

# SURFACE-MOUNT WOUND MOLDED CHIP INDUCTORS

## AISM1008 SERIES



### FEATURES:

- Lead-free materials is used for the plating on the terminals.
- The product uses metal terminals, which realize excellent connection reliability.
- High resistance to heat, humidity, mechanical shocks and presser. Accurate dimensions for automatically surface mounted.
- The product has good heat durability that withstands lead-free compatible reflow soldering conditions.

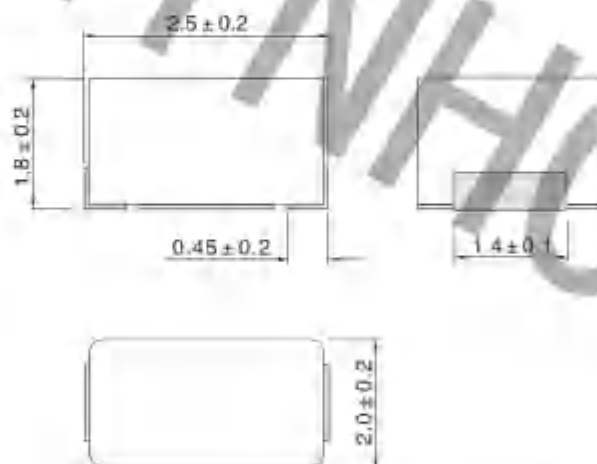
### APPLICATIONS:

- Communication
- Equipment
- Instrument
- Video & audio

### ELECTRICAL CHARACTERISTICS:

| Part Number   | L<br>μH | Tol<br>% | Q<br>Min | SRF<br>MHz<br>Min | DCR<br>Ω<br>Max | IDC<br>Max<br>mA | Test<br>Freq<br>MHz | Part Number   | L<br>μH | Tol<br>% | Q<br>Min | SRF<br>MHz<br>Min | DCR<br>Ω<br>Max | IDC<br>Max<br>mA | Test<br>Freq<br>MHz |
|---------------|---------|----------|----------|-------------------|-----------------|------------------|---------------------|---------------|---------|----------|----------|-------------------|-----------------|------------------|---------------------|
| AISM1008-10NK | .010    | ±10      | 10       | 2150              | 0.26            | 530              | 100                 | AISM1008-1R2J | 1.2     | ±5       | 30       | 180               | 1.20            | 230              | 7.96                |
| AISM1008-12NK | .012    | ±10      | 15       | 2050              | 0.27            | 500              | 100                 | AISM1008-1R5J | 1.5     | ±5       | 30       | 136               | 1.30            | 300              | 7.96                |
| AISM1008-15NK | .015    | ±10      | 15       | 1850              | 0.31            | 480              | 100                 | AISM1008-1R8J | 1.8     | ±5       | 30       | 100               | 1.45            | 210              | 7.96                |
| AISM1008-16NK | .016    | ±10      | 15       | 1650              | 0.34            | 450              | 100                 | AISM1008-2R2J | 2.2     | ±5       | 30       | 75                | 1.55            | 200              | 7.96                |
| AISM1008-22NK | .022    | ±10      | 15       | 1550              | 0.38            | 420              | 100                 | AISM1008-2R7J | 2.7     | ±5       | 30       | 55                | 1.70            | 195              | 7.96                |
| AISM1008-27NK | .027    | ±10      | 15       | 1400              | 0.42            | 410              | 100                 | AISM1008-3R3J | 3.3     | ±5       | 30       | 48                | 1.90            | 185              | 7.96                |
| AISM1008-33NK | .033    | ±10      | 15       | 1250              | 0.46            | 400              | 100                 | AISM1008-3R9J | 3.9     | ±5       | 30       | 43                | 2.10            | 180              | 7.96                |
| AISM1008-36NK | .036    | ±10      | 20       | 1100              | 0.50            | 380              | 100                 | AISM1008-4R7J | 4.7     | ±5       | 30       | 40                | 2.30            | 175              | 7.96                |
| AISM1008-47NK | .047    | ±10      | 20       | 1050              | 0.56            | 360              | 100                 | AISM1008-5R6J | 5.6     | ±5       | 25       | 36                | 2.50            | 170              | 7.96                |
| AISM1008-56NK | .056    | ±10      | 20       | 900               | 0.65            | 340              | 100                 | AISM1008-6R8J | 6.8     | ±5       | 25       | 33                | 2.70            | 165              | 7.96                |
| AISM1008-66NK | .066    | ±10      | 20       | 800               | 0.70            | 320              | 100                 | AISM1008-8R2J | 8.2     | ±5       | 25       | 30                | 3.05            | 160              | 7.96                |
| AISM1008-82NK | .082    | ±10      | 30       | 650               | 0.75            | 300              | 100                 | AISM1008-100J | 10      | ±5       | 25       | 27                | 3.50            | 155              | 2.52                |
| AISM1008-R10K | 10      | ±10      | 20       | 700               | 0.80            | 280              | 100                 | AISM1008-120J | 12      | ±5       | 25       | 23                | 3.60            | 150              | 2.52                |
| AISM1008-R12K | 12      | ±10      | 30       | 600               | 0.91            | 250              | 25.2                | AISM1008-150J | 15      | ±5       | 25       | 20                | 4.40            | 140              | 2.52                |
| AISM1008-R15K | 15      | ±10      | 30       | 550               | 0.97            | 480              | 25.2                | AISM1008-180J | 18      | ±5       | 25       | 18                | 4.80            | 136              | 2.52                |
| AISM1008-R18K | 18      | ±10      | 30       | 500               | 0.96            | 460              | 25.2                | AISM1008-220J | 22      | ±5       | 25       | 17                | 5.50            | 125              | 2.52                |
| AISM1008-R22K | 22      | ±10      | 30       | 450               | 0.92            | 430              | 25.2                | AISM1008-270J | 27      | ±5       | 25       | 16                | 6.30            | 115              | 2.52                |
| AISM1008-R27K | 27      | ±10      | 30       | 425               | 0.96            | 420              | 25.2                | AISM1008-330J | 33      | ±5       | 20       | 15                | 7.10            | 110              | 2.52                |
| AISM1008-R33K | 33      | ±10      | 30       | 400               | 0.60            | 400              | 25.2                | AISM1008-390J | 39      | ±5       | 20       | 14                | 9.50            | 90               | 2.52                |
| AISM1008-R39K | 39      | ±10      | 30       | 375               | 0.68            | 375              | 25.2                | AISM1008-470J | 47      | ±5       | 20       | 13                | 11.10           | 81               | 2.52                |
| AISM1008-R47K | 47      | ±10      | 30       | 350               | 0.68            | 330              | 25.2                | AISM1008-560J | 56      | ±5       | 20       | 12                | 12.10           | 75               | 2.52                |
| AISM1008-R56K | 56      | ±10      | 30       | 300               | 0.75            | 325              | 25.2                | AISM1008-680J | 68      | ±5       | 20       | 11                | 15.50           | 70               | 2.52                |
| AISM1008-R68K | 68      | ±10      | 30       | 270               | 0.85            | 300              | 25.2                | AISM1008-820J | 82      | ±5       | 20       | 10                | 19.00           | 65               | 2.52                |
| AISM1008-R82K | 82      | ±10      | 30       | 250               | 1.00            | 260              | 25.2                | AISM1008-101J | 100     | ±5       | 15       | 8                 | 21.00           | 60               | 0.796               |
| AISM1008-1R0J | 1.00    | ±5       | 30       | 220               | 1.10            | 245              | 7.96                |               |         |          |          |                   |                 |                  |                     |

### PHYSICAL CHARACTERISTICS



### Winding



- Testing: (Equivalent acceptable)
- Inductance: HP4285A
- DCR: QuadTech 1R80 Milliohmmer
- Q: HP4342A
- SRF: HP4291A
- Operating temperature: -25°C to +85°C
- Storage Temperature: -40°C to +85°C
- Resistance to soldering heat: 260°C for 10 seconds
- Marking: Inductance & Tolerance

Note: All specifications subject to change without notice.

## SURFACE MOUNT WOUND MOLDED CHIP INDUCTORS

### AIMS1210 SERIES

#### FEATURES:

- Lead-free materials is used for the plating on the terminals.
- The product uses metal terminals, which realize excellent connection reliability.
- High resistance to heat, humidity, mechanical shocks and pressure. Accurate dimensions for automatically surface mounted.
- The product has good heat durability that withstands lead-free compatible reflow soldering conditions

#### APPLICATIONS:

- Communication
- Equipment
- Instrument
- Video & audio

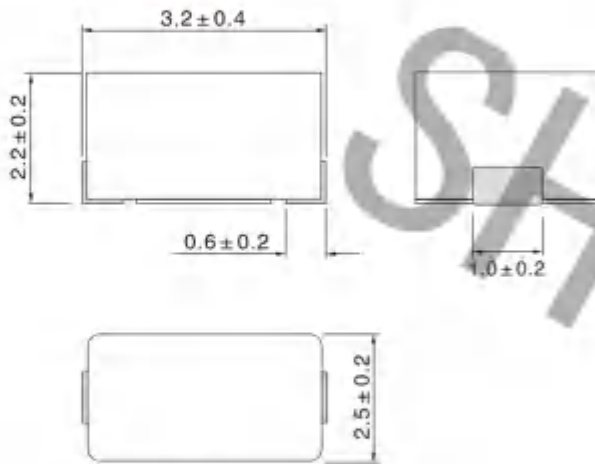


#### ELECTRICAL CHARACTERISTICS:

| Part Number    | Inductance (μH) | Inductance Tolerance (%) | Q min. | Test Frequency LQ (MHz) | Self-resonant Frequency (MHz) min. | DC resistance (Ω) max. | Rated current (mA) max. |
|----------------|-----------------|--------------------------|--------|-------------------------|------------------------------------|------------------------|-------------------------|
| AIMS1210-R10 □ | 0.1             | ±20, ±10%                | 28     | 100                     | 700                                | 0.44                   | 450                     |
| AIMS1210-R12 □ | 0.12            | ±20, ±10%                | 30     | 25.2                    | 500                                | 0.35                   | 450                     |
| AIMS1210-R15 □ | 0.15            | ±20, ±10%                | 30     | 25.2                    | 450                                | 0.25                   | 450                     |
| AIMS1210-R18 □ | 0.18            | ±20, ±10%                | 30     | 25.2                    | 400                                | 0.28                   | 450                     |
| AIMS1210-R22 □ | 0.22            | ±20, ±10%                | 30     | 25.2                    | 350                                | 0.32                   | 450                     |
| AIMS1210-R27 □ | 0.27            | ±20, ±10%                | 30     | 25.2                    | 320                                | 0.36                   | 450                     |
| AIMS1210-R33 □ | 0.33            | ±20, ±10%                | 30     | 25.2                    | 300                                | 0.4                    | 450                     |
| AIMS1210-R39 □ | 0.39            | ±20, ±10%                | 30     | 25.2                    | 250                                | 0.45                   | 450                     |
| AIMS1210-R47 □ | 0.47            | ±20, ±10%                | 30     | 25.2                    | 220                                | 0.5                    | 450                     |
| AIMS1210-R56 □ | 0.56            | ±20, ±10%                | 30     | 25.2                    | 180                                | 0.55                   | 450                     |
| AIMS1210-R68 □ | 0.68            | ±20, ±10%                | 30     | 25.2                    | 160                                | 0.6                    | 450                     |
| AIMS1210-R82 □ | 0.82            | ±20, ±10%                | 30     | 25.2                    | 140                                | 0.65                   | 450                     |
| AIMS1210-1R0 □ | 1               | ±10%, ±5%                | 30     | 7.96                    | 120                                | 0.7                    | 400                     |
| AIMS1210-1R2 □ | 1.2             | ±10%, ±5%                | 30     | 7.96                    | 100                                | 0.75                   | 390                     |
| AIMS1210-1R5 □ | 1.5             | ±10%, ±5%                | 30     | 7.96                    | 85                                 | 0.85                   | 370                     |
| AIMS1210-1R8 □ | 1.8             | ±10%, ±5%                | 30     | 7.96                    | 80                                 | 0.9                    | 350                     |
| AIMS1210-2R2 □ | 2.2             | ±10%, ±5%                | 30     | 7.96                    | 75                                 | 1                      | 320                     |
| AIMS1210-2R7 □ | 2.7             | ±10%, ±5%                | 30     | 7.96                    | 70                                 | 1.1                    | 290                     |
| AIMS1210-3R3 □ | 3.3             | ±10%, ±5%                | 30     | 7.96                    | 60                                 | 1.2                    | 260                     |
| AIMS1210-3R9 □ | 3.9             | ±10%, ±5%                | 30     | 7.96                    | 55                                 | 1.3                    | 250                     |
| AIMS1210-4R7 □ | 4.7             | ±10%, ±5%                | 30     | 7.96                    | 50                                 | 1.5                    | 220                     |
| AIMS1210-5R6 □ | 5.6             | ±10%, ±5%                | 30     | 7.96                    | 45                                 | 1.6                    | 200                     |
| AIMS1210-6R8 □ | 6.8             | ±10%, ±5%                | 30     | 7.96                    | 40                                 | 1.8                    | 180                     |
| AIMS1210-8R2 □ | 8.2             | ±10%, ±5%                | 30     | 7.96                    | 35                                 | 2                      | 170                     |
| AIMS1210-100 □ | 10              | ±10%, ±5%                | 30     | 2.52                    | 30                                 | 2.1                    | 150                     |
| AIMS1210-120 □ | 12              | ±10%, ±5%                | 30     | 2.52                    | 28                                 | 2.5                    | 140                     |
| AIMS1210-150 □ | 15              | ±10%, ±5%                | 30     | 2.52                    | 20                                 | 2.8                    | 130                     |
| AIMS1210-180 □ | 18              | ±10%, ±5%                | 30     | 2.52                    | 20                                 | 3.3                    | 120                     |
| AIMS1210-220 □ | 22              | ±10%, ±5%                | 30     | 2.52                    | 20                                 | 3.7                    | 110                     |
| AIMS1210-270 □ | 27              | ±10%, ±5%                | 30     | 2.52                    | 20                                 | 5                      | 80                      |
| AIMS1210-330 □ | 33              | ±10%, ±5%                | 30     | 2.52                    | 17                                 | 5.6                    | 70                      |
| AIMS1210-390 □ | 39              | ±10%, ±5%                | 30     | 2.52                    | 16                                 | 6.4                    | 65                      |
| AIMS1210-470 □ | 47              | ±10%, ±5%                | 30     | 2.52                    | 15                                 | 7                      | 60                      |
| AIMS1210-560 □ | 56              | ±10%, ±5%                | 30     | 2.52                    | 13                                 | 8                      | 55                      |
| AIMS1210-680 □ | 68              | ±10%, ±5%                | 30     | 2.52                    | 12                                 | 9                      | 50                      |
| AIMS1210-820 □ | 82              | ±10%, ±5%                | 30     | 2.52                    | 11                                 | 10                     | 45                      |
| AIMS1210-101 □ | 100             | ±10%, ±5%                | 20     | 0.796                   | 10                                 | 10                     | 40                      |
| AIMS1210-121 □ | 120             | ±10%, ±5%                | 20     | 0.796                   | 10                                 | 11                     | 70                      |
| AIMS1210-151 □ | 150             | ±10%, ±5%                | 20     | 0.796                   | 8                                  | 15                     | 65                      |
| AIMS1210-181 □ | 180             | ±10%, ±5%                | 20     | 0.796                   | 7                                  | 17                     | 60                      |
| AIMS1210-221 □ | 220             | ±10%, ±5%                | 20     | 0.796                   | 7                                  | 21                     | 50                      |

□ G=±2%, J=±5%, K=±10%, M=±20%, N=±30%

## PHYSICAL CHARACTERISTICS

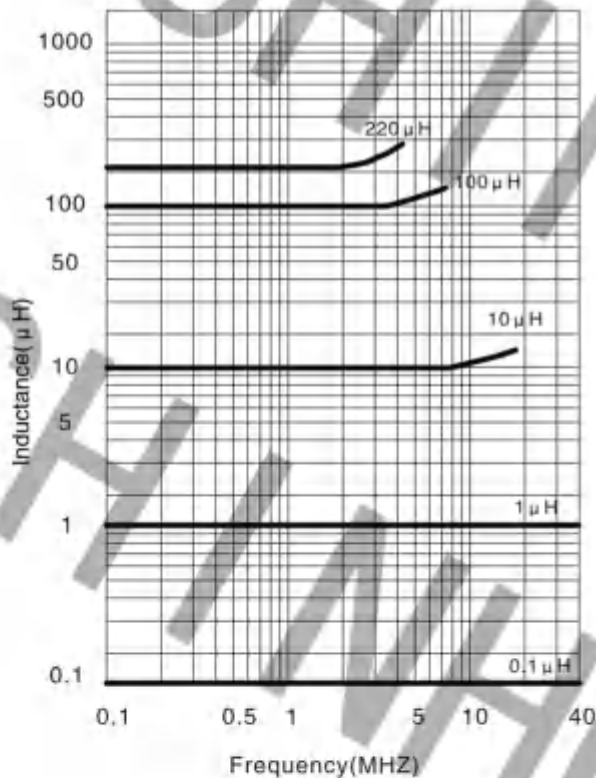


### Winding

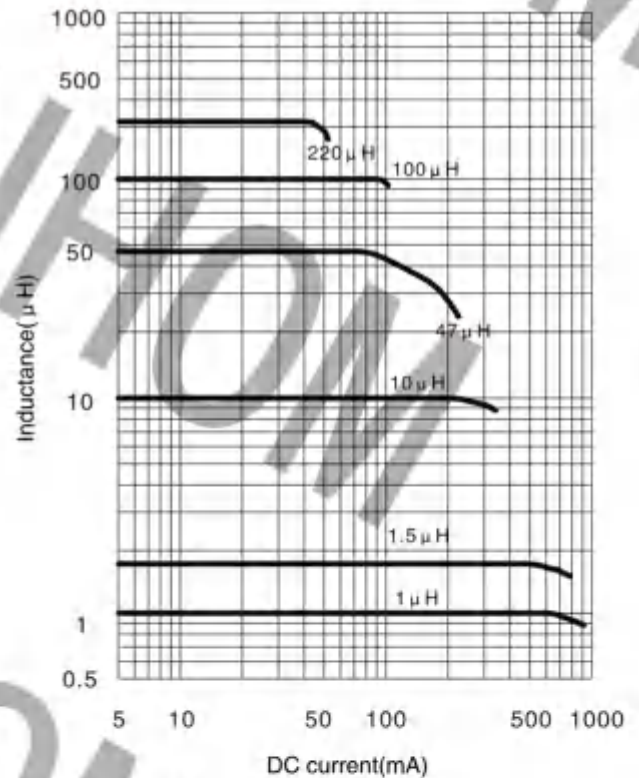


- Testing: (Equivalent acceptable)
- Inductance: HP4285A
- RDC: QuadTech 1880 Milliohmeter
- Q: HP4342A
- SRF: HP4291A
- Operating temperature:  $-25^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- Storage Temperature:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- Resistance to soldering heat:  $260^{\circ}\text{C}$  for 10 seconds
- Marking: Inductance & Tolerance

## INDUCTANCE VS FREQUENCY CURVE



## IMPEDANCE VS FREQUENCY CURVE



# SURFACE MOUNT WOUND MOLDED CHIP INDUCTORS

## AIMS1812 SERIES

### FEATURES:

- Lead-free materials is used for the plating on the terminals.
- The product uses metal terminals, which realize excellent connection reliability.
- High resistance to heat, humidity, mechanical shocks and pressure. Accurate dimensions for automatically surface mounted.
- The product has good heat durability that withstands lead-free compatible reflow soldering conditions

### APPLICATIONS:

- Communication
- Equipment
- Instrument
- Video & audio

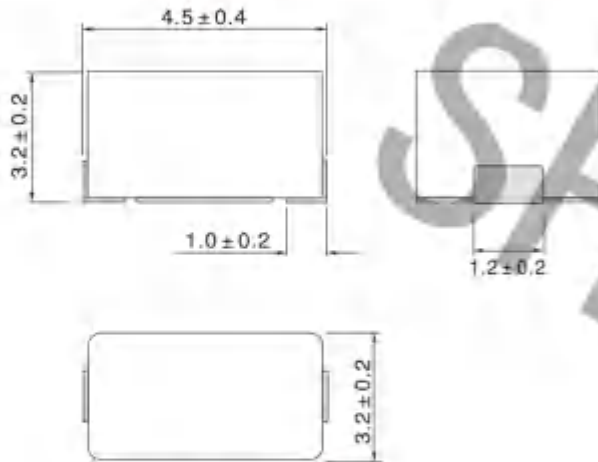


### ELECTRICAL CHARACTERISTICS:

| Part Number    | Inductance (μH) | Inductance Tolerance (%) | Q min | Test Frequency LQ (MHz) | Self-resonant Frequency (MHz)min | DC resistance (Ω) max. | Rated current (mA)max. |
|----------------|-----------------|--------------------------|-------|-------------------------|----------------------------------|------------------------|------------------------|
| AIMS1812-R10 □ | 0.1             | ±10%, ±20%               | 35    | 25.2                    | 300                              | 0.18                   | 800                    |
| AIMS1812-R12 □ | 0.12            | ±10%, ±20%               | 35    | 25.2                    | 280                              | 0.20                   | 770                    |
| AIMS1812-R15 □ | 0.15            | ±10%, ±20%               | 35    | 25.2                    | 250                              | 0.22                   | 730                    |
| AIMS1812-R18 □ | 0.18            | ±10%, ±20%               | 35    | 25.2                    | 220                              | 0.24                   | 700                    |
| AIMS1812-R22 □ | 0.22            | ±10%, ±20%               | 40    | 25.2                    | 200                              | 0.25                   | 665                    |
| AIMS1812-R27 □ | 0.27            | ±10%, ±20%               | 40    | 25.2                    | 180                              | 0.26                   | 625                    |
| AIMS1812-R33 □ | 0.33            | ±10%, ±20%               | 40    | 25.2                    | 165                              | 0.28                   | 605                    |
| AIMS1812-R39 □ | 0.39            | ±10%, ±20%               | 40    | 25.2                    | 150                              | 0.30                   | 575                    |
| AIMS1812-R47 □ | 0.47            | ±10%, ±20%               | 40    | 25.2                    | 145                              | 0.32                   | 545                    |
| AIMS1812-R56 □ | 0.56            | ±10%, ±20%               | 40    | 25.2                    | 140                              | 0.36                   | 520                    |
| AIMS1812-R68 □ | 0.68            | ±10%, ±20%               | 40    | 25.2                    | 135                              | 0.40                   | 500                    |
| AIMS1812-R82 □ | 0.82            | ±10%, ±20%               | 40    | 25.2                    | 130                              | 0.45                   | 475                    |
| AIMS1812-1R0 □ | 1.0             | ±10%, ±20%               | 50    | 7.96                    | 100                              | 0.5                    | 450                    |
| AIMS1812-1R2 □ | 1.2             | ±10%, ±20%               | 50    | 7.96                    | 80                               | 0.55                   | 430                    |
| AIMS1812-1R5 □ | 1.5             | ±10%, ±20%               | 50    | 7.96                    | 70                               | 0.6                    | 410                    |
| AIMS1812-1R8 □ | 1.8             | ±10%, ±20%               | 50    | 7.96                    | 60                               | 0.65                   | 380                    |
| AIMS1812-2R2 □ | 2.2             | ±10%, ±20%               | 50    | 7.96                    | 55                               | 0.7                    | 380                    |
| AIMS1812-2R7 □ | 2.7             | ±10%, ±20%               | 50    | 7.96                    | 50                               | 0.75                   | 370                    |
| AIMS1812-3R3 □ | 3.3             | ±10%, ±20%               | 50    | 7.96                    | 45                               | 0.8                    | 355                    |
| AIMS1812-3R9 □ | 3.9             | ±10%, ±20%               | 50    | 7.96                    | 40                               | 0.9                    | 330                    |
| AIMS1812-4R7 □ | 4.7             | ±10%, ±20%               | 50    | 7.96                    | 35                               | 1                      | 315                    |
| AIMS1812-5R6 □ | 5.6             | ±10%, ±20%               | 50    | 7.96                    | 33                               | 1.1                    | 300                    |
| AIMS1812-6R8 □ | 6.8             | ±10%, ±20%               | 50    | 7.96                    | 27                               | 1.2                    | 285                    |
| AIMS1812-8R2 □ | 8.2             | ±5%, ±10%                | 50    | 7.96                    | 25                               | 1.4                    | 270                    |
| AIMS1812-100 □ | 10              | ±5%, ±10%                | 50    | 2.52                    | 20                               | 1.6                    | 250                    |
| AIMS1812-120 □ | 12              | ±5%, ±10%                | 50    | 2.52                    | 18                               | 2                      | 225                    |
| AIMS1812-150 □ | 15              | ±5%, ±10%                | 50    | 2.52                    | 17                               | 2.5                    | 200                    |
| AIMS1812-160 □ | 16              | ±5%, ±10%                | 50    | 2.52                    | 15                               | 2.6                    | 190                    |
| AIMS1812-220 □ | 22              | ±5%, ±10%                | 50    | 2.52                    | 13                               | 3.2                    | 180                    |
| AIMS1812-270 □ | 27              | ±5%, ±10%                | 50    | 2.52                    | 12                               | 3.6                    | 170                    |
| AIMS1812-330 □ | 33              | ±5%, ±10%                | 50    | 2.52                    | 11                               | 4                      | 160                    |
| AIMS1812-390 □ | 39              | ±5%, ±10%                | 50    | 2.52                    | 10                               | 4.5                    | 150                    |
| AIMS1812-470 □ | 47              | ±5%, ±10%                | 50    | 2.52                    | 10                               | 5                      | 140                    |
| AIMS1812-560 □ | 56              | ±5%, ±10%                | 50    | 2.52                    | 9                                | 5.5                    | 135                    |
| AIMS1812-680 □ | 68              | ±5%, ±10%                | 50    | 2.52                    | 9                                | 6                      | 130                    |
| AIMS1812-820 □ | 82              | ±5%, ±10%                | 50    | 2.52                    | 8                                | 7                      | 120                    |
| AIMS1812-101 □ | 100             | ±5%, ±10%                | 40    | 0.796                   | 8                                | 8                      | 110                    |
| AIMS1812-121 □ | 120             | ±5%, ±10%                | 40    | 0.796                   | 6                                | 8                      | 110                    |
| AIMS1812-151 □ | 150             | ±5%, ±10%                | 40    | 0.796                   | 5                                | 9                      | 105                    |
| AIMS1812-181 □ | 180             | ±5%, ±10%                | 40    | 0.796                   | 5                                | 9.5                    | 102                    |
| AIMS1812-221 □ | 220             | ±5%, ±10%                | 40    | 0.796                   | 4                                | 10                     | 100                    |
| AIMS1812-271 □ | 270             | ±5%, ±10%                | 40    | 0.796                   | 4                                | 12                     | 92                     |
| AIMS1812-331 □ | 330             | ±5%, ±10%                | 40    | 0.796                   | 3.5                              | 14                     | 85                     |
| AIMS1812-391 □ | 390             | ±5%, ±10%                | 40    | 0.796                   | 3                                | 15                     | 80                     |
| AIMS1812-471 □ | 470             | ±5%, ±10%                | 40    | 0.796                   | 3                                | 26                     | 62                     |
| AIMS1812-561 □ | 560             | ±5%, ±10%                | 30    | 0.796                   | 3                                | 30                     | 50                     |
| AIMS1812-681 □ | 680             | ±5%, ±10%                | 30    | 0.796                   | 3                                | 33                     | 50                     |
| AIMS1812-821 □ | 820             | ±5%, ±10%                | 30    | 0.796                   | 2.5                              | 35                     | 30                     |
| AIMS1812-102 □ | 1000            | ±5%, ±10%                | 20    | 0.252                   | 2.5                              | 40                     | 30                     |

□ G=±2%, J=±5%, K=±10%, M=±20%, N=±30%.

## PHYSICAL CHARACTERISTICS

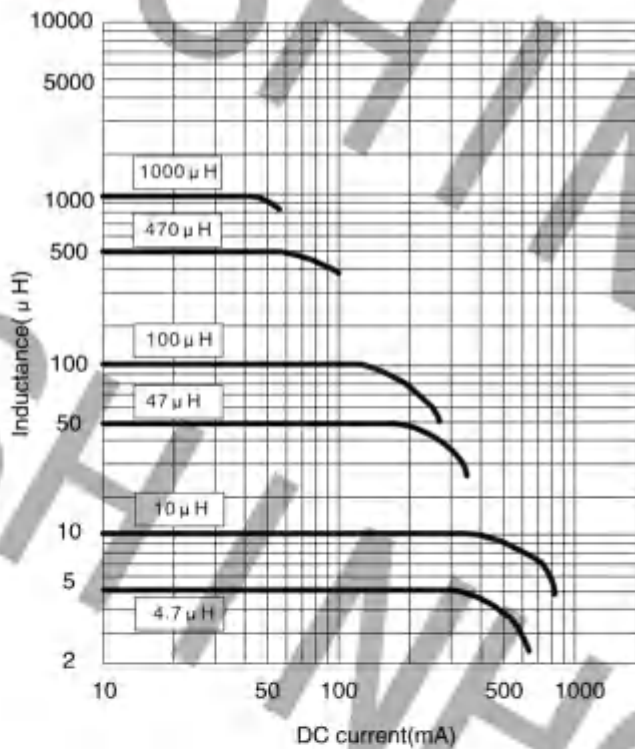


### Winding

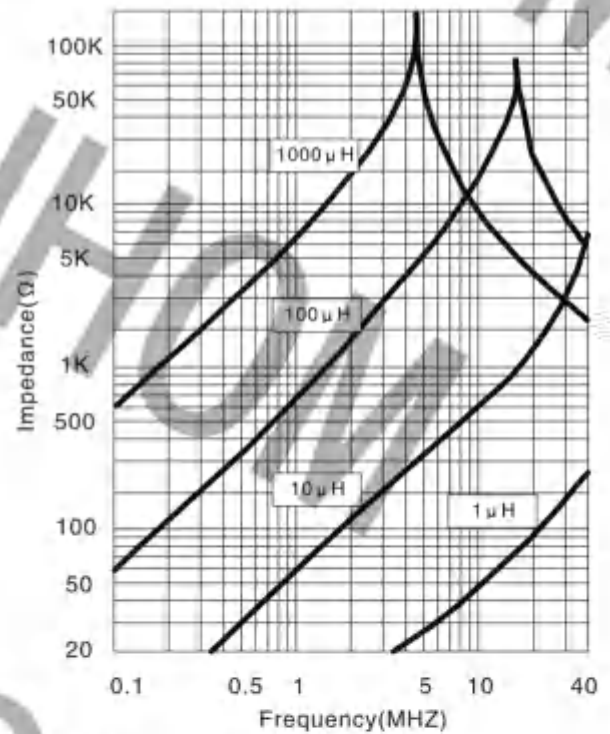


- Testing: (Equivalent acceptable)
- Inductance: HP4285A
- RDC: QuadTech 1880 Milliohm meter
- Q: HP4342A
- SRF: HP4291A
- Operating temperature:  $-25^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- Storage Temperature:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- Resistance to soldering heat:  $260^{\circ}\text{C}$  for 10 seconds
- Marking: Inductance & Tolerance

## DC BISE CURVE



## IMPEDANCE VS FREQUENCY CURVE





# SURFACE-MOUNT WOUND MOLDED CHIP INDUCTORS

## AISM-2220 SERIES

### FEATURES:

- Molded construction
- Heat Resistant Molded Resin
- Excellent Mechanical Strength
- Excellent Solderability
- High Reliability
- Low Profile

### OPTIONS:

- Packaging Tape & Reel is standard (Qty: 3000pcs)
- Bulk packaging available for smaller quantities
- Tolerance: 10% and 5% is standard, tighter tolerances available

### COMMON APPLICATIONS:

- VCRs
- Video Cameras
- Communication System
- Automotive Systems
- Liquid Crystal Televisions
- Hard Disk Drives
- Network Systems
- Computer Peripheral Equipment

### ELECTRICAL CHARACTERISTICS:

| Part Number    | L<br>μH | Q<br>Min | SRF<br>MHz<br>Min | DCR<br>Ω<br>Max | IDC<br>Max<br>mA | Test<br>Freq<br>MHz |
|----------------|---------|----------|-------------------|-----------------|------------------|---------------------|
| AISM-2220-1R0K | 1.00    | 10       | 95                | 0.030           | 1800             | 7.96                |
| AISM-2220-1R2K | 1.20    | 10       | 70                | 0.035           | 1700             | 7.96                |
| AISM-2220-1R5K | 1.50    | 10       | 35                | 0.04            | 1600             | 7.96                |
| AISM-2220-1R8K | 1.80    | 10       | 17                | 0.05            | 1400             | 7.96                |
| AISM-2220-2R2K | 2.20    | 10       | 42                | 0.06            | 1300             | 7.96                |
| AISM-2220-2R7K | 2.70    | 10       | 37                | 0.07            | 1200             | 7.96                |
| AISM-2220-3R3K | 3.30    | 10       | 34                | 0.08            | 1120             | 7.96                |
| AISM-2220-3R9K | 3.90    | 10       | 32                | 0.09            | 1040             | 7.96                |
| AISM-2220-4R7K | 4.70    | 10       | 29                | 0.11            | 960              | 7.96                |
| AISM-2220-5R6K | 5.60    | 10       | 25                | 0.13            | 880              | 7.96                |
| AISM-2220-6R8K | 6.80    | 10       | 24                | 0.15            | 810              | 7.96                |
| AISM-2220-8R2K | 8.20    | 10       | 22                | 0.18            | 740              | 7.96                |
| AISM-2220-10K  | 10.00   | 10       | 19                | 0.21            | 680              | 7.96                |
| AISM-2220-12K  | 12.00   | 10       | 17                | 0.25            | 630              | 7.96                |
| AISM-2220-15K  | 15.00   | 10       | 16                | 0.30            | 580              | 7.96                |
| AISM-2220-18K  | 18.00   | 10       | 14                | 0.36            | 530              | 7.96                |
| AISM-2220-22K  | 22.00   | 10       | 13                | 0.43            | 480              | 7.96                |
| AISM-2220-27K  | 27.00   | 10       | 11.5              | 0.52            | 440              | 7.96                |
| AISM-2220-33K  | 33.00   | 10       | 10.5              | 0.62            | 400              | 7.96                |
| AISM-2220-39K  | 39.00   | 10       | 9.5               | 0.72            | 370              | 7.96                |
| AISM-2220-47K  | 47.00   | 10       | 8.5               | 0.83            | 340              | 7.96                |
| AISM-2220-56K  | 56.00   | 10       | 7.8               | 1.0             | 310              | 7.96                |
| AISM-2220-68K  | 68.00   | 10       | 7.0               | 1.2             | 290              | 7.96                |
| AISM-2220-82K  | 82.00   | 10       | 6.4               | 1.4             | 270              | 7.96                |
| AISM-2220-101K | 100     | 20       | 6.0               | 1.6             | 250              | 0.796               |
| AISM-2220-121K | 120     | 20       | 5.4               | 1.9             | 230              | 0.796               |
| AISM-2220-151K | 150     | 20       | 4.9               | 2.2             | 210              | 0.796               |
| AISM-2220-181K | 180     | 20       | 4.4               | 2.6             | 190              | 0.796               |
| AISM-2220-221K | 220     | 20       | 3.9               | 3.0             | 170              | 0.796               |
| AISM-2220-271K | 270     | 20       | 3.5               | 4.2             | 155              | 0.796               |
| AISM-2220-331K | 330     | 20       | 3.2               | 4.0             | 140              | 0.796               |
| AISM-2220-391K | 390     | 20       | 2.9               | 5.6             | 130              | 0.796               |
| AISM-2220-471K | 470     | 20       | 2.6               | 7.0             | 120              | 0.796               |
| AISM-2220-561K | 560     | 20       | 2.4               | 8.5             | 110              | 0.796               |
| AISM-2220-681K | 680     | 20       | 2.2               | 10              | 100              | 0.796               |
| AISM-2220-821K | 820     | 20       | 2.0               | 13              | 90               | 0.796               |
| AISM-2220-1R0J | 1000    | 30       | 1.8               | 15              | 85               | 0.252               |
| AISM-2220-1R2J | 1200    | 30       | 1.5               | 17              | 75               | 0.252               |
| AISM-2220-1R5J | 1500    | 30       | 1.4               | 20              | 70               | 0.252               |
| AISM-2220-1R8J | 1800    | 30       | 1.3               | 30              | 60               | 0.252               |
| AISM-2220-2R2J | 2200    | 30       | 1.2               | 36              | 55               | 0.252               |
| AISM-2220-2R7J | 2700    | 30       | 1.1               | 53              | 45               | 0.252               |
| AISM-2220-3R3J | 3300    | 30       | 1.0               | 60              | 40               | 0.252               |
| AISM-2220-3R9J | 3900    | 30       | 1.0               | 70              | 38               | 0.252               |
| AISM-2220-4R7J | 4700    | 30       | 0.9               | 71              | 36               | 0.252               |
| AISM-2220-5R6J | 5600    | 30       | 0.8               | 85              | 33               | 0.252               |
| AISM-2220-6R8J | 6800    | 30       | 0.7               | 110             | 30               | 0.252               |
| AISM-2220-8R2J | 8200    | 30       | 0.6               | 125             | 28               | 0.252               |
| AISM-2220-100J | 10000   | 30       | 0.5               | 150             | 25               | 0.0796              |

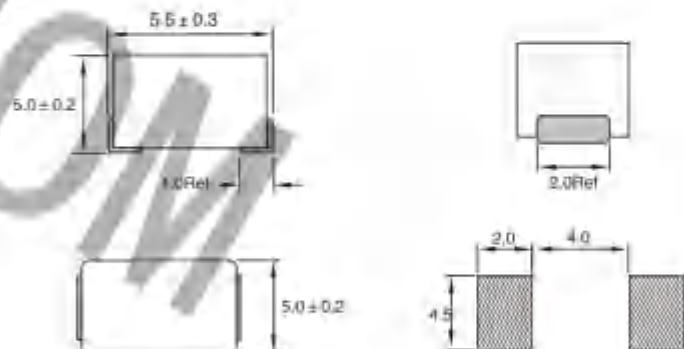
Note: 1. J ± 5%, K = ± 10%, M = ± 20%

### TECHNICAL INFORMATION:

- Testing: (Equivalent acceptable)
- Inductance: HP4285A
- RDC: QuadTech 1880 Milliohmeter
- Q- HP4342A - SRF-HP4191A
- IDC Max: Determined when superimposed DC current is decreased 10% against its initial value
- Operating temperature: -40°C to +105°C
- Storage Temperature: -40°C to +105°C
- Solder methods: Vapor Phase, Infrared Reflow
- Resistance to soldering heat: 260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance

Note: All specifications subject to change without notice.

### PHYSICAL CHARACTERISTICS:



Dimensions: (mm)

## HIGH CURRENT SURFACE MOUNT WOUND MOLDED CHIP INDUCTORS

### AIMS1210C SERIES

Pb



#### FEATURES:

- Lead-free materials is used for the plating on the terminals.
- The product uses metal terminals, which realize excellent connection reliability.
- High resistance to heat, humidity, mechanical shocks and presser. Accurate dimensions for automatically surface mounted.
- The product has good heat durability that withstands lead-free compatible reflow soldering conditions.

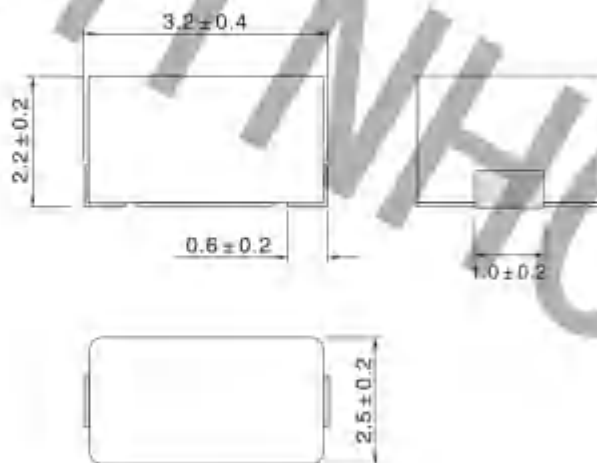
#### APPLICATIONS:

- Communication
- Equipment
- Instrument
- Video & audio

#### ELECTRICAL CHARACTERISTICS:

| Part Number    | Inductance (uH) | Inductance Tolerance (%) | Q min. | Test Frequency LQ (MHz) | Self-resonant Frequency (MHz)min. | DC resistance (Ω) max. | Rated current (mA)max. |
|----------------|-----------------|--------------------------|--------|-------------------------|-----------------------------------|------------------------|------------------------|
| AIMS1210C-1R0M | 1               | ± 20%                    | 10     | 7.96                    | 100                               | 0.156                  | 770                    |
| AIMS1210C-1R5M | 1.5             | ± 20%                    | 10     | 7.96                    | 80                                | 0.195                  | 580                    |
| AIMS1210C-2R2M | 2.2             | ± 20%                    | 10     | 7.96                    | 65                                | 0.260                  | 480                    |
| AIMS1210C-3R3M | 3.3             | ± 20%                    | 10     | 7.96                    | 55                                | 0.325                  | 400                    |
| AIMS1210C-4R7M | 4.7             | ± 20%                    | 10     | 7.96                    | 45                                | 0.520                  | 320                    |
| AIMS1210C-6R8M | 6.8             | ± 20%                    | 10     | 7.96                    | 35                                | 0.850                  | 280                    |
| AIMS1210C-100K | 10              | ± 10%                    | 15     | 2.52                    | 28                                | 1.105                  | 220                    |
| AIMS1210C-150K | 15              | ± 10%                    | 15     | 2.52                    | 25                                | 1.69                   | 180                    |
| AIMS1210C-220K | 22              | ± 10%                    | 15     | 2.52                    | 20                                | 2.60                   | 145                    |
| AIMS1210C-330K | 33              | ± 10%                    | 15     | 2.52                    | 15                                | 3.64                   | 115                    |
| AIMS1210C-390K | 39              | ± 10%                    | 15     | 2.52                    | 14                                | 4.50                   | 110                    |
| AIMS1210C-470K | 47              | ± 10%                    | 15     | 2.52                    | 13                                | 5.46                   | 105                    |
| AIMS1210C-680K | 68              | ± 10%                    | 15     | 2.52                    | 10                                | 8.45                   | 85                     |
| AIMS1210C-820K | 82              | ± 10%                    | 15     | 2.52                    | 9                                 | 8.71                   | 80                     |
| AIMS1210C-101K | 100             | ± 10%                    | 15     | 0.796                   | 8                                 | 9.14                   | 75                     |

#### PHYSICAL CHARACTERISTICS

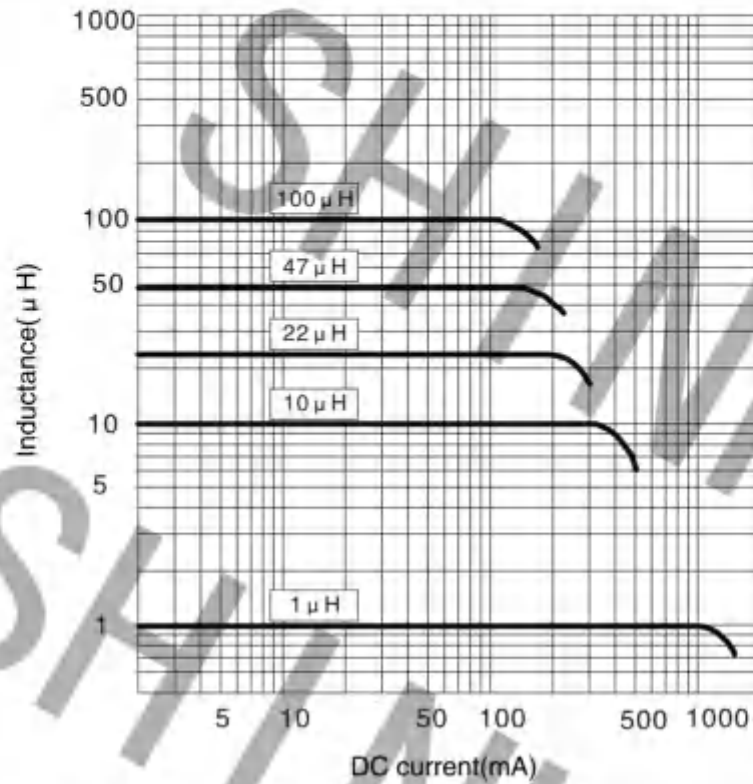


#### Winding

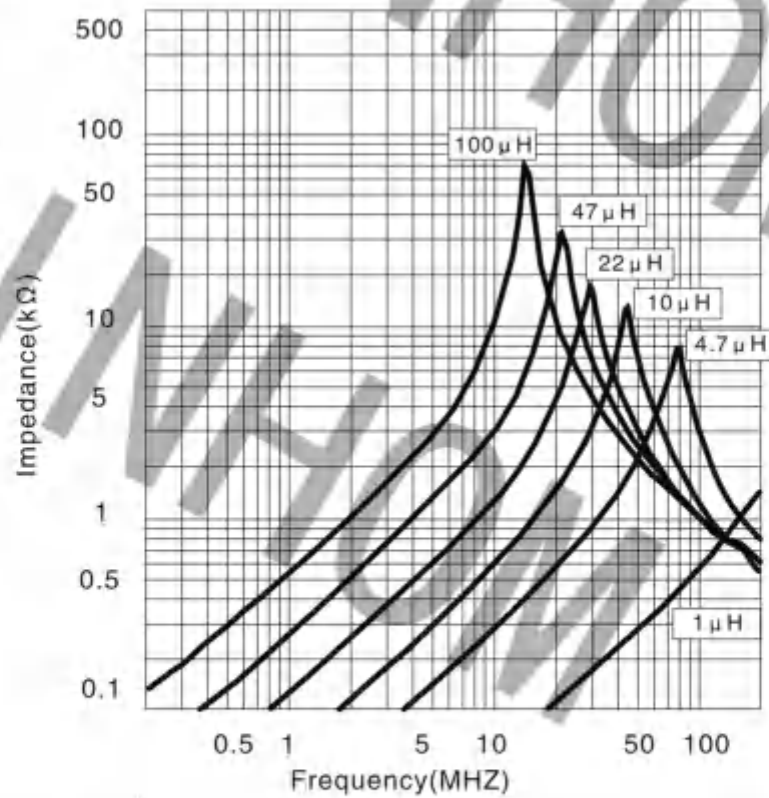


- Testing: (Equivalent acceptable)
- Inductance: HP4285A
- RDC: QuadTech 1680 Milliohmmer
- Q: HP4342A
- SRF: HP4291A
- Operating temperature: -25°C to +85°C
- Storage Temperature: -40°C to +85°C
- Resistance to soldering heat: 260°C for 10 seconds
- Marking: Inductance & Tolerance

## DC BISE CURVE



## IMPEDANCE VS FREQUENCY CURVE



# HIGH CURRENT SURFACE MOUNT WOUND MOLDED CHIP INDUCTORS

## AISM1812C SERIES

### FEATURES:

- Lead-free materials is used for the plating on the terminals.
- The product uses metal terminals, which realize excellent connection reliability.
- High resistance to heat, humidity, mechanical shocks and pressure. Accurate dimensions for automatically surface mounted.
- The product has good heat durability that withstands lead-free compatible reflow soldering conditions

### APPLICATIONS:

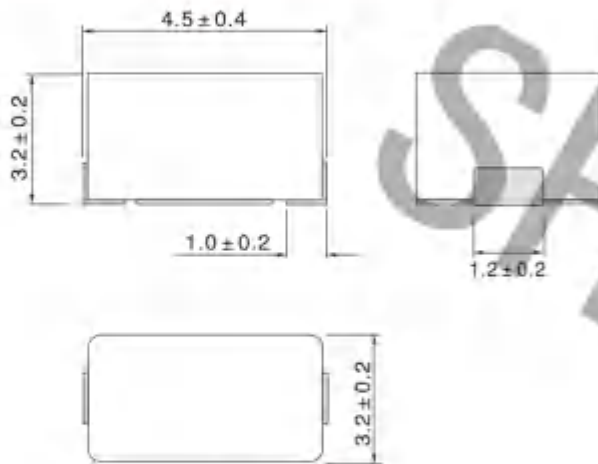
- Communication
- Equipment
- Instrument
- Video & audio



### ELECTRICAL CHARACTERISTICS:

| Part Number    | Inductance (μH) | Inductance Tolerance (%) | Q min. | Test Frequency LQ (MHz) | Self-resonant Frequency (MHz) min. | DC resistance (Ω) max. | Rated current (mA) max. |
|----------------|-----------------|--------------------------|--------|-------------------------|------------------------------------|------------------------|-------------------------|
| AISM1812C-1R0K | 1.0             | ±10%                     | 10     | 7.96                    | 180                                | 0.11                   | 1050                    |
| AISM1812C-1R2K | 1.2             | ±10%                     | 10     | 7.96                    | 160                                | 0.12                   | 1000                    |
| AISM1812C-1R5K | 1.5             | ±10%                     | 10     | 7.96                    | 130                                | 0.15                   | 950                     |
| AISM1812C-1R8K | 1.8             | ±10%                     | 10     | 7.96                    | 100                                | 0.16                   | 900                     |
| AISM1812C-2R2K | 2.2             | ±10%                     | 10     | 7.96                    | 80                                 | 0.18                   | 850                     |
| AISM1812C-2R7K | 2.7             | ±10%                     | 10     | 7.96                    | 60                                 | 0.20                   | 800                     |
| AISM1812C-3R3K | 3.3             | ±10%                     | 10     | 7.96                    | 45                                 | 0.22                   | 750                     |
| AISM1812C-3R9K | 3.9             | ±10%                     | 10     | 7.96                    | 40                                 | 0.24                   | 700                     |
| AISM1812C-4R7K | 4.7             | ±10%                     | 10     | 7.96                    | 35                                 | 0.27                   | 650                     |
| AISM1812C-5R6K | 5.6             | ±10%                     | 10     | 7.96                    | 30                                 | 0.30                   | 650                     |
| AISM1812C-6R8K | 6.8             | ±10%                     | 10     | 7.96                    | 28                                 | 0.35                   | 600                     |
| AISM1812C-8R2K | 8.2             | ±10%                     | 10     | 7.96                    | 25                                 | 0.40                   | 600                     |
| AISM1812C-100K | 10              | ±10%                     | 10     | 2.52                    | 22                                 | 0.50                   | 550                     |
| AISM1812C-120K | 12              | ±10%                     | 10     | 2.52                    | 21                                 | 0.60                   | 500                     |
| AISM1812C-150K | 15              | ±10%                     | 10     | 2.52                    | 20                                 | 0.70                   | 450                     |
| AISM1812C-180K | 18              | ±10%                     | 10     | 2.52                    | 19                                 | 0.80                   | 400                     |
| AISM1812C-220K | 22              | ±10%                     | 10     | 2.52                    | 18                                 | 0.9                    | 370                     |
| AISM1812C-270K | 27              | ±10%                     | 10     | 2.52                    | 16                                 | 1.2                    | 330                     |
| AISM1812C-330K | 33              | ±10%                     | 10     | 2.52                    | 14                                 | 1.4                    | 300                     |
| AISM1812C-390K | 39              | ±10%                     | 10     | 2.52                    | 12                                 | 1.6                    | 280                     |
| AISM1812C-470K | 47              | ±10%                     | 10     | 2.52                    | 11.5                               | 1.9                    | 260                     |
| AISM1812C-560K | 56              | ±10%                     | 10     | 2.52                    | 11                                 | 2.2                    | 240                     |
| AISM1812C-680K | 68              | ±10%                     | 10     | 2.52                    | 10                                 | 2.6                    | 220                     |
| AISM1812C-820K | 82              | ±10%                     | 10     | 2.52                    | 9                                  | 3.5                    | 200                     |
| AISM1812C-101K | 100             | ±10%                     | 20     | 0.796                   | 8                                  | 4.0                    | 180                     |
| AISM1812C-121K | 120             | ±10%                     | 20     | 0.796                   | 7.5                                | 4.5                    | 160                     |
| AISM1812C-151K | 150             | ±10%                     | 20     | 0.796                   | 7                                  | 6.5                    | 140                     |
| AISM1812C-181K | 180             | ±10%                     | 20     | 0.796                   | 6.5                                | 7.5                    | 120                     |
| AISM1812C-221K | 220             | ±10%                     | 20     | 0.796                   | 5.5                                | 9.0                    | 120                     |
| AISM1812C-271K | 270             | ±10%                     | 20     | 0.796                   | 5                                  | 11                     | 100                     |
| AISM1812C-331K | 330             | ±10%                     | 20     | 0.796                   | 4                                  | 13                     | 90                      |

## PHYSICAL CHARACTERISTICS

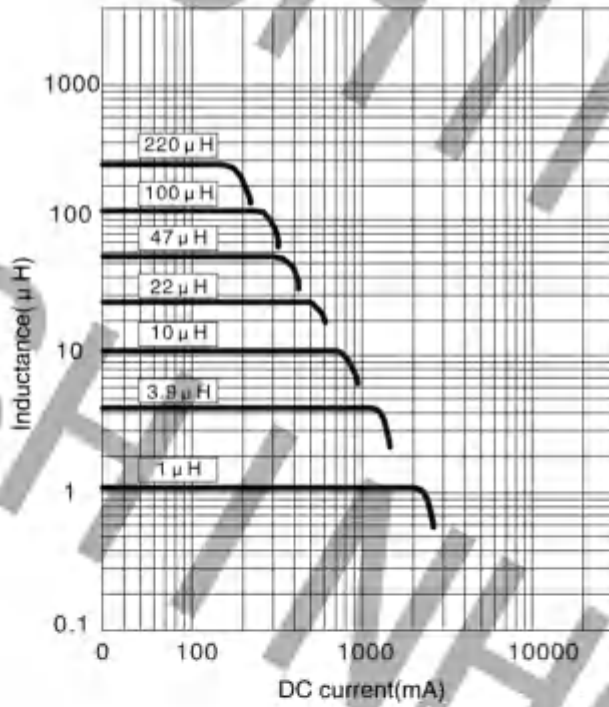


### Winding

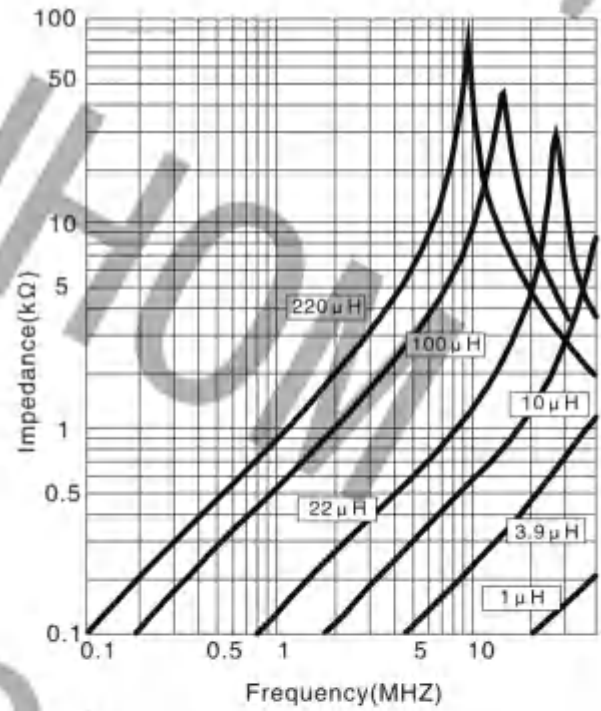


- Testing: (Equivalent acceptable)
- Inductance: HP4285A
- RDC: QuadTech 1880 Milliohm meter
- Q: HP4342A
- SRF: HP4291A
- Operating temperature:  $-25^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- Storage Temperature:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- Resistance to soldering heat:  $260^{\circ}\text{C}$  for 10 seconds
- Marking: Inductance & Tolerance

## DC BISE CURVE



## IMPEDANCE VS FREQUENCY CURVE





## SMD MOLDED POWER INDUCTORS

# LPM 0420,0630 SERIES

### FEATURES:

- Lowest height in this package footprint.
- Shielded construction.
- Lowest DCR/uH, in this package size.
- Handles high transient current spikes without saturation.
- Ultra low buzz noise, due to composite construction.
- Frequency up to 5MHz.

### OPTIONS:

- Tape & Reel is Standard (Qty: 1000pcs.)
- Bulk packaging Available for Smaller Quantities
- Tolerance M=20%, N=30%, is Standard, Tighter Tolerances Available

### COMMON APPLICATIONS:

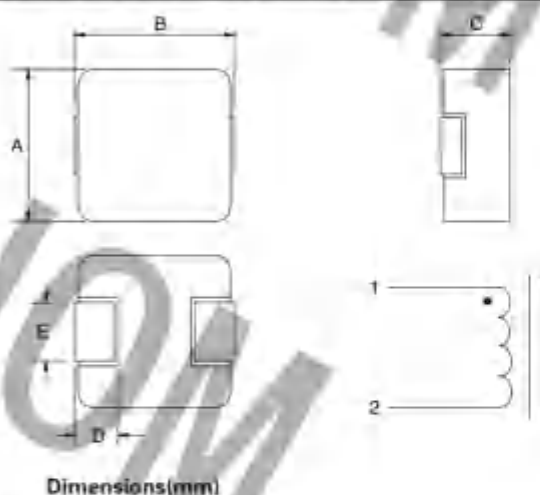
- Excellent for power line DC-DC conversion
- Applications used in power switching
- Personal computers and other handheld electronic equipment.

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L(1, H) = 20%<br>@0Adc | Heat rating<br>current DC<br>Amps (IDC/A) | Saturation<br>current DC<br>Amps (Isat/A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) | Part Number  | Inductance<br>L(1, H) = 20%<br>@0Adc | Heat rating<br>current DC<br>Amps (IDC/A) | Saturation<br>current DC<br>Amps (Isat/A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|--------------------------------------|-------------------------------------------|-------------------------------------------|------------------|------------------|--------------|--------------------------------------|-------------------------------------------|-------------------------------------------|------------------|------------------|
| LPM0420-R047M | 0.047                                | 15                                        | 15                                        | 2.5              | 3                | LPM0630-R82M | 0.82                                 | 13                                        | 24                                        | 4.8              | 7.8              |
| LPM0420-R10M  | 0.1                                  | 15                                        | 12                                        | 4.6              | 5.5              | LPM0630-1R0M | 1.0                                  | 12                                        | 22                                        | 7.4              | 9.4              |
| LPM0420-R22M  | 0.22                                 | 9.5                                       | 9.5                                       | 8                | 9.5              | LPM0630-1R5M | 1.5                                  | 10                                        | 18                                        | 8.8              | 14               |
| LPM0420-R47M  | 0.47                                 | 6                                         | 6                                         | 17.5             | 19               | LPM0630-2R2M | 2.2                                  | 8                                         | 15                                        | 12.3             | 18               |
| LPM0420-1R0M  | 1.0                                  | 4.2                                       | 4.5                                       | 41.5             | 43               | LPM0630-3R3M | 3.3                                  | 6                                         | 11.5                                      | 17.3             | 25               |
| LPM0420-1R2M  | 1.2                                  | 3.75                                      | 3.75                                      | 54.5             | 56.6             | LPM0630-4R7M | 4.7                                  | 5.5                                       | 10                                        | 24.2             | 32               |
| LPM0420-1R5M  | 1.5                                  | 3.25                                      | 3.25                                      | 67               | 68               | LPM0630-5R6M | 5.6                                  | 5.0                                       | 8.5                                       | 30.6             | 40               |
| LPM0420-2R2M  | 2.2                                  | 2.75                                      | 3                                         | 77.5             | 79               | LPM0630-6R8M | 6.8                                  | 4.5                                       | 8.0                                       | 37               | 44               |
| LPM0630-R20M  | 0.2                                  | 24                                        | 41                                        | 2                | 3.0              | LPM0630-8R2M | 8.2                                  | 4.0                                       | 6.5                                       | 50               | 60               |
| LPM0630-R33M  | 0.33                                 | 20                                        | 30                                        | 2.1              | 3.4              | LPM0630-100M | 10                                   | 3.5                                       | 5.5                                       | 56               | 72               |
| LPM0630-R47M  | 0.47                                 | 17.5                                      | 26                                        | 4.0              | 5.2              | LPM0630-150M | 15                                   | 3.0                                       | 5                                         | 84               | 105              |
| LPM0630-R68M  | 0.68                                 | 16.0                                      | 25                                        | 4.6              | 6.4              | LPM0630-220M | 22                                   | 2.5                                       | 4.5                                       | 112              | 155              |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

- Test Frequency : 100KHz / 0.25Vdc
- Testing Instrument : LHP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- Heat Rated Current (Irms) will cause the coil temperature rise approximately,  $\Delta T=40^{\circ}\text{C}$  without core loss.
- Saturation Current (Isat) will cause L0 to drop approximately 20%.
- The part temperature (ambient + temp rise) should not exceed  $125^{\circ}\text{C}$  under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating Temperature & Storage Temperature:  $-40^{\circ}\text{C}$  ~  $+105^{\circ}\text{C}$ .



| Series   | A(mm)            | B(mm)            | C(mm)    | D(mm)          | E(mm)         |  |  |
|----------|------------------|------------------|----------|----------------|---------------|--|--|
| LPM 0420 | $4.06 \pm 0.254$ | $4.45 \pm 0.254$ | 2.0 max. | $0.76 \pm 0.3$ | $2.3 \pm 0.2$ |  |  |
| LPM 0630 | $6.8 \pm 0.2$    | $7.2 \pm 0.2$    | 3.0 max. | $1.5 \pm 0.5$  | $3.0 \pm 0.2$ |  |  |

Note: All specifications subject to change without notice.



## SMD MOLDED POWER INDUCTORS

# LPM 1040,1045 SERIES

### FEATURES:

- Lowest height in this package footprint.
- Shielded construction.
- Lowest DCR/H, in this package size.
- Handles high transient current spikes without saturation.
- Ultra low buzz noise, due to composite construction.
- Frequency up to 5MHz.

### OPTIONS:

- Tape & Reel is Standard (Qty:1000pcs.)
- Bulk packaging Available for Smaller Quantities
- Tolerance: M=20%, N=30%, J Standard, Tighter Tolerances Available

### COMMON APPLICATIONS:

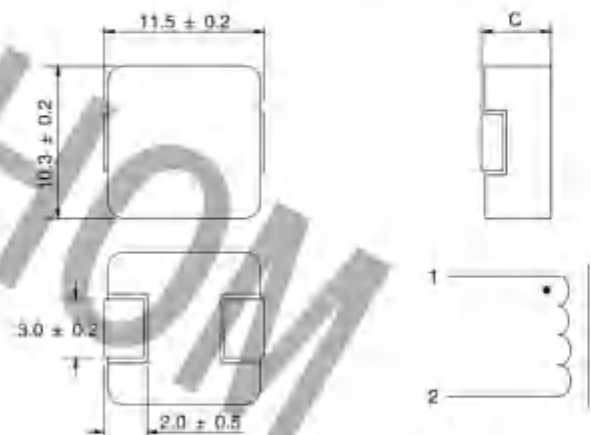
- Excellent for power line DC-DC conversion
- Applications used in power switching
- Personal computers and other handheld electronic equipment.

### ELECTRICAL CHARACTERISTICS:

| Part Number  | Inductance<br>L0(μH) ±20%<br>@0Ade | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) | Part Number  | Inductance<br>L0(μH) ±20%<br>@0Ade | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|--------------|------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|--------------|------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM1040-R20M | 0.2                                | 36                                       | 66                                       | 1.8              | 3.5              | LPM1040-5R6M | 5.6                                | 8.5                                      | 15                                       | 18.9             | 25               |
| LPM1040-R33M | 0.33                               | 31                                       | 60                                       | 2.0              | 3.8              | LPM1040-6R6M | 6.8                                | 8.0                                      | 14                                       | 23.5             | 30               |
| LPM1040-R47M | 0.47                               | 28.5                                     | 54                                       | 2.1              | 4.0              | LPM1040-8R2M | 8.2                                | 7.0                                      | 12.5                                     | 28.3             | 35               |
| LPM1040-R56M | 0.56                               | 27.5                                     | 49                                       | 2.2              | 4.5              | LPM1045-100M | 10                                 | 6.8                                      | 11.5                                     | 30.2             | 38               |
| LPM1040-R68M | 0.68                               | 24                                       | 42                                       | 2.8              | 5.0              | LPM1045-150M | 15                                 | 5.0                                      | 9                                        | 48               | 55               |
| LPM1040-R82M | 0.82                               | 22                                       | 39                                       | 3.0              | 7.0              | LPM1045-220M | 22                                 | 4.5                                      | 8                                        | 50               | 58               |
| LPM1040-1R0M | 1.0                                | 17.5                                     | 32                                       | 3.5              | 7.5              | LPM1045-330M | 33                                 | 3.5                                      | 6.5                                      | 75               | 90               |
| LPM1040-1R2M | 1.2                                | 19.5                                     | 29                                       | 4.3              | 7.9              | LPM1045-470M | 47                                 | 3.0                                      | 5                                        | 110              | 130              |
| LPM1040-1R5M | 1.5                                | 15                                       | 27.5                                     | 5.2              | 8.0              |              |                                    |                                          |                                          |                  |                  |
| LPM1040-2R2M | 2.2                                | 12                                       | 21.5                                     | 6.5              | 10               |              |                                    |                                          |                                          |                  |                  |
| LPM1040-3R3M | 3.3                                | 10                                       | 18.6                                     | 10.1             | 14               |              |                                    |                                          |                                          |                  |                  |
| LPM1040-4R7M | 4.7                                | 9.5                                      | 16.5                                     | 15.5             | 23.6             |              |                                    |                                          |                                          |                  |                  |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

- Test Frequency : 100KHz / 0.25Vdc
- Testing Instrument : LHP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH18502, Agilent33420A MICRO OHMMETER.
- Heat Rated Current (Irms) will cause the coil temperature rise approximately  $\Delta T=40^{\circ}\text{C}$  without core loss.
- Saturation Current (Isat) will cause L0 to drop approximately 20%.
- The part temperature (ambient + temp rise) should not exceed  $125^{\circ}\text{C}$  under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating Temperature & Storage Temperature:  $-40^{\circ}\text{C}$  ~  $+105^{\circ}\text{C}$ .



Dimensions(mm)

| Series  | C      |
|---------|--------|
| LPM1040 | 4.5Max |
| LPM1045 | 5.5Max |

Note: All specifications subject to change without notice.



## SMD MOLDED POWER INDUCTORS

# LPM 1240,1250,1260 1265,1270 SERIES

### FEATURES:

- Lowest height in this package footprint.
- Shielded construction.
- Lowest DCR/H, in this package size.
- Handles high transient current spikes without saturation.
- Ultra low buzz noise, due to composite construction.
- Frequency up to 5MHz.

### OPTIONS:

- Tape & Reel is Standard (Qty:1000pcs.)
- Bulk packaging Available for Smaller Quantities
- Tolerance,M=20%,N=30%,J Standard, Tighter Tolerances Available

### COMMON APPLICATIONS:

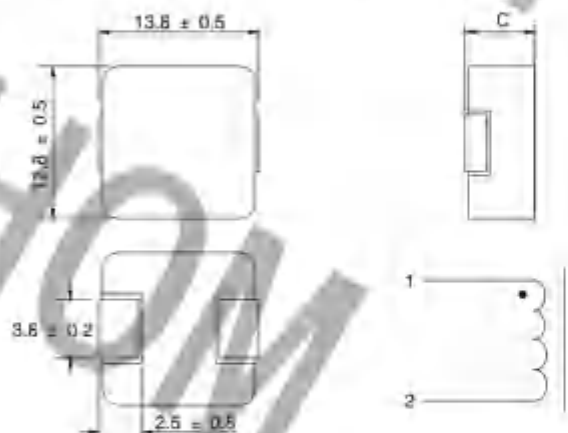
- Excellent for power line DC-DC conversion
- Applications used in power switching
- Personal computers and other handheld electronic equipment.

### ELECTRICAL CHARACTERISTICS:

| Part Number  | Inductance<br>Lo(LH) = 20%<br>@0Ade | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) | Part Number  | Inductance<br>Lo(LH) = 20%<br>@0Ade | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|--------------|-------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|--------------|-------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM1240-R22M | 0.22                                | 45                                       | 85.6                                     | 1.5              | 3.0              | LPM1260-5R6M | 5.6                                 | 11.5                                     | 20                                       | 10.5             | 15               |
| LPM1240-R33M | 0.33                                | 42                                       | 80.5                                     | 1.8              | 3.5              | LPM1260-6R8M | 6.8                                 | 11.0                                     | 18.5                                     | 13               | 17               |
| LPM1240-R47M | 0.47                                | 38                                       | 66                                       | 2.0              | 4.0              | LPM1260-8R2M | 8.2                                 | 10                                       | 17                                       | 18               | 23               |
| LPM1240-R56M | 0.56                                | 35                                       | 55                                       | 2.3              | 5.0              | LPM1260-100M | 10                                  | 9.5                                      | 16                                       | 25               | 30               |
| LPM1240-R68M | 0.68                                | 34                                       | 54                                       | 2.7              | 5.5              | LPM1265-150M | 15                                  | 9.0                                      | 14.5                                     | 36               | 45               |
| LPM1250-R82M | 0.82                                | 31                                       | 53                                       | 3.0              | 6.5              | LPM1265-220M | 22                                  | 8.0                                      | 13                                       | 39               | 50               |
| LPM1250-1R0M | 1.0                                 | 29                                       | 50                                       | 3.5              | 7.0              | LPM1265-330M | 33                                  | 7.0                                      | 11                                       | 42               | 55               |
| LPM1250-1R2M | 1.2                                 | 26                                       | 49                                       | 3.9              | 7.5              | LPM1265-470M | 47                                  | 6.0                                      | 10                                       | 61               | 65               |
| LPM1250-1R5M | 1.5                                 | 23                                       | 48                                       | 4.3              | 8.0              | LPM1265-680M | 68                                  | 4.5                                      | 8.5                                      | 92               | 110              |
| LPM1250-2R2M | 2.2                                 | 20                                       | 32                                       | 5.0              | 9.0              | LPM1275-800M | 82                                  | 3.5                                      | 6.5                                      | 104              | 125              |
| LPM1250-3R3M | 3.3                                 | 15                                       | 27.5                                     | 6.5              | 11               | LPM1270-101M | 100                                 | 3.0                                      | 5.5                                      | 111.5            | 140              |
| LPM1260-4R7M | 4.7                                 | 12                                       | 22.5                                     | 8.5              | 13               |              |                                     |                                          |                                          |                  |                  |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

- Test Frequency : 100KHz / 0.25Vdc
- Testing Instrument : LHP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH18502, Agilent33420A MICRO OHMMETER.
- Heat Rated Current (Irms) will cause the coil temperature rise approximately  $\Delta T=40^{\circ}\text{C}$  without core loss.
- Saturation Current (Isat) will cause L0 to drop approximately 20%.
- The part temperature (ambient + temp rise) should not exceed  $125^{\circ}\text{C}$  under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating Temperature & Storage Temperature:  $-40^{\circ}\text{C}$  -  $+105^{\circ}\text{C}$ .



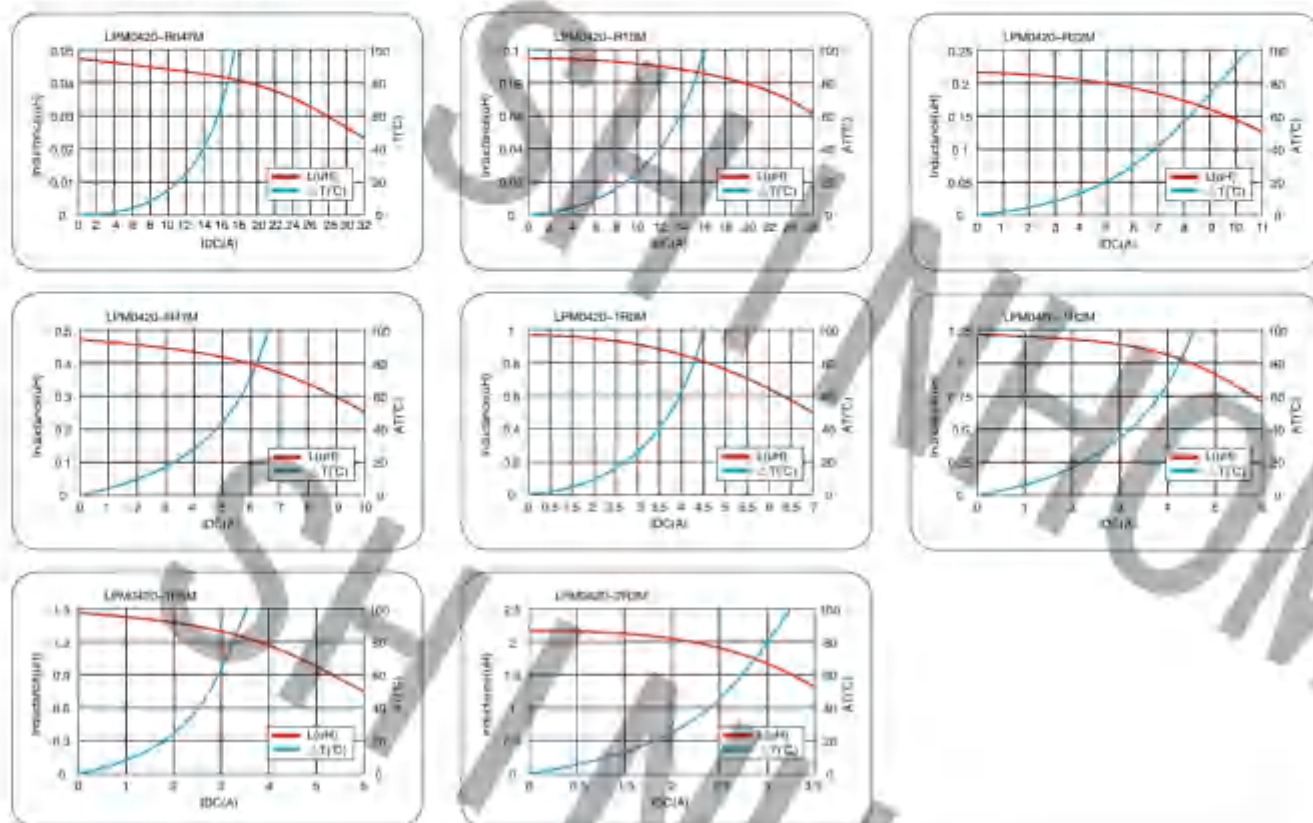
Dimensions(mm)

| Series | LPM1240 | LPM1250 | LPM1260 | LPM1265 | LPM1270 |
|--------|---------|---------|---------|---------|---------|
| C      | 5.0Max  | 6.0Max  | 7.0Max  | 7.5Max  | 8.0Max  |

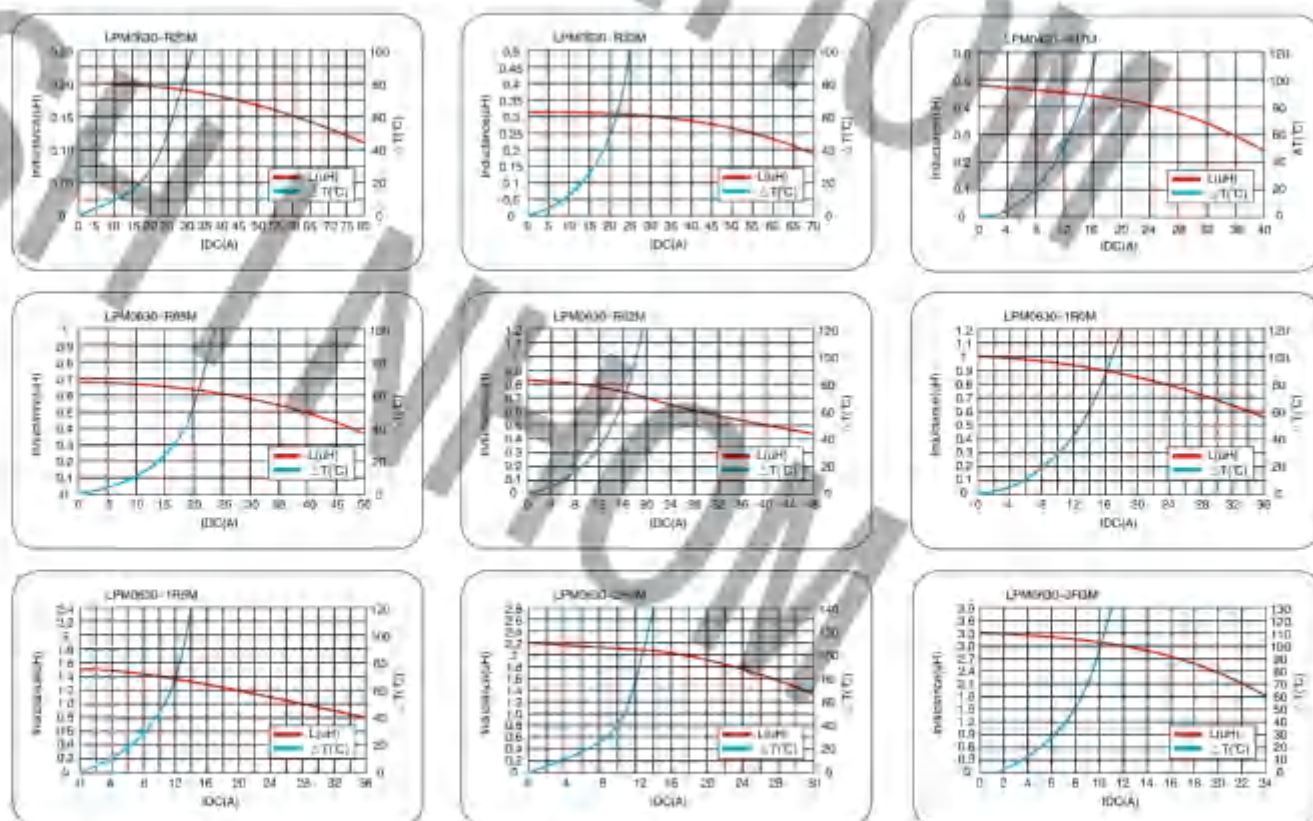
Note: All specifications subject to change without notice.

## PERFORMANCE CURVE

### LPM0420 Series

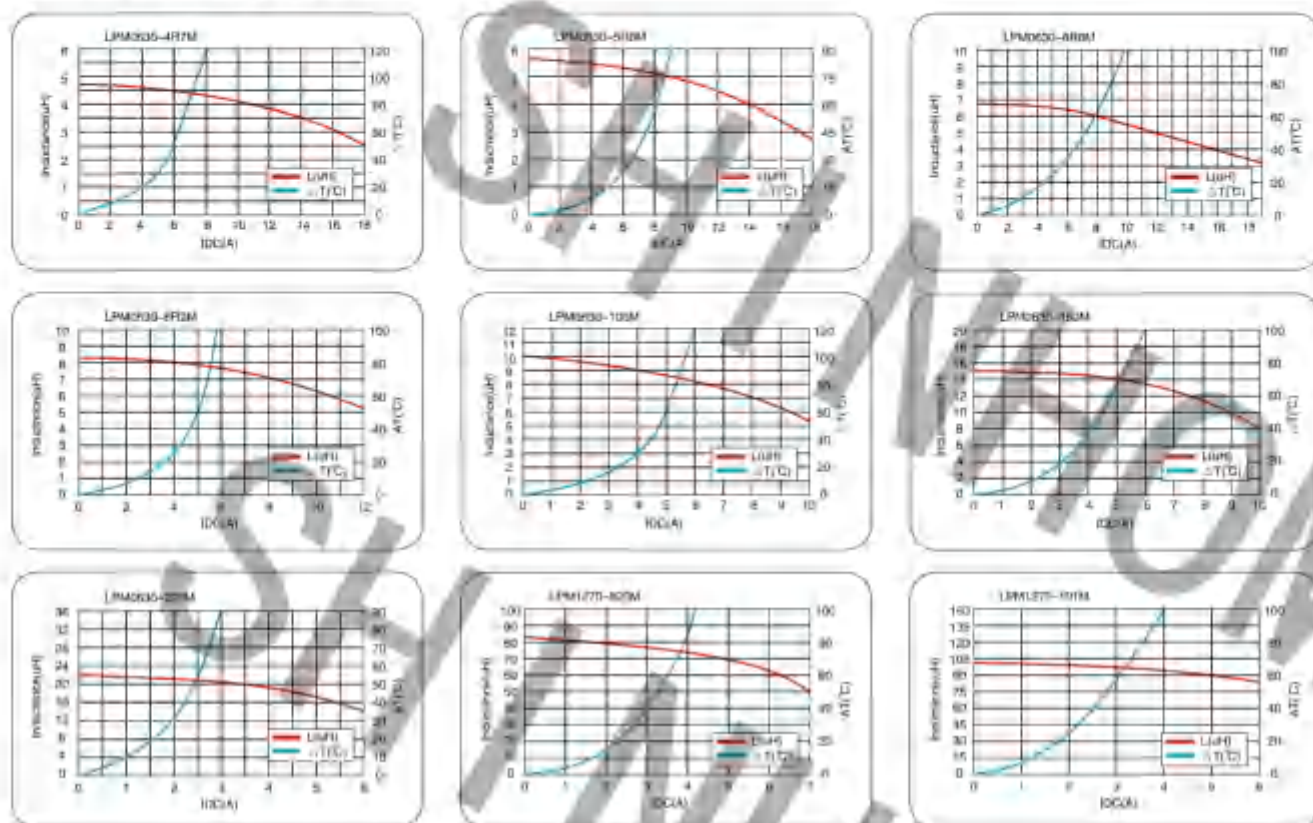


### LPM0630 Series

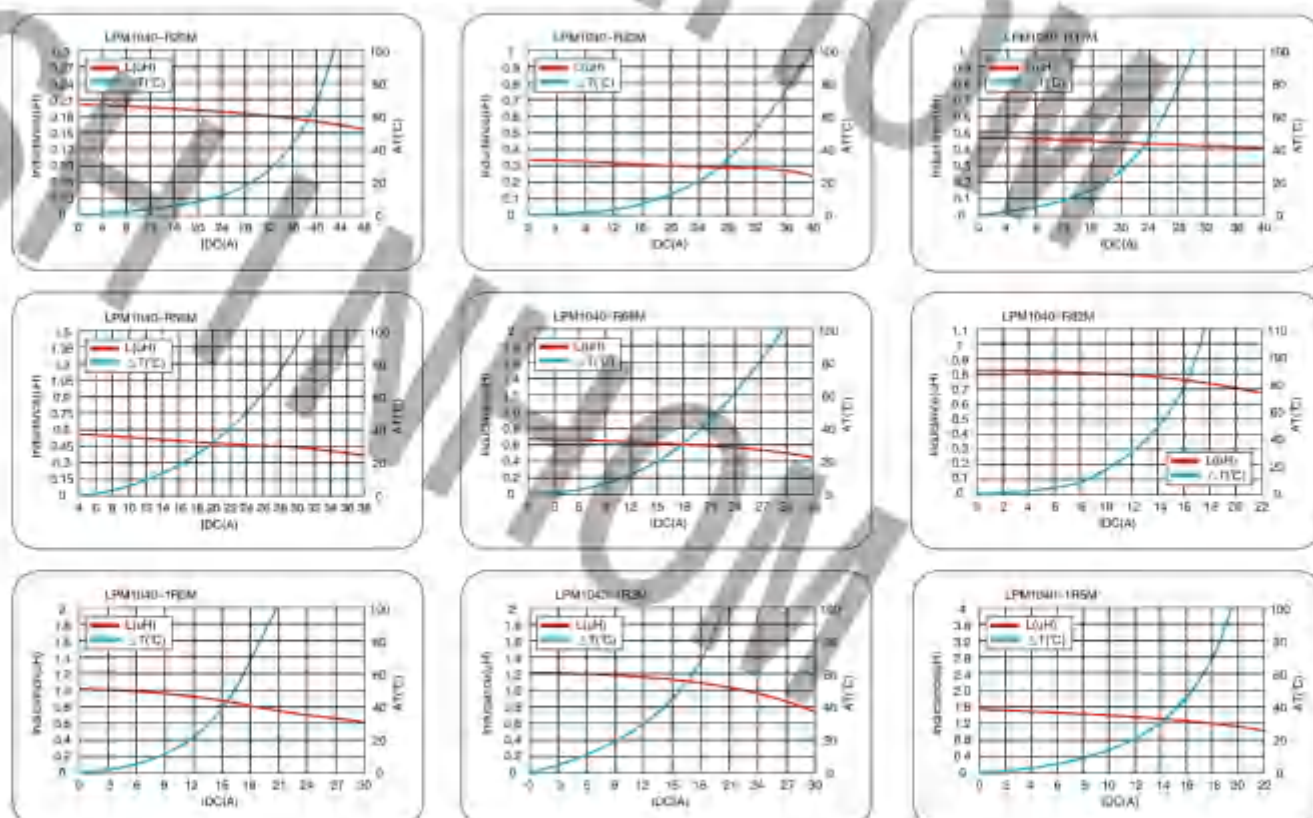


## PERFORMANCE CURVE

### LPM0630,1270 Series

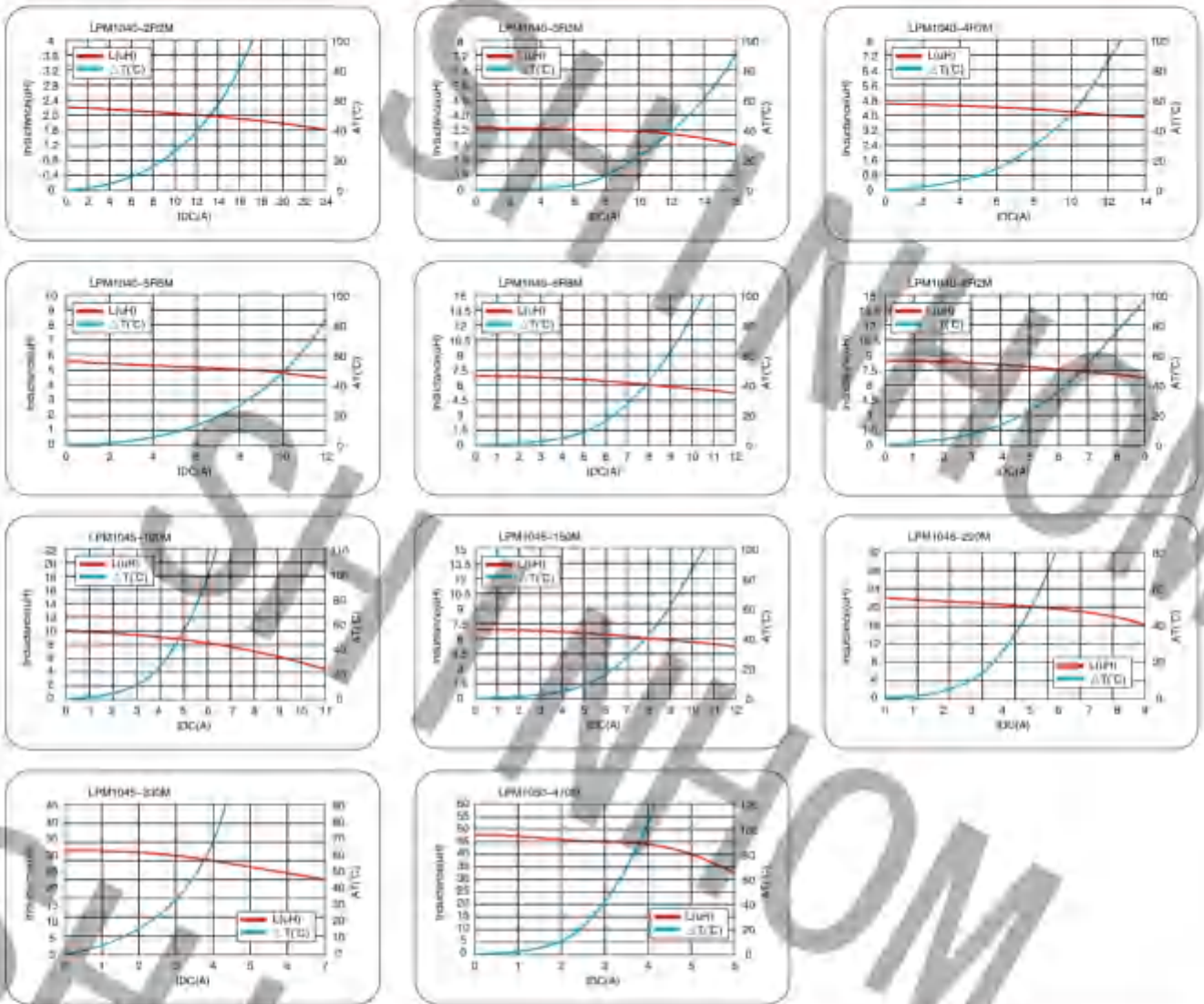


### LPM1040 Series

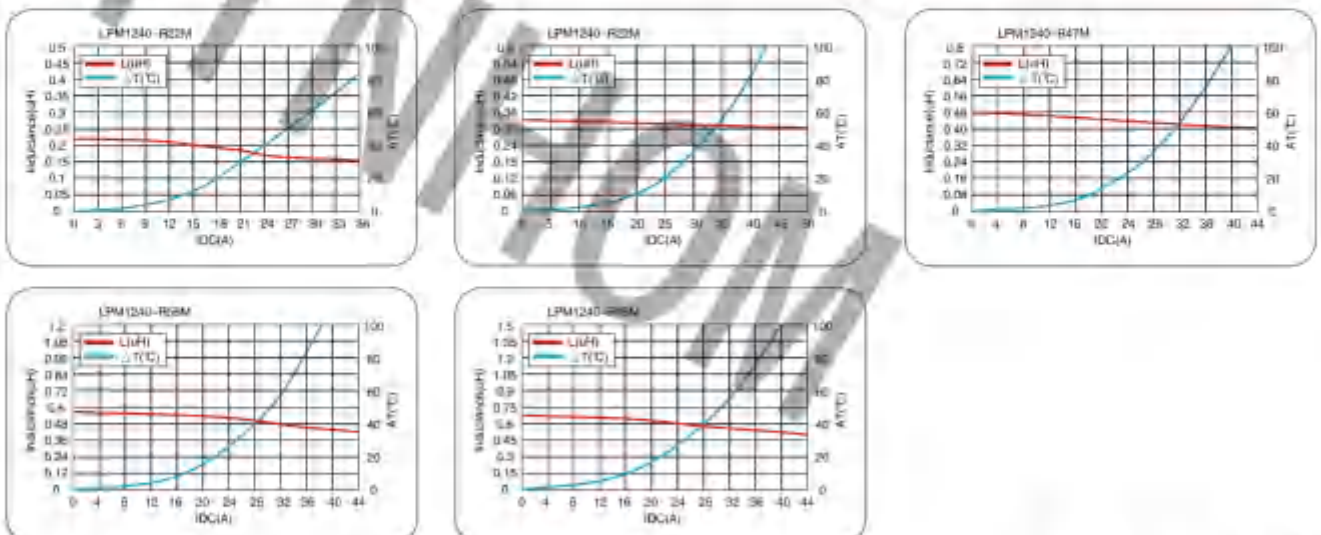


## PERFORMANCE CURVE

### LPM1040,1045 Series

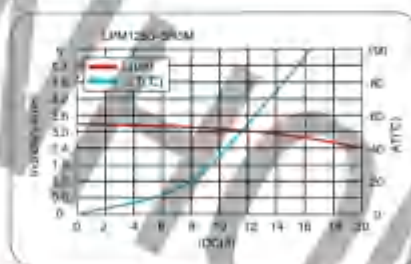
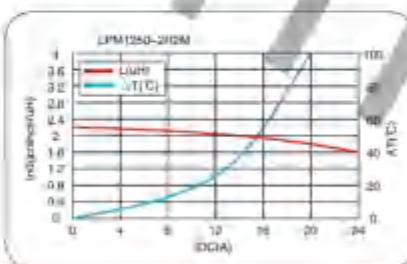
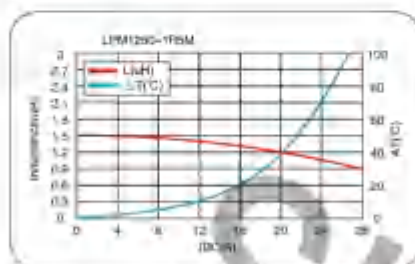
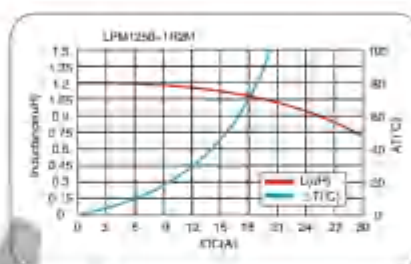
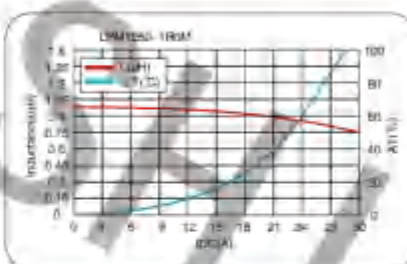
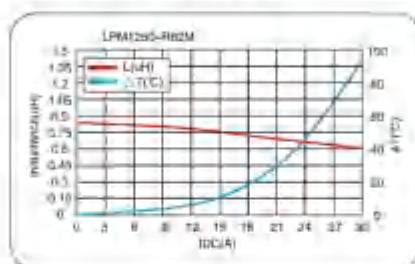


### LPM1240 Series

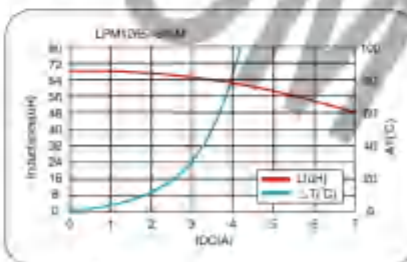
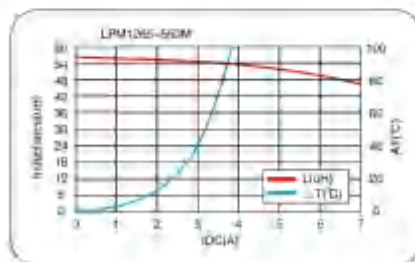
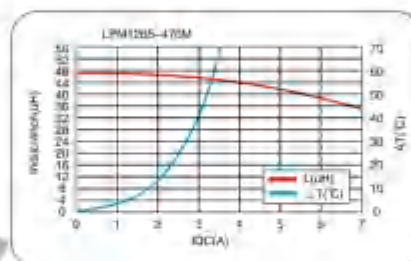
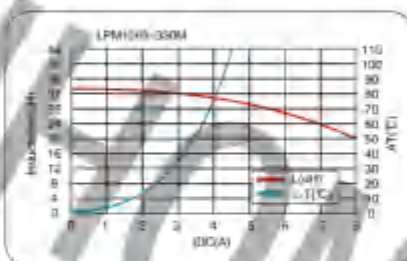
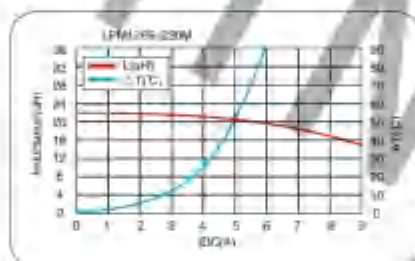
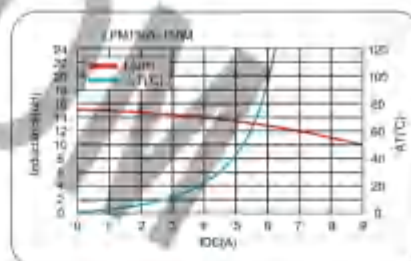
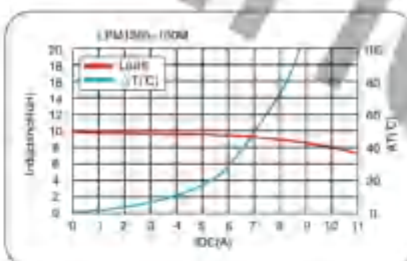
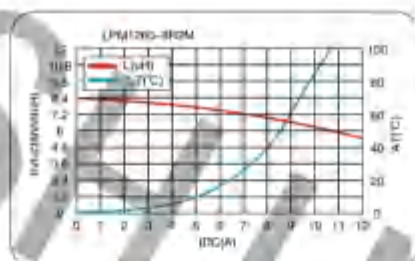
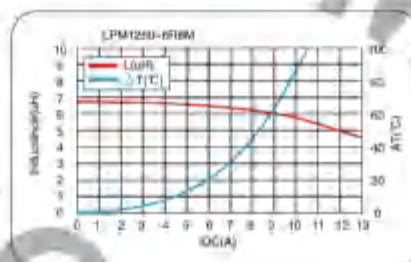
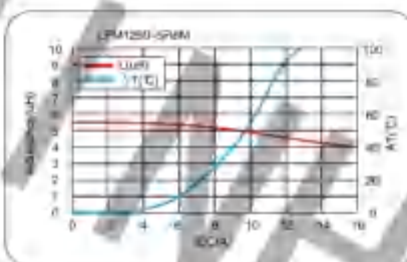
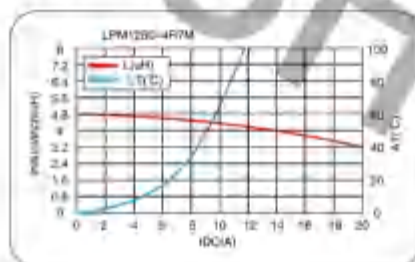


## PERFORMANCE CURVE

### LPM1250 Series

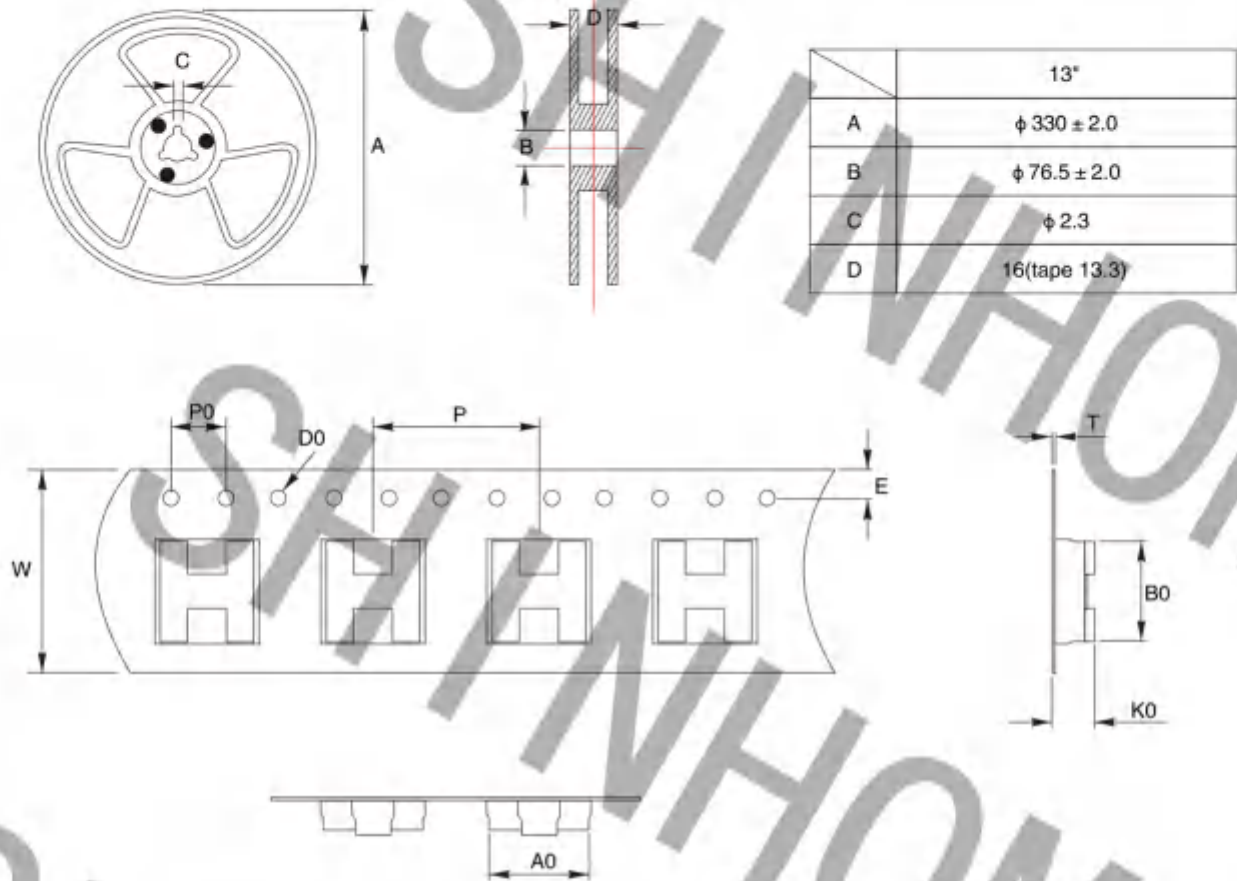


### LPM1260,1265 Series

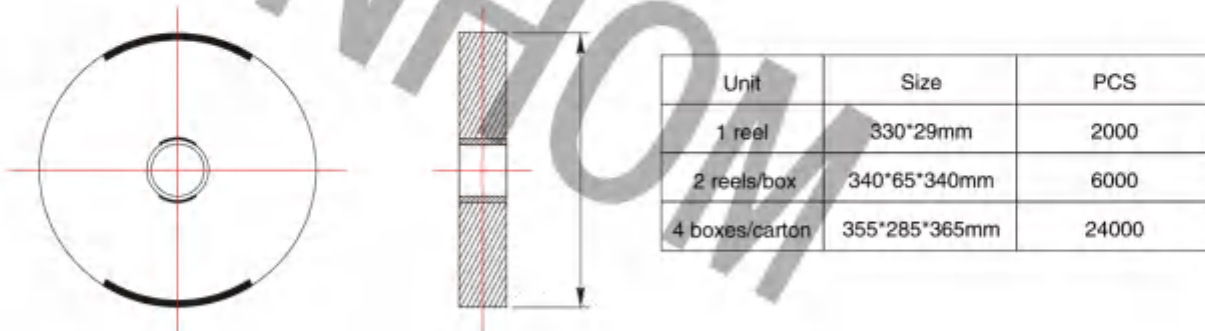


## PRODUCT PACKAGING

### LPM0630 Series

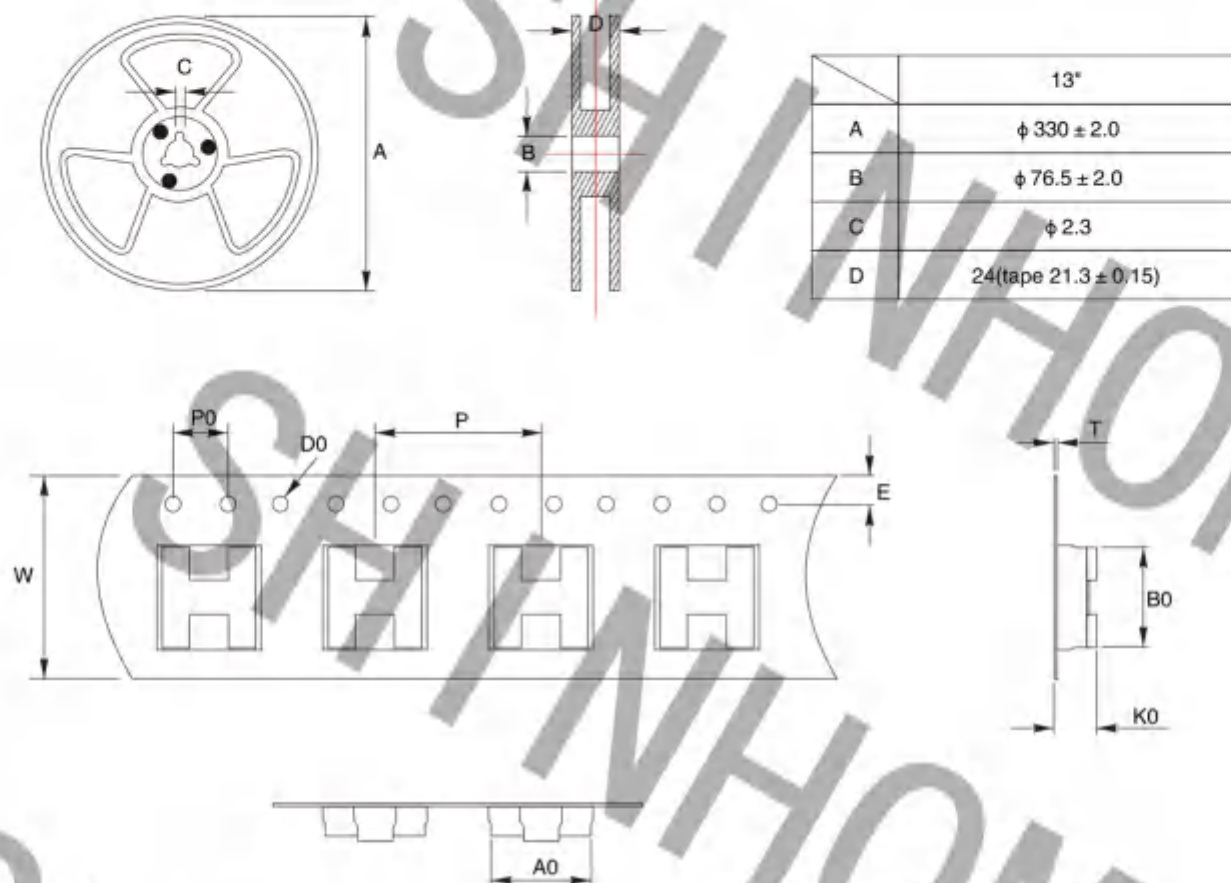


| Size | W              | A0            | B0            | D0            | E              | K0            | P0            | P              | T              |
|------|----------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|----------------|
| 0630 | $16.0 \pm 0.3$ | $6.8 \pm 0.1$ | $6.8 \pm 0.1$ | $1.5 \pm 0.1$ | $1.75 \pm 0.1$ | $2.8 \pm 0.1$ | $4.0 \pm 0.1$ | $12.0 \pm 0.1$ | $0.4 \pm 0.05$ |

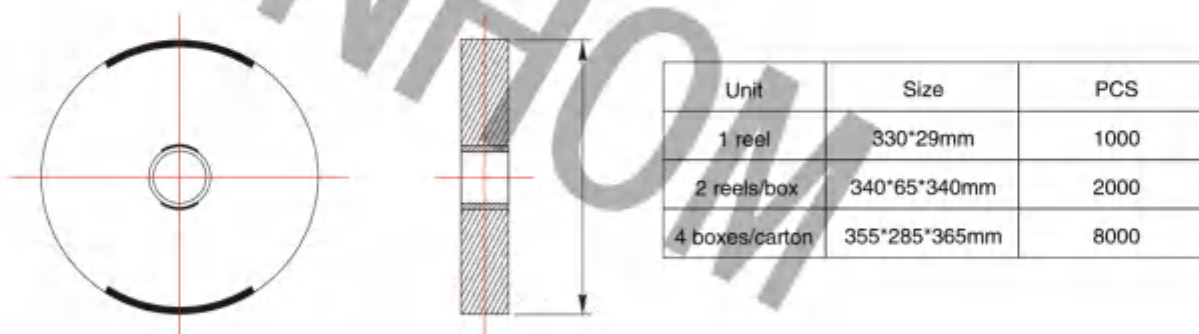


## PRODUCT PACKAGING

### LPM1040 Series

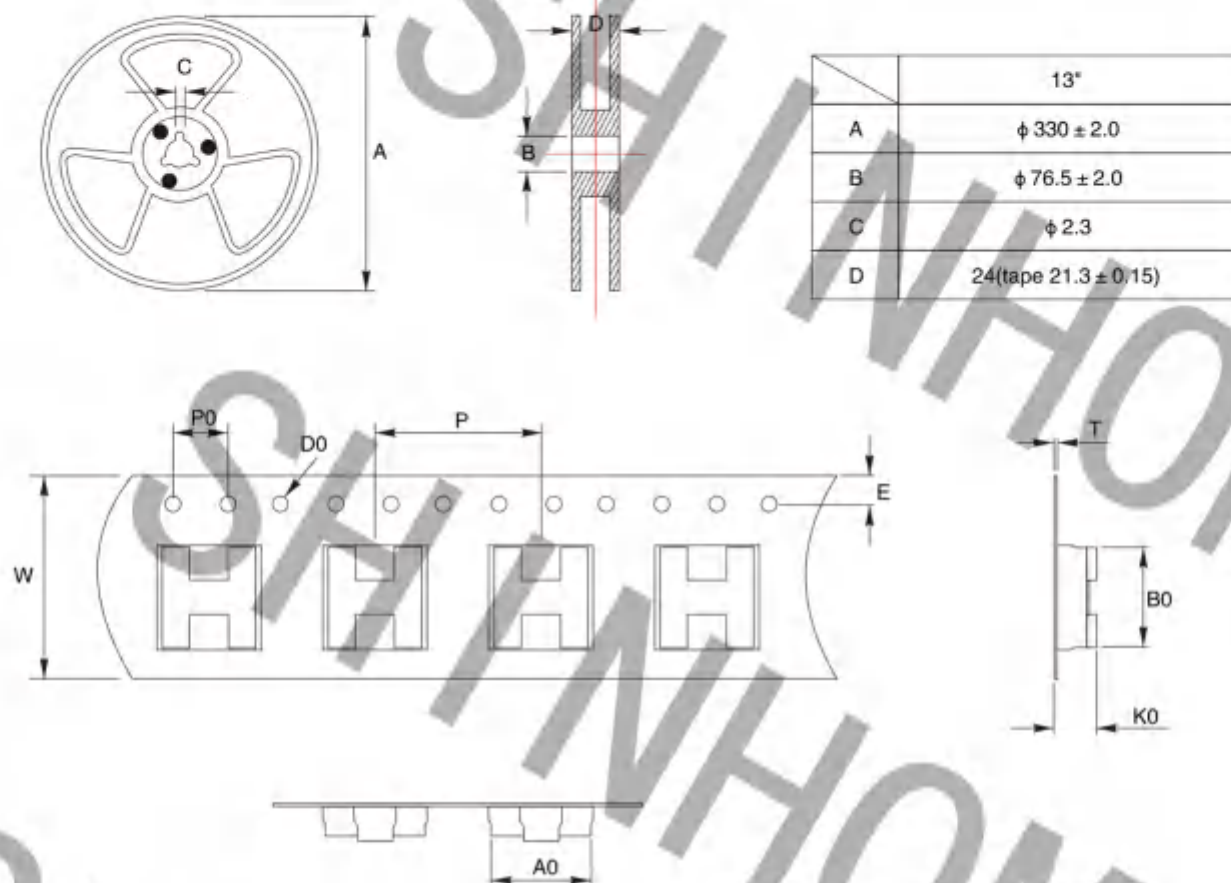


| Size | W              | A0             | B0             | D0            | E              | K0            | P0            | P              | T              |
|------|----------------|----------------|----------------|---------------|----------------|---------------|---------------|----------------|----------------|
| 1040 | $24.0 \pm 0.3$ | $10.6 \pm 0.1$ | $11.6 \pm 0.1$ | $1.5 \pm 0.1$ | $1.75 \pm 0.1$ | $4.2 \pm 0.1$ | $4.0 \pm 0.1$ | $16.0 \pm 0.1$ | $0.4 \pm 0.05$ |

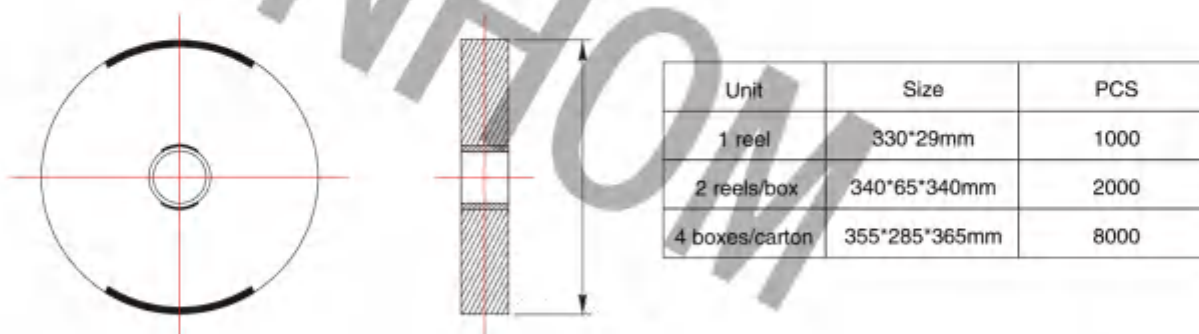


## PRODUCT PACKAGING

### LPM1260 Series



| Size | W              | A0             | B0             | D0            | E              | K0            | P0             | P              | T              |
|------|----------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|----------------|
| 1260 | $24.0 \pm 0.3$ | $13.1 \pm 0.1$ | $14.1 \pm 0.1$ | $1.5 \pm 0.1$ | $1.75 \pm 0.1$ | $6.0 \pm 0.1$ | $20.0 \pm 0.1$ | $16.0 \pm 0.1$ | $0.4 \pm 0.05$ |





## SMD MOLDED POWER INDUCTORS

# LPM 1340 SERIES

### FEATURES:

- Lowest height in this package footprint.
- Shielded construction.
- Lowest DCR/ $\mu$ H, in this package size.
- Handles high transient current spikes without saturation.
- Ultra low buzz noise, due to composite construction.

### COMMON APPLICATIONS:

- Excellent for power line DC-DC conversion
- Applications used in power switching
- Personal computers and other handheld electronic equipment.

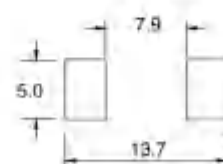
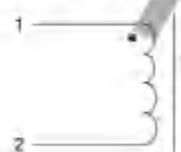
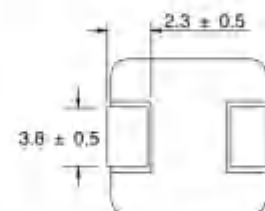
### ELECTRICAL CHARACTERISTICS:

| Part Number  | Codes | Inductance<br>$L_0(\mu H) \pm 20\%$<br>@0Adc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Max.<br>(m $\Omega$ ). |
|--------------|-------|----------------------------------------------|------------------------------------------|------------------------------------------|----------------------------|
| LPM1340-R10M | R10   | 0.1                                          | 33.0                                     | 84.0                                     | 0.96                       |
| LPM1340-R15M | R15   | 0.15                                         | 31.0                                     | 75.0                                     | 1.2                        |
| LPM1340-R22M | R22   | 0.22                                         | 28.5                                     | 65.0                                     | 1.3                        |
| LPM1340-R33M | R33   | 0.33                                         | 26.5                                     | 62.0                                     | 1.5                        |
| LPM1340-R47M | R47   | 0.47                                         | 23.0                                     | 65.0                                     | 2.0                        |
| LPM1340-R60M | R60   | 0.60                                         | 22.0                                     | 40.0                                     | 3.0                        |
| LPM1340-R68M | R68   | 0.68                                         | 22.0                                     | 40.0                                     | 2.5                        |
| LPM1340-R82M | R82   | 0.82                                         | 20.0                                     | 38.0                                     | 3.0                        |
| LPM1340-1R0M | 1R0   | 1.0                                          | 19.0                                     | 38.0                                     | 3.5                        |
| LPM1340-1R5M | 1R5   | 1.5                                          | 16.0                                     | 30.0                                     | 5.5                        |
| LPM1340-1R8M | 1R8   | 1.8                                          | 16.0                                     | 26.0                                     | 8.3                        |
| LPM1340-2R2M | 2R2   | 2.2                                          | 15.0                                     | 22.0                                     | 9.5                        |
| LPM1340-3R3M | 3R3   | 3.3                                          | 14.0                                     | 20.0                                     | 12.0                       |
| LPM1340-4R7M | 4R7   | 4.7                                          | 9.0                                      | 15.0                                     | 15.0                       |
| LPM1340-5R6M | 5R6   | 5.6                                          | 8.0                                      | 14.0                                     | 19.0                       |
| LPM1340-6R8M | 6R8   | 6.8                                          | 7.0                                      | 12.0                                     | 24.0                       |
| LPM1340-8R2M | 8R2   | 8.2                                          | 7.0                                      | 12.0                                     | 28.0                       |
| LPM1340-100M | 100   | 10                                           | 6.0                                      | 10.0                                     | 35.0                       |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

- Test Frequency : 100KHz / 0.25Vdc @ 25°C.
- Testing Instrument : LHP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- Heat Rated Current (Irms) will cause the coil temperature rise approximately,  $\Delta T=40^\circ\text{C}$  without core loss.
- Saturation Current (Isat) will cause  $L_0$  to drop approximately 25%.
- The part temperature (ambient + temp rise) should not exceed  $125^\circ\text{C}$  under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating Temperature & Storage Temperature:  $-55^\circ\text{C} \sim +125^\circ\text{C}$ .

Dimensions(mm).



Note: All specifications subject to change without notice.



## SMD MOLDED POWER INDUCTORS

# LPM 1350 SERIES

### FEATURES:

- Lowest height in this package footprint.
- Shielded construction.
- Lowest DCR/H, in this package size.
- Handles high transient current spikes without saturation.
- Ultra low buzz noise, due to composite construction.

### COMMON APPLICATIONS:

- Excellent for power line DC-DC conversion
- Applications used in power switching
- Personal computers and other handheld electronic equipment.

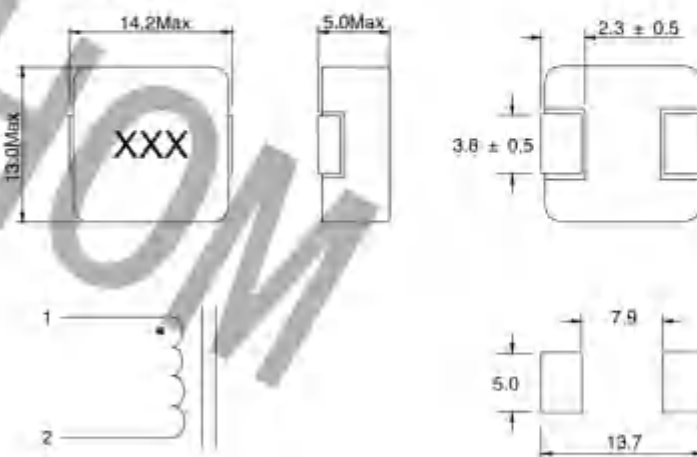
### ELECTRICAL CHARACTERISTICS:

| Part Number  | Codes | Inductance<br>L0(μH) ± 20%<br>@0Adc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Max.<br>(mΩ). |
|--------------|-------|-------------------------------------|------------------------------------------|------------------------------------------|-------------------|
| LPM1350-R10M | R10   | 0.1                                 | 45.0                                     | 98                                       | 0.6               |
| LPM1350-R22M | R22   | 0.22                                | 41.0                                     | 90                                       | 0.8               |
| LPM1350-R33M | R33   | 0.33                                | 32.0                                     | 60                                       | 1.1               |
| LPM1350-R47M | R47   | 0.47                                | 25.0                                     | 48                                       | 1.3               |
| LPM1350-R56M | R56   | 0.56                                | 23.0                                     | 46                                       | 1.5               |
| LPM1350-R68M | R68   | 0.68                                | 20.0                                     | 40                                       | 1.7               |
| LPM1350-R82M | R82   | 0.82                                | 19.0                                     | 39                                       | 2.5               |
| LPM1350-1R0M | 1R0   | 1.0                                 | 16.0                                     | 35                                       | 3.5               |
| LPM1350-1R5M | 1R5   | 1.5                                 | 16.0                                     | 33                                       | 4.1               |
| LPM1350-1R8M | 1R8   | 1.8                                 | 17.0                                     | 30                                       | 4.9               |
| LPM1350-2R2M | 2R2   | 2.2                                 | 16.0                                     | 25                                       | 5.5               |
| LPM1350-3R3M | 3R3   | 3.3                                 | 15.0                                     | 23                                       | 13.0              |
| LPM1350-4R7M | 4R7   | 4.7                                 | 12.0                                     | 21                                       | 15.0              |
| LPM1350-5R6M | 5R6   | 5.6                                 | 12.0                                     | 20                                       | 17.0              |
| LPM1350-6R8M | 6R8   | 6.8                                 | 11.0                                     | 18                                       | 19.0              |
| LPM1350-8R2M | 8R2   | 8.2                                 | 10.0                                     | 17                                       | 22.5              |
| LPM1350-100M | 100   | 10                                  | 6.0                                      | 13                                       | 25.5              |
| LPM1350-470M | 470   | 47                                  | 2.5                                      | 3.5                                      | 90.0              |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

- Test Frequency : 100KHz / 0.25Vdc @ 25°C.
- Testing Instrument : LHP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- Heat Rated Current (Irms) will cause the coil temperature rise approximately,  $\Delta T=40^{\circ}\text{C}$  without core loss.
- Saturation Current (Isat) will cause L0 to drop approximately 25%.
- The part temperature (ambient + temp rise) should not exceed  $125^{\circ}\text{C}$  under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating Temperature & Storage Temperature:  $-55^{\circ}\text{C}$  ~  $+125^{\circ}\text{C}$ .

Dimensions(mm).



Note: All specifications subject to change without notice.



## SMD MOLDED POWER INDUCTORS

# LPM 1360 SERIES

### FEATURES:

- Lowest height in this package footprint.
- Shielded construction.
- Lowest DCR/H, in this package size.
- Handles high transient current spikes without saturation.
- Ultra low buzz noise, due to composite construction.

### COMMON APPLICATIONS:

- Excellent for power line DC-DC conversion
- Applications used in power switching
- Personal computers and other handheld electronic equipment.

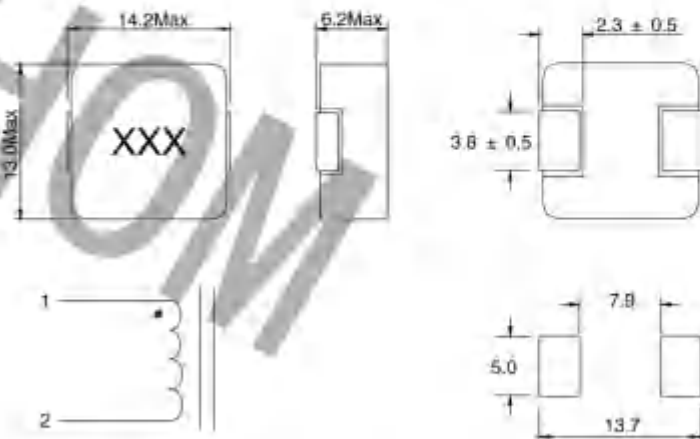
### ELECTRICAL CHARACTERISTICS:

| Part Number  | Codes | Inductance<br>L0(μH) ± 20%<br>@ 0Adc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Max.<br>(mΩ). |
|--------------|-------|--------------------------------------|------------------------------------------|------------------------------------------|-------------------|
| LPM1360-R10M | R10   | 0.1                                  | 60                                       | 108                                      | 2.0               |
| LPM1360-R15M | R15   | 0.15                                 | 55                                       | 105                                      | 2.1               |
| LPM1360-R22M | R22   | 0.22                                 | 53                                       | 100                                      | 2.2               |
| LPM1360-R30M | R30   | 0.30                                 | 48                                       | 90                                       | 2.3               |
| LPM1360-R33M | R33   | 0.33                                 | 46                                       | 55                                       | 2.3               |
| LPM1360-R40M | R40   | 0.40                                 | 44                                       | 52                                       | 2.4               |
| LPM1360-R47M | R47   | 0.47                                 | 41                                       | 50                                       | 2.5               |
| LPM1360-R56M | R56   | 0.56                                 | 37                                       | 48                                       | 2.6               |
| LPM1360-R68M | R68   | 0.68                                 | 35                                       | 45                                       | 2.8               |
| LPM1360-R82M | R82   | 0.82                                 | 25                                       | 42                                       | 3.0               |
| LPM1360-1R0M | 1R0   | 1.0                                  | 21                                       | 40                                       | 3.5               |
| LPM1360-1R2M | 1R2   | 1.2                                  | 21                                       | 38                                       | 3.6               |
| LPM1360-1R5M | 1R5   | 1.5                                  | 21                                       | 35                                       | 4.0               |
| LPM1360-1R8M | 1R8   | 1.8                                  | 20                                       | 33                                       | 4.2               |
| LPM1360-2R2M | 2R2   | 2.2                                  | 20                                       | 32                                       | 4.5               |
| LPM1360-3R3M | 3R3   | 3.3                                  | 15                                       | 30                                       | 6.2               |
| LPM1360-4R7M | 4R7   | 4.7                                  | 12                                       | 25                                       | 13.5              |
| LPM1360-5R6M | 5R6   | 5.6                                  | 12                                       | 22                                       | 21.0              |
| LPM1360-6R8M | 6R8   | 6.8                                  | 11                                       | 20                                       | 23.0              |
| LPM1360-8R2M | 8R2   | 8.2                                  | 10.5                                     | 16                                       | 15.5              |
| LPM1360-100M | 100   | 10                                   | 10                                       | 12.5                                     | 30.0              |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

- Test Frequency : 100KHz / 0.25Vdc @ 25°C
- Testing Instrument : LHP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent34420A MICRO OHMMETER.
- Heat Rated Current (Irms) will cause the coil temperature rise approximately,  $\Delta T=40^{\circ}\text{C}$  without core loss
- Saturation Current (Isat) will cause L0 to drop approximately 25%
- The part temperature (ambient + temp rise) should not exceed  $125^{\circ}\text{C}$  under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating Temperature & Storage Temperature:  $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$ .

Dimensions(mm)



Note: All specifications subject to change without notice.

## SMD MOLDED POWER INDUCTORS

# LPM 1510 SERIES



### FEATURES:

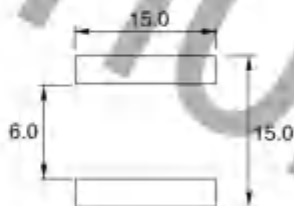
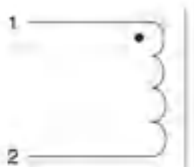
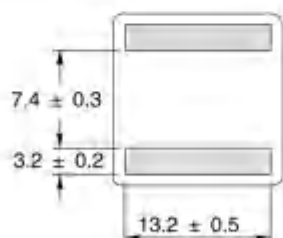
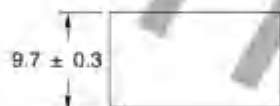
- High current; very low DCR
- Shielded construction
- AEC-Q200 Grade 1 qualified (-40°C to +125°C ambient)
- Soft saturation makes them ideal for VRM/VRD applications
- Environmental RoHS compliant

### ELECTRICAL CHARACTERISTICS:

| Part Number  | Inductance<br>L0(μH) ± 20%<br>@ 0Adc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|--------------|--------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM1510-4R7M | 4.7                                  | 30.0                                     | 39.0                                     | 3.4              | 3.8              |
| LPM1510-5R6M | 5.6                                  | 28.0                                     | 34.0                                     | 3.82             | 4.2              |
| LPM1510-6R8M | 6.8                                  | 26.0                                     | 31.0                                     | 4.18             | 4.6              |
| LPM1510-8R2M | 8.2                                  | 25.0                                     | 28.0                                     | 6.0              | 7.2              |
| LPM1510-100M | 10                                   | 24.0                                     | 26.0                                     | 7.1              | 8.6              |
| LPM1510-150M | 15                                   | 18.0                                     | 20.0                                     | 9.2              | 11.5             |
| LPM1510-220M | 22                                   | 16.0                                     | 18.0                                     | 13.2             | 15.8             |
| LPM1510-330M | 33                                   | 13.0                                     | 16.7                                     | 18.7             | 20.0             |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Recommended land pattern

- Test Frequency : 1MHz / 0.1Vdc @ 25°C.
- Testing Instrument : L:HP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- Operating voltage: 0-55V
- Heat Rated Current (Irms) will cause the coil temperature rise approximately, ΔT=40°C without core loss.
- Saturation Current (Isat) will cause L0 to drop approximately 30%
- The part temperature (ambient + temp rise) should not exceed 165°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Ambient Temperature: -55°C ~ +125°C.
- Storage Temperature: -55°C ~ +165°C.

Note: All specifications subject to change without notice.

## SMD MOLDED POWER INDUCTORS

# LPM 1513 SERIES

### FEATURES:

- High current; very low DCR
- Shielded construction
- AEC-Q200 Grade 1 qualified (-40°C to +125°C ambient)
- Soft saturation makes them ideal for VRM/VRD applications
- Environmental RoHS compliant

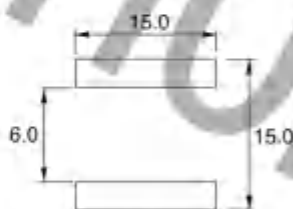
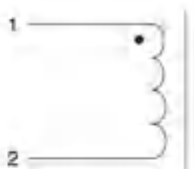
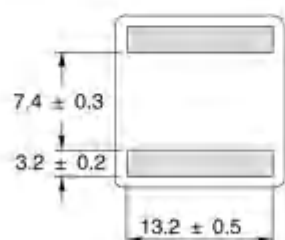
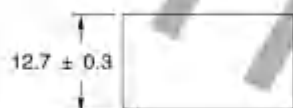


### ELECTRICAL CHARACTERISTICS:

| Part Number  | Inductance L0(μH) ± 20% @0Adc | Heat rating current DC Amps IDC(A) | Saturation current DC Amps Isat(A) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|--------------|-------------------------------|------------------------------------|------------------------------------|---------------|---------------|
| LPM1513-4R7M | 4.7                           | 31.0                               | 40.0                               | 3.0           | 3.3           |
| LPM1513-5R6M | 5.6                           | 29.0                               | 35.0                               | 3.5           | 3.9           |
| LPM1513-6R8M | 6.8                           | 27.0                               | 32.0                               | 3.8           | 4.2           |
| LPM1513-8R2M | 8.2                           | 26.0                               | 29.0                               | 5.1           | 5.74          |
| LPM1513-100M | 10                            | 25.0                               | 27.0                               | 6.3           | 7.0           |
| LPM1513-150M | 15                            | 22.0                               | 19.0                               | 6.5           | 7.2           |
| LPM1513-220M | 22                            | 17.0                               | 19.0                               | 12.6          | 13.86         |
| LPM1513-330M | 33                            | 14.0                               | 16.0                               | 18.5          | 22.2          |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Recommended land pattern

- Test Frequency : 1MHz / 0.1Vdc @25°C.
- Testing Instrument : L:HP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- Operating voltage: 0-55V
- Heat Rated Current (Irms) will cause the coil temperature rise approximately, ΔT=40°C without core loss.
- Saturation Current (Isat) will cause L0 to drop approximately 30%
- The part temperature (ambient + temp rise) should not exceed 165°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Ambient Temperature: -55°C ~ +125°C.
- Storage Temperature: -55°C ~ +165°C.

Note:All specifications subject to change without notice.

## SMD MOLDED POWER INDUCTORS

### LPM0110 SERIES



#### FEATURES:

- High performance (fast) realized by metal dust core.
- Low profile: 1.2mm x 1.0mm x 0.8mm
- Low loss realized with low DCR.
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

#### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type on-board power supply module for exchange
- VRM for server

#### ELECTRICAL CHARACTERISTICS:

| Part Number  | Inductance tolerance | Inductance LD(μH) @0A dc | Heat rating current DC Amps IDC(A) | Saturation current DC Amps Isat(A) | DCR Max. (mΩ) |
|--------------|----------------------|--------------------------|------------------------------------|------------------------------------|---------------|
| LPM0110-R22M | 20%                  | 0.22                     | 1.7                                | 2.16                               | 80            |
| LPM0110-R33M | 20%                  | 0.33                     | 1.53                               | 1.90                               | 80            |
| LPM0110-R47M | 20%                  | 0.47                     | 1.40                               | 1.40                               | 98            |
| LPM0110-1R0M | 20%                  | 1.0                      | 0.95                               | 1.04                               | 231           |
| LPM0110-1R5M | 20%                  | 1.5                      | 0.81                               | 0.74                               | 276           |
| LPM0110-2R2M | 20%                  | 2.2                      | 0.75                               | 0.61                               | 338           |
| LPM0110-3R3M | 20%                  | 3.3                      | 0.52                               | 0.47                               | 518           |
| LPM0110-4R7M | 20%                  | 4.7                      | 0.43                               | 0.41                               | 748           |
| LPM0110-100M | 20%                  | 10                       | 0.32                               | 0.32                               | 1500          |

#### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



#### Notes

- Test Frequency : 1.0MHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause LD to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM0420C SERIES



### FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile: 4.6mm x 4.0mm x 2.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

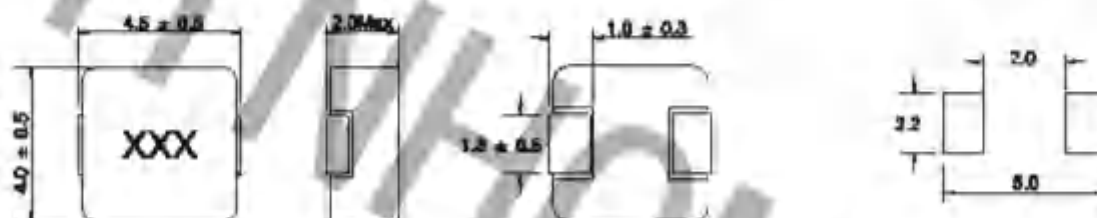
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps (DC(A) | Saturation<br>current DC<br>Amps (sat(A) | DCR Typ.<br>(mΩ). | DCR Max.<br>(mΩ). |
|---------------|-----------------------------------|------------------------------------------|------------------------------------------|-------------------|-------------------|
| LPM0420C-R10M | 0.10                              | 18.0                                     | 35.0                                     | 3.50              | 4.20              |
| LPM0420C-R15M | 0.15                              | 15.0                                     | 28.0                                     | 3.70              | 4.50              |
| LPM0420C-R22M | 0.22                              | 12.0                                     | 23.0                                     | 5.10              | 6.00              |
| LPM0420C-R33M | 0.33                              | 10.0                                     | 17.0                                     | 8.30              | 8.80              |
| LPM0420C-R47M | 0.47                              | 9.0                                      | 16.0                                     | 12.8              | 16.0              |
| LPM0420C-R56M | 0.56                              | 8.0                                      | 13.0                                     | 13.0              | 16.0              |
| LPM0420C-R68M | 0.68                              | 7.0                                      | 12.0                                     | 16.0              | 19.0              |
| LPM0420C-1R0M | 1.0                               | 6.0                                      | 10.0                                     | 23.5              | 28.0              |
| LPM0420C-1R2M | 1.2                               | 5.0                                      | 9.0                                      | 27.0              | 32.0              |
| LPM0420C-1R5M | 1.5                               | 4.5                                      | 8.0                                      | 31.0              | 37.0              |
| LPM0420C-2R2M | 2.2                               | 4.0                                      | 7.0                                      | 53.0              | 60.0              |
| LPM0420C-3R3M | 3.3                               | 3.5                                      | 6.0                                      | 86.0              | 96.0              |
| LPM0420C-4R7M | 4.7                               | 3.0                                      | 5.0                                      | 112.0             | 125.0             |
| LPM0420C-5R6M | 5.6                               | 2.6                                      | 4.5                                      | 146.0             | 173.0             |
| LPM0420C-6R8M | 6.8                               | 2.5                                      | 4.0                                      | 165.0             | 185.0             |
| LPM0420C-8R2M | 8.2                               | 2.0                                      | 3.0                                      | 241.0             | 290.0             |
| LPM0420C-100M | 10.0                              | 1.6                                      | 3.0                                      | 265.0             | 310.0             |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimension(mm)



Winding



Notes

- Test Frequency: 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM0515C SERIES

### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low profile: 5.6mm x 5.2mm x 1.6mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DBCs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server



### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps (DC(A) | Saturation<br>current DC<br>Amps (sat(A) | DCR Typ.<br>(mΩ). | DCR Max.<br>(mΩ). |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|-------------------|-------------------|
| LPM0515C-R15M | 0.15                               | 16.0                                     | 26.0                                     | 4.50              | 5.40              |
| LPM0515C-R22M | 0.22                               | 15.0                                     | 25.0                                     | 6.50              | 7.80              |
| LPM0515C-R47M | 0.47                               | 12.0                                     | 20.0                                     | 11.0              | 13.0              |
| LPM0515C-R68M | 0.68                               | 10.0                                     | 18.0                                     | 11.8              | 13.5              |
| LPM0515C-1R0M | 1.0                                | 8.0                                      | 10.0                                     | 19.5              | 24.0              |
| LPM0515C-2R2M | 2.2                                | 5.0                                      | 7.0                                      | 53.0              | 70.0              |
| LPM0515C-3R3M | 3.3                                | 4.0                                      | 6.0                                      | 68.0              | 75.0              |
| LPM0515C-4R7M | 4.7                                | 3.0                                      | 5.0                                      | 108.0             | 118.0             |
| LPM0515C-5R8M | 5.8                                | 2.6                                      | 4.5                                      | 126.0             | 140.0             |
| LPM0515C-6R8M | 6.8                                | 2.5                                      | 4.2                                      | 142.0             | 155.0             |
| LPM0515C-8R2M | 8.2                                | 2.4                                      | 4.0                                      | 175.0             | 190.0             |
| LPM0515C-100M | 10.0                               | 2.3                                      | 3.8                                      | 255.0             | 280.0             |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



Notes

- Test Frequency : 100kHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions.Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature.Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM0518C SERIES

### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low profile: 5.6mm x 5.2mm x 1.8mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DBCs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

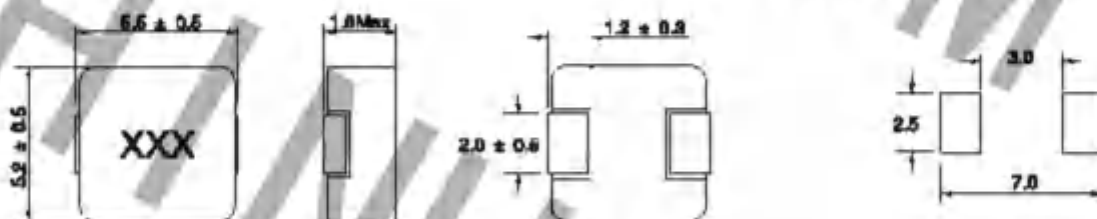


### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0A dc | Heat rating<br>current DC<br>Amps (DC(A) | Saturation<br>current DC<br>Amps (sat(A) | DCR Typ.<br>(mΩ). | DCR Max.<br>(mΩ). |
|---------------|-------------------------------------|------------------------------------------|------------------------------------------|-------------------|-------------------|
| LPM0518C-R22M | 0.22                                | 16.0                                     | 28.0                                     | 4.40              | 5.30              |
| LPM0518C-R47M | 0.47                                | 13.0                                     | 22.0                                     | 6.00              | 8.50              |
| LPM0518C-1R0M | 1.0                                 | 8.0                                      | 14.0                                     | 14.0              | 16.5              |
| LPM0518C-2R2M | 2.2                                 | 6.0                                      | 8.0                                      | 36.0              | 43.0              |
| LPM0518C-4R7M | 4.7                                 | 3.5                                      | 5.5                                      | 76.0              | 85.0              |
|               |                                     |                                          |                                          |                   |                   |
|               |                                     |                                          |                                          |                   |                   |
|               |                                     |                                          |                                          |                   |                   |
|               |                                     |                                          |                                          |                   |                   |
|               |                                     |                                          |                                          |                   |                   |
|               |                                     |                                          |                                          |                   |                   |
|               |                                     |                                          |                                          |                   |                   |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions.Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature.Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM0520C SERIES

### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low profile: 5.6mm x 5.2mm x 2.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type oil-cooled power supply module for exchanger
- VRM for server

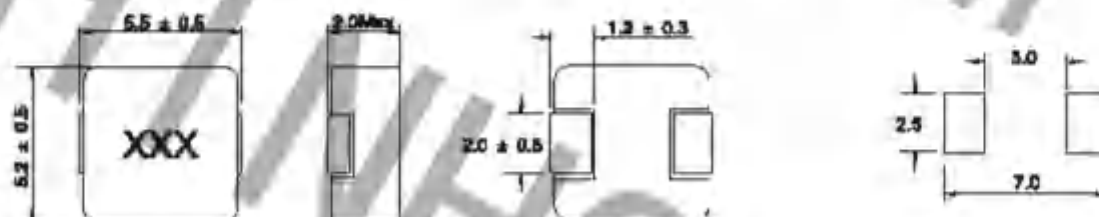


### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps (DC(A) | Saturation<br>current DC<br>Amps (sat(A) | DCR Typ.<br>(mΩ). | DCR Max.<br>(mΩ). |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|-------------------|-------------------|
| LPM0520C-R10M | 0.10                               | 20.0                                     | 32.0                                     | 3.00              | 3.66              |
| LPM0520C-R22M | 0.22                               | 16.0                                     | 28.0                                     | 4.30              | 5.20              |
| LPM0520C-R33M | 0.33                               | 16.0                                     | 26.0                                     | 8.8               | 10.5              |
| LPM0520C-R47M | 0.47                               | 14.0                                     | 24.0                                     | 8.8               | 10.5              |
| LPM0520C-R68M | 0.68                               | 12.0                                     | 18.0                                     | 12.0              | 15.0              |
| LPM0520C-1R0M | 1.0                                | 10.0                                     | 15.0                                     | 17.0              | 20.0              |
| LPM0520C-1R6M | 1.5                                | 7.0                                      | 13.0                                     | 28.0              | 33.0              |
| LPM0520C-2R2M | 2.2                                | 6.0                                      | 9.0                                      | 33.0              | 39.0              |
| LPM0520C-3R3M | 3.3                                | 5.0                                      | 8.0                                      | 60.0              | 70.0              |
| LPM0520C-4R7M | 4.7                                | 4.0                                      | 6.0                                      | 94.0              | 95.0              |
| LPM0520C-5R8M | 5.8                                | 3.5                                      | 5.0                                      | 84.0              | 95.0              |
| LPM0520C-6R8M | 6.8                                | 3.0                                      | 4.5                                      | 83.0              | 105.0             |
| LPM0520C-8R2M | 8.2                                | 2.5                                      | 4.0                                      | 132.0             | 145.0             |
| LPM0520C-100M | 10.0                               | 2.0                                      | 3.5                                      | 155.0             | 175.0             |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (rms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (test) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM0530C SERIES



### FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile: 5.6mm x 5.2mm x 3.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

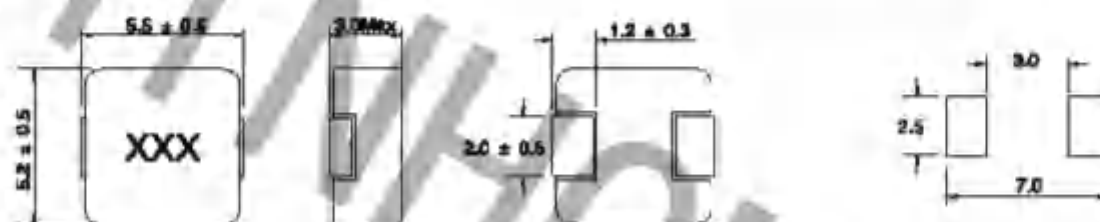
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type oil-cooled power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps (DC(A) | Saturation<br>current DC<br>Amps (sat(A) | DCR Typ.<br>(mΩ). | DCR Max.<br>(mΩ). |
|---------------|-----------------------------------|------------------------------------------|------------------------------------------|-------------------|-------------------|
| LPM0530C-R10M | 0.10                              | 23.0                                     | 38.0                                     | 2.80              | 3.30              |
| LPM0530C-R15M | 0.15                              | 22.0                                     | 35.0                                     | 2.80              | 3.50              |
| LPM0530C-R22M | 0.22                              | 19.0                                     | 32.0                                     | 4.00              | 5.00              |
| LPM0530C-R33M | 0.33                              | 18.0                                     | 28.0                                     | 5.10              | 6.00              |
| LPM0530C-R47M | 0.47                              | 16.0                                     | 26.0                                     | 6.50              | 8.00              |
| LPM0530C-R68M | 0.68                              | 14.0                                     | 24.0                                     | 8.0               | 10.0              |
| LPM0530C-1R0M | 1.0                               | 12.0                                     | 18.0                                     | 11.5              | 14.0              |
| LPM0530C-1R2M | 1.2                               | 11.0                                     | 16.0                                     | 11.5              | 14.0              |
| LPM0530C-1R5M | 1.5                               | 9.0                                      | 14.0                                     | 15.5              | 18.5              |
| LPM0530C-2R2M | 2.2                               | 8.0                                      | 13.0                                     | 25.5              | 31.0              |
| LPM0530C-3R3M | 3.3                               | 7.0                                      | 11.0                                     | 32.5              | 37.0              |
| LPM0530C-4R7M | 4.7                               | 5.5                                      | 9.0                                      | 56.0              | 66.0              |
| LPM0530C-5R6M | 5.6                               | 5.0                                      | 8.0                                      | 83.0              | 72.0              |
| LPM0530C-6R8M | 6.8                               | 4.5                                      | 7.0                                      | 79.0              | 66.0              |
| LPM0530C-100M | 10.0                              | 4.0                                      | 6.0                                      | 111.0             | 122.0             |
| LPM0530C-150M | 15.0                              | 3.0                                      | 5.0                                      | 153.0             | 188.0             |
| LPM0530C-330M | 33.0                              | 2.0                                      | 3.5                                      | 315.0             | 340.0             |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



Notes

- Test Frequency: 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (rms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (best) DC current (A) that will cause Ld to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM0620C SERIES

### FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile: 7.4mm x 6.8mm x 2.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type oil-cooled power supply module for exchanger
- VRM for server

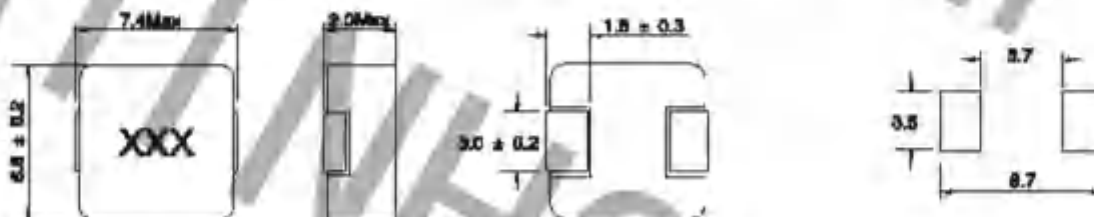


### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>①0Adc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM0620C-R10M | 0.10                               | 21.0                                     | 45.0                                     | 2.70             | 3.30             |
| LPM0620C-R22M | 0.22                               | 17.0                                     | 30.0                                     | 2.80             | 3.50             |
| LPM0620C-R33M | 0.33                               | 15.0                                     | 26.0                                     | 5.60             | 7.00             |
| LPM0620C-R47M | 0.47                               | 11.0                                     | 23.0                                     | 6.10             | 7.80             |
| LPM0620C-R68M | 0.68                               | 10.0                                     | 21.0                                     | 9.8              | 12.0             |
| LPM0620C-1R0M | 1.00                               | 9.0                                      | 20.0                                     | 16.0             | 19.0             |
| LPM0620C-1R6M | 1.50                               | 8.0                                      | 18.0                                     | 22.0             | 26.0             |
| LPM0620C-2R2M | 2.20                               | 8.0                                      | 12.0                                     | 32.0             | 36.0             |
| LPM0620C-3R3M | 3.30                               | 5.0                                      | 9.0                                      | 45.0             | 53.0             |
| LPM0620C-4R7M | 4.70                               | 4.5                                      | 6.0                                      | 53.0             | 62.0             |
| LPM0620C-8R8M | 8.80                               | 4.0                                      | 5.0                                      | 114.0            | 128.0            |
| LPM0620C-100M | 10.00                              | 3.0                                      | 5.0                                      | 147.0            | 160.0            |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



Notes

- Test Frequency: 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

## SMD MOLDED POWER INDUCTORS

### LPM0624C SERIES

#### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low profile: 7.4mm x 6.8mm x 2.4mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

#### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type oil-cooled power supply module for exchanger
- VRM for server

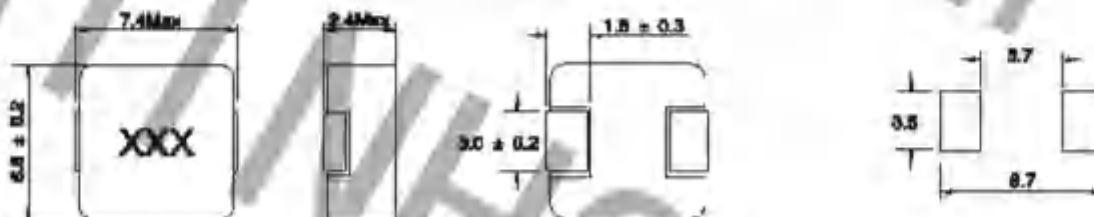


#### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps (DC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ). | DCR Max.<br>(mΩ). |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|-------------------|-------------------|
| LPM0624C-R10M | 0.10                               | 30.0                                     | 60.0                                     | 1.30              | 1.60              |
| LPM0624C-R22M | 0.22                               | 21.0                                     | 34.0                                     | 2.50              | 3.00              |
| LPM0624C-R47M | 0.47                               | 16.0                                     | 26.0                                     | 4.00              | 4.80              |
| LPM0624C-R80M | 0.80                               | 14.0                                     | 23.0                                     | 7.10              | 8.50              |
| LPM0624C-R92M | 0.82                               | 13.0                                     | 22.0                                     | 9.8               | 11.5              |
| LPM0624C-1R0M | 1.0                                | 12.0                                     | 22.0                                     | 11.9              | 13.0              |
| LPM0624C-1R6M | 1.5                                | 10.0                                     | 18.0                                     | 14.0              | 17.0              |
| LPM0624C-2R2M | 2.2                                | 8.0                                      | 14.0                                     | 22.0              | 26.0              |
| LPM0624C-3R3M | 3.3                                | 7.0                                      | 12.0                                     | 32.0              | 38.0              |
| LPM0624C-4R7M | 4.7                                | 6.0                                      | 11.0                                     | 47.0              | 55.0              |
| LPM0624C-6R8M | 6.8                                | 5.0                                      | 9.0                                      | 65.0              | 75.0              |
| LPM0624C-8R2M | 8.2                                | 4.5                                      | 8.0                                      | 82.0              | 90.0              |
| LPM0624C-100M | 10.0                               | 4.0                                      | 7.0                                      | 90.0              | 95.0              |
| LPM0624C-150M | 15.0                               | 3.5                                      | 6.0                                      | 122.0             | 136.0             |

#### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (rms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (test) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM0630C SERIES



### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low profile: 7.4mm x 6.8mm x 3.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

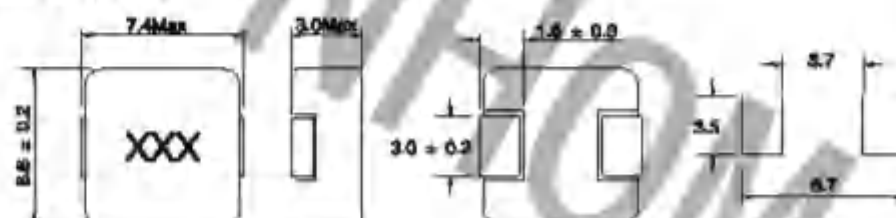


### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance L(μH) ±20% @0Adc | Heat rating current DC Amps IDC(A) | Saturation current DC Amps Isat(A) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|---------------|-----------------------------|------------------------------------|------------------------------------|---------------|---------------|
| LPM0630C-R10M | 0.10                        | 30.0                               | 75.0                               | 1.20          | 1.50          |
| LPM0630C-R12M | 0.12                        | 29.0                               | 80.0                               | 1.70          | 2.10          |
| LPM0630C-R15M | 0.15                        | 28.0                               | 83.0                               | 1.70          | 2.10          |
| LPM0630C-R22M | 0.22                        | 25.0                               | 45.0                               | 2.20          | 2.70          |
| LPM0630C-R33M | 0.33                        | 23.0                               | 35.0                               | 2.60          | 3.20          |
| LPM0630C-R36M | 0.36                        | 22.0                               | 32.0                               | 3.30          | 4.00          |
| LPM0630C-R47M | 0.47                        | 21.0                               | 31.0                               | 3.50          | 4.50          |
| LPM0630C-R56M | 0.68                        | 20.0                               | 30.0                               | 4.90          | 6.00          |
| LPM0630C-R82M | 0.82                        | 16.0                               | 26.0                               | 7.30          | 8.50          |
| LPM0630C-1R0M | 1.0                         | 13.0                               | 26.0                               | 7.50          | 9.00          |
| LPM0630C-1R2M | 1.2                         | 12.0                               | 22.0                               | 9.3           | 11.0          |
| LPM0630C-1R5M | 1.5                         | 11.0                               | 20.0                               | 10.5          | 13.0          |
| LPM0630C-2R2M | 2.2                         | 10.0                               | 18.0                               | 14.5          | 18.5          |
| LPM0630C-3R3M | 3.3                         | 9.0                                | 15.0                               | 25.0          | 30.0          |
| LPM0630C-4R7M | 4.7                         | 8.0                                | 14.0                               | 36.0          | 40.0          |
| LPM0630C-5R6M | 5.6                         | 7.0                                | 13.0                               | 43.0          | 51.0          |
| LPM0630C-6R8M | 6.8                         | 6.0                                | 11.0                               | 54.0          | 63.0          |
| LPM0630C-100M | 10.0                        | 4.5                                | 6.0                                | 73.0          | 88.0          |
| LPM0630C-150M | 15.0                        | 3.5                                | 6.0                                | 94.0          | 105.0         |
| LPM0630C-220M | 22.0                        | 2.5                                | 4.0                                | 122.0         | 138.0         |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



#### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM0640C SERIES

### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low profile: 7.4mm x 6.8mm x 4.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type oil-cooled power supply module for exchanger
- VRM for server

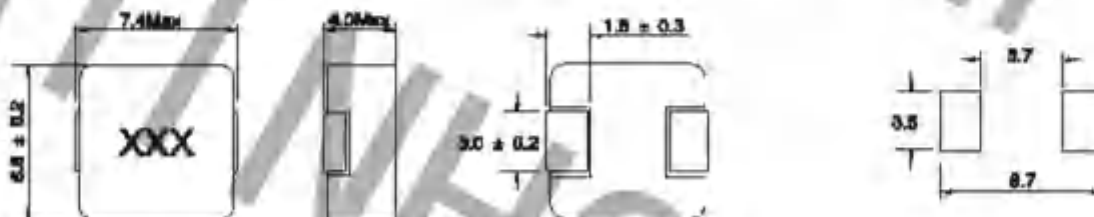


### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance L0(μH) ±20%<br>①0Adc | Heat rating current DC<br>Ampe (DC(A)) | Saturation current DC<br>Ampe Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|---------------------------------|----------------------------------------|---------------------------------------|------------------|------------------|
| LPM0640C-R15M | 0.15                            | 40.0                                   | 65.0                                  | 0.65             | 0.80             |
| LPM0640C-R22M | 0.22                            | 36.0                                   | 48.0                                  | 0.98             | 1.05             |
| LPM0640C-R33M | 0.33                            | 25.0                                   | 36.0                                  | 1.90             | 2.04             |
| LPM0640C-R55M | 0.55                            | 22.0                                   | 30.0                                  | 3.50             | 4.50             |
| LPM0640C-1R0M | 1.0                             | 14.0                                   | 25.0                                  | 5.70             | 7.00             |
| LPM0640C-2R2M | 2.2                             | 11.0                                   | 20.0                                  | 11.2             | 13.5             |
| LPM0640C-3R3M | 3.3                             | 9.0                                    | 18.0                                  | 15.0             | 18.0             |
| LPM0640C-4R7M | 4.7                             | 8.0                                    | 15.0                                  | 22.0             | 26.0             |
| LPM0640C-5R8M | 5.8                             | 7.0                                    | 14.0                                  | 29.0             | 35.0             |
| LPM0640C-6R8M | 6.8                             | 6.5                                    | 13.0                                  | 31.0             | 37.0             |
| LPM0640C-100M | 10.0                            | 5.0                                    | 12.0                                  | 59.0             | 70.0             |
| LPM0640C-120M | 12.0                            | 4.0                                    | 8.0                                   | 65.0             | 80.0             |
|               |                                 |                                        |                                       |                  |                  |
|               |                                 |                                        |                                       |                  |                  |
|               |                                 |                                        |                                       |                  |                  |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (rms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (fast) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM0650C SERIES

### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low profile: 7.4mm x 6.8mm x 5.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type oil-cooled power supply module for exchanger
- VRM for server

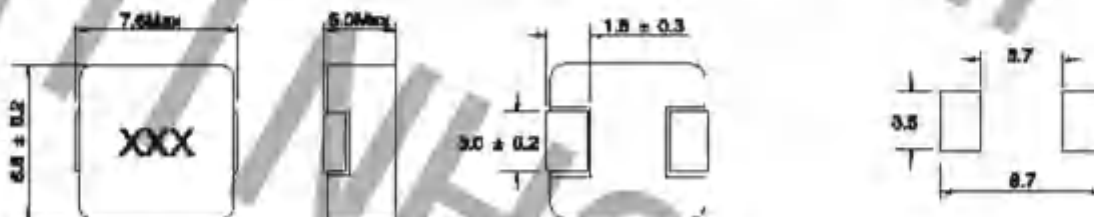


### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM0650C-R47M | 0.47                               | 22.0                                     | 30.0                                     | 3.20             | 3.60             |
| LPM0650C-1R0M | 1.0                                | 16.0                                     | 28.0                                     | 4.00             | 7.50             |
| LPM0650C-2R2M | 2.2                                | 11.0                                     | 18.0                                     | 9.90             | 12.0             |
| LPM0650C-3R3M | 3.3                                | 9.0                                      | 17.0                                     | 17.5             | 25.0             |
| LPM0650C-4R7M | 4.7                                | 7.0                                      | 16.0                                     | 26.0             | 32.0             |
| LPM0650C-5R6M | 5.6                                | 7.0                                      | 15.0                                     | 29.0             | 35.0             |
| LPM0650C-6R8M | 6.8                                | 6.5                                      | 13.0                                     | 33.5             | 40.0             |
| LPM0650C-100M | 10.0                               | 6.0                                      | 12.0                                     | 47.0             | 55.0             |
| LPM0650C-160M | 15.0                               | 5.0                                      | 10.0                                     | 82.0             | 83.0             |
| LPM0650C-220M | 22.0                               | 4.0                                      | 7.0                                      | 121.0            | 140.0            |
| LPM0650C-330M | 33.0                               | 3.0                                      | 6.0                                      | 145.0            | 158.0            |
| LPM0650C-470M | 47.0                               | 2.5                                      | 4.0                                      | 200.0            | 225.0            |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (rms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (fast) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM0830C SERIES

### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low profile: 9.2mm x 8.0mm x 3.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type oil-cooled power supply module for exchanger
- VRM for server

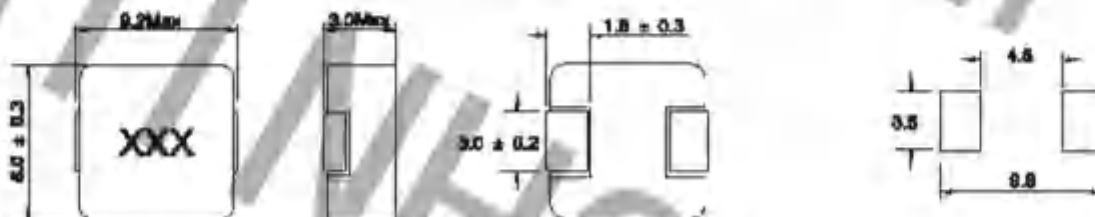


### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps (DC(A) | Saturation<br>current DC<br>Amps (sat(A) | DCR Typ.<br>(mΩ). | DCR Max.<br>(mΩ). |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|-------------------|-------------------|
| LPM0830C-R22M | 0.22                               | 30.0                                     | 55.0                                     | 1.50              | 1.80              |
| LPM0830C-R33M | 0.33                               | 25.0                                     | 47.0                                     | 2.20              | 2.50              |
| LPM0830C-R47M | 0.47                               | 20.0                                     | 38.0                                     | 3.10              | 3.90              |
| LPM0830C-R68M | 0.68                               | 19.0                                     | 32.0                                     | 3.30              | 4.00              |
| LPM0830C-1R0M | 1.0                                | 16.0                                     | 30.0                                     | 6.50              | 8.00              |
| LPM0830C-1R5M | 1.5                                | 14.0                                     | 23.0                                     | 6.50              | 8.00              |
| LPM0830C-2R2M | 2.2                                | 12.0                                     | 18.0                                     | 10.5              | 12.5              |
| LPM0830C-3R9M | 3.3                                | 10.0                                     | 18.0                                     | 19.0              | 23.0              |
| LPM0830C-4R7M | 4.7                                | 9.0                                      | 15.0                                     | 31.5              | 38.0              |
| LPM0830C-5R8M | 5.8                                | 8.0                                      | 13.0                                     | 38.0              | 42.0              |
| LPM0830C-8R8M | 8.8                                | 7.0                                      | 12.0                                     | 46.0              | 53.0              |
| LPM0830C-9R2M | 9.2                                | 6.5                                      | 9.5                                      | 49.0              | 85.0              |
| LPM0830C-100M | 10.0                               | 6.0                                      | 8.0                                      | 54.0              | 65.0              |
| LPM0830C-330M | 33.0                               | 3.0                                      | 6.0                                      | 175.0             | 185.0             |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

## SMD MOLDED POWER INDUCTORS

### LPM0840C SERIES

#### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low profile: 9.2mm x 8.0mm x 4.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

#### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type oil-cooled power supply module for exchanger
- VRM for server

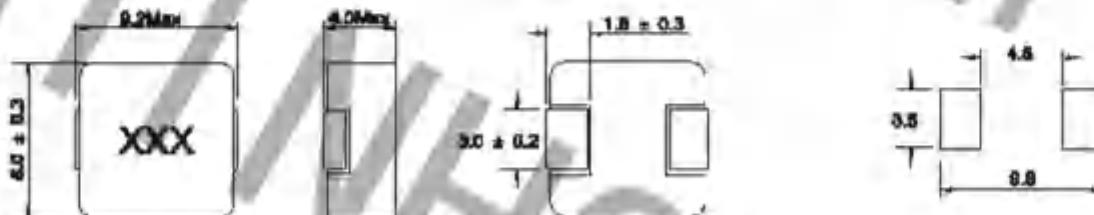


#### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps (DC(A) | Saturation<br>current DC<br>Amps (sat(A) | DCR Typ.<br>(mΩ). | DCR Max.<br>(mΩ). |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|-------------------|-------------------|
| LPM0840C-R22M | 0.22                               | 32.0                                     | 60.0                                     | 1.60              | 2.00              |
| LPM0840C-R33M | 0.33                               | 30.0                                     | 55.0                                     | 2.10              | 2.50              |
| LPM0840C-R47M | 0.47                               | 25.0                                     | 45.0                                     | 2.50              | 3.00              |
| LPM0840C-R62M | 0.62                               | 20.0                                     | 30.0                                     | 3.00              | 3.80              |
| LPM0840C-1R0M | 1.0                                | 18.0                                     | 26.0                                     | 4.50              | 5.50              |
| LPM0840C-1R5M | 1.5                                | 15.0                                     | 24.0                                     | 5.30              | 6.50              |
| LPM0840C-2R2M | 2.2                                | 13.0                                     | 22.0                                     | 10.1              | 12.5              |
| LPM0840C-3R3M | 3.3                                | 11.0                                     | 20.0                                     | 16.0              | 19.0              |
| LPM0840C-8R2M | 8.2                                | 6.0                                      | 11.0                                     | 40.5              | 48.0              |
| LPM0840C-100M | 10.0                               | 8.0                                      | 10.0                                     | 48.0              | 55.0              |
| LPM0840C-150M | 15.0                               | 5.0                                      | 8.0                                      | 60.0              | 68.0              |
| LPM0840C-220M | 22.0                               | 4.0                                      | 7.0                                      | 102.0             | 110.2             |
| LPM0840C-470M | 47.0                               | 3.0                                      | 5.5                                      | 191.0             | 205.0             |

#### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (rms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (fast) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in this end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM0850C SERIES



### FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile: 0.2mm x 8.0mm x 5.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

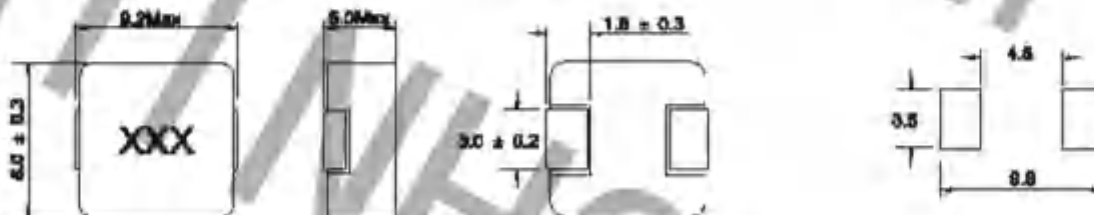
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DBOs, PDAs etc.
- Thin type oil-cooled power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance L0(μH) ±20%<br>①0Adc | Heat rating current DC<br>Amps IDC(A) | Saturation current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|---------------------------------|---------------------------------------|---------------------------------------|------------------|------------------|
| LPM0850C-R16M | 0.15                            | 45.0                                  | 80.0                                  | 0.55             | 0.65             |
| LPM0850C-R22M | 0.22                            | 36.0                                  | 55.0                                  | 0.80             | 1.00             |
| LPM0850C-1R0M | 1.0                             | 20.0                                  | 30.0                                  | 4.70             | 5.50             |
| LPM0850C-1R5M | 1.5                             | 17.0                                  | 25.0                                  | 6.10             | 7.00             |
| LPM0850C-2R2M | 2.2                             | 15.0                                  | 24.0                                  | 9.4              | 12.0             |
| LPM0850C-4R7M | 4.7                             | 11.0                                  | 22.0                                  | 18.0             | 21.0             |
| LPM0850C-6R8M | 6.8                             | 10.0                                  | 18.0                                  | 28.5             | 31.0             |
| LPM0850C-100M | 10.0                            | 8.0                                   | 18.0                                  | 41.0             | 47.0             |
| LPM0850C-220M | 22.0                            | 5.0                                   | 10.0                                  | 81.0             | 88.0             |
|               |                                 |                                       |                                       |                  |                  |
|               |                                 |                                       |                                       |                  |                  |
|               |                                 |                                       |                                       |                  |                  |
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|               |                                 |                                       |                                       |                  |                  |
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|               |                                 |                                       |                                       |                  |                  |
|               |                                 |                                       |                                       |                  |                  |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (rms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (best) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM1020C SERIES



### FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile: 10.6mm x 10.3mm x 2.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

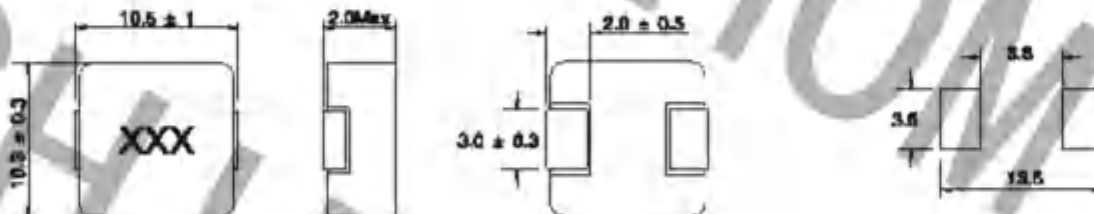
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DBCs, PDAs etc..
- Thin type on-board power supply module for exchange
- VRM for server

### ELECTRICAL CHARACTERISTICS:

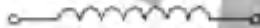
| Part Number   | Inductance<br>L0(μH) ±20%<br>①0A dc | Heat rating<br>current DC<br>Amps (DC/A) | Saturation<br>current DC<br>Amps (sat/A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|-------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM1020C-R33M | 0.33                                | 29.0                                     | 38.0                                     | 1.80             | 2.30             |
| LPM1020C-R47M | 0.47                                | 23.0                                     | 35.0                                     | 3.00             | 3.80             |
| LPM1020C-1R0M | 1.0                                 | 19.0                                     | 23.0                                     | 5.50             | 8.80             |
| LPM1020C-2R2M | 2.2                                 | 8.0                                      | 14.0                                     | 13.3             | 16.5             |
|               |                                     |                                          |                                          |                  |                  |
|               |                                     |                                          |                                          |                  |                  |
|               |                                     |                                          |                                          |                  |                  |
|               |                                     |                                          |                                          |                  |                  |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

#### Dimensions(mm)



#### Winding



#### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 50%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM1030C SERIES

### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low profile: 10.5mm x 10.3mm x 3.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DBCs, PDAs etc..
- Thin type on-board power supply module for exchanger
- VRM for server

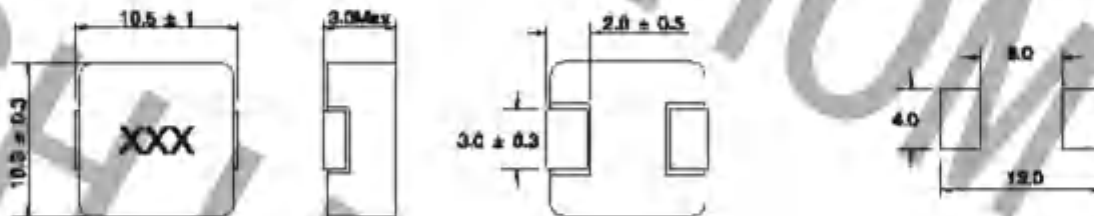


### ELECTRICAL CHARACTERISTICS:

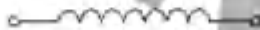
| Part Number   | Inductance<br>L0(μH) ±20%<br>①0A dc | Heat rating<br>current DC<br>Amps (DC/A) | Saturation<br>current DC<br>Amps (sat/A) | DCR Typ.<br>(mΩ). | DCR Max.<br>(mΩ). |
|---------------|-------------------------------------|------------------------------------------|------------------------------------------|-------------------|-------------------|
| LPM1020C-R36M | 0.36                                | 25.0                                     | 55.0                                     | 1.30              | 1.50              |
| LPM1020C-1R0M | 1.0                                 | 16.0                                     | 33.0                                     | 6.60              | 8.00              |
| LPM1020C-1R2M | 1.2                                 | 17.0                                     | 32.0                                     | 6.80              | 8.00              |
| LPM1020C-1R5M | 1.5                                 | 14.0                                     | 28.0                                     | 7.80              | 9.00              |
| LPM1020C-2R2M | 2.2                                 | 12.0                                     | 20.0                                     | 9.0               | 11.0              |
| LPM1020C-3R3M | 3.3                                 | 9.0                                      | 18.0                                     | 14.0              | 17.0              |
| LPM1020C-4R7M | 4.7                                 | 8.0                                      | 15.0                                     | 16.5              | 19.5              |
| LPM1020C-6R8M | 6.8                                 | 7.0                                      | 12.0                                     | 32.5              | 36.0              |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 50%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM1040C SERIES



### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

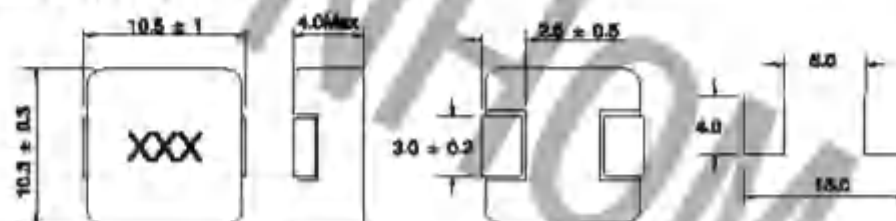
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L(μH) ±20%<br>@0.1A | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|-----------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM1040C-R19M | 0.19                              | 40.0                                     | 100.0                                    | 0.70             | 0.95             |
| LPM1040C-R22M | 0.22                              | 36.0                                     | 80.0                                     | 0.85             | 0.80             |
| LPM1040C-R33M | 0.33                              | 32.0                                     | 70.0                                     | 1.05             | 1.30             |
| LPM1040C-R36M | 0.36                              | 31.0                                     | 65.0                                     | 1.10             | 1.35             |
| LPM1040C-R47M | 0.47                              | 30.0                                     | 60.0                                     | 1.15             | 1.40             |
| LPM1040C-R56M | 0.56                              | 28.0                                     | 55.0                                     | 1.85             | 2.00             |
| LPM1040C-R68M | 0.68                              | 25.0                                     | 50.0                                     | 2.20             | 2.60             |
| LPM1040C-R82M | 0.82                              | 24.0                                     | 41.0                                     | 2.10             | 2.50             |
| LPM1040C-1R0M | 1.0                               | 22.0                                     | 40.0                                     | 2.15             | 2.50             |
| LPM1040C-1R2M | 1.2                               | 20.0                                     | 35.0                                     | 2.85             | 3.50             |
| LPM1040C-1R5M | 1.5                               | 18.0                                     | 30.0                                     | 4.30             | 5.20             |
| LPM1040C-2R2M | 2.2                               | 16.0                                     | 28.0                                     | 5.30             | 6.50             |
| LPM1040C-3R3M | 3.3                               | 14.0                                     | 25.0                                     | 10.30            | 13.00            |
| LPM1040C-4R7M | 4.7                               | 12.0                                     | 20.0                                     | 13.50            | 19.00            |
| LPM1040C-5R6M | 5.6                               | 10.0                                     | 18.0                                     | 16.50            | 19.50            |
| LPM1040C-6R8M | 6.8                               | 9.0                                      | 15.0                                     | 21.50            | 28.00            |
| LPM1040C-8R2M | 8.2                               | 8.0                                      | 14.0                                     | 30.00            | 36.00            |
| LPM1040C-10M  | 10                                | 7.0                                      | 13.0                                     | 32.00            | 38.00            |
| LPM1040C-22M  | 22                                | 6.0                                      | 9.0                                      | 67.00            | 85.00            |
| LPM1040C-33M  | 33                                | 4.5                                      | 7.5                                      | 105.00           | 118.00           |
| LPM1040C-47M  | 47                                | 3.5                                      | 6.5                                      | 129.00           | 145.00           |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



#### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM1050C SERIES



### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

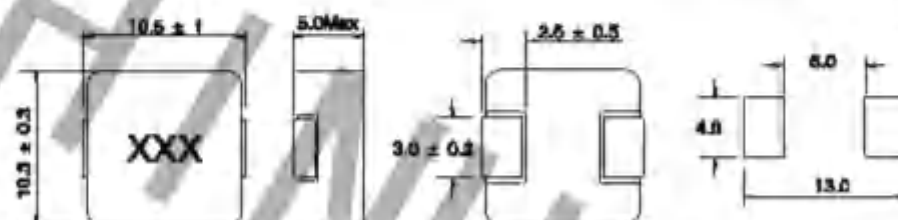
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance L0(μH) ±20% @0A <sub>dc</sub> | Heat rating current DC Amps I <sub>DC</sub> (A) | Saturation current DC Ampe I <sub>sat</sub> (A) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|---------------|------------------------------------------|-------------------------------------------------|-------------------------------------------------|---------------|---------------|
| LPM1040C-R36M | 0.36                                     | 33.0                                            | 80.0                                            | 0.78          | 1.00          |
| LPM1040C-R47M | 0.47                                     | 32.0                                            | 70.0                                            | 1.10          | 1.40          |
| LPM1040C-R56M | 0.56                                     | 30.0                                            | 55.0                                            | 1.30          | 1.60          |
| LPM1040C-R68M | 0.68                                     | 26.0                                            | 50.0                                            | 1.50          | 1.80          |
| LPM1040C-1R0M | 1.00                                     | 24.0                                            | 45.0                                            | 2.10          | 2.50          |
| LPM1040C-1R5M | 1.50                                     | 20.0                                            | 42.0                                            | 2.98          | 3.80          |
| LPM1040C-2R2M | 2.20                                     | 18.0                                            | 40.0                                            | 8.0           | 7.10          |
| LPM1040C-3R0M | 3.30                                     | 16.0                                            | 30.0                                            | 7.8           | 10.8          |
| LPM1040C-4R7M | 4.70                                     | 14.0                                            | 23.0                                            | 9.8           | 12.0          |
| LPM1040C-5R6M | 5.60                                     | 12.0                                            | 20.0                                            | 11.5          | 14.0          |
| LPM1040C-6R8M | 6.80                                     | 11.0                                            | 19.0                                            | 14.8          | 18.0          |
| LPM1040C-8R2M | 8.20                                     | 10.0                                            | 16.0                                            | 23.0          | 27.0          |
| LPM1040C-100M | 10.00                                    | 9.0                                             | 15.0                                            | 24.5          | 28.0          |
| LPM1040C-150M | 15.00                                    | 7.0                                             | 11.0                                            | 45.0          | 53.0          |
| LPM1040C-220M | 22.00                                    | 6.0                                             | 10.0                                            | 46.0          | 53.0          |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimension(mm)



Winding



Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions.Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature.Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM1050D SERIES

### FEATURES:

- Alloy iron powder Moulded structure
- Low profile: 11.5mm x 10.2mm x 5.0mm
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- Isolated converters, such as flyback converters
- Step-down, boost, SEPIC, Zeta, Cuk.
- A switching regulator with a second, unregulated output voltage.

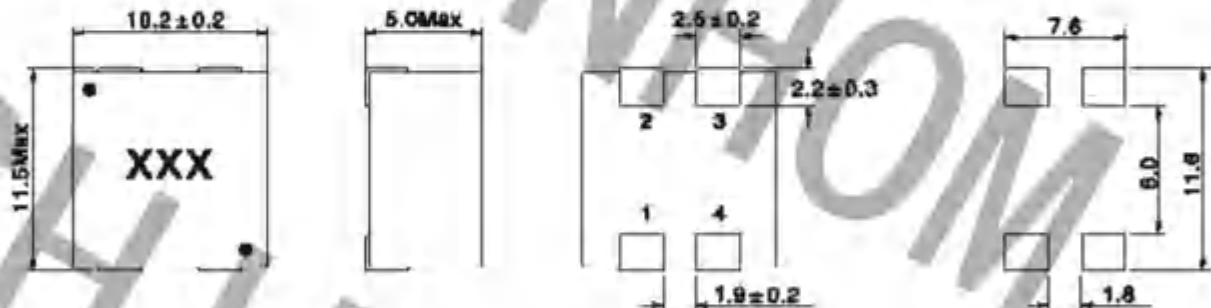


### ELECTRICAL CHARACTERISTICS:

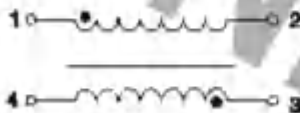
| Part Number   | Inductance<br>L0(μH) ±20%<br>@0A dc<br>(1-2)=(3-4) | Heat rating<br>current DC<br>Ampe (DC)(A) | Saturation<br>current DC<br>Ampe (sat)(A) | DCR Typ.<br>(mΩ).<br>(1-2)=(3-4) | DCR Max.<br>(mΩ).<br>(1-2)=(3-4) |
|---------------|----------------------------------------------------|-------------------------------------------|-------------------------------------------|----------------------------------|----------------------------------|
| LPM1050D-3R3M | 3.3                                                | 7.0                                       | 32.0                                      | 18.3                             | 22.0                             |
| LPM1050D-4R7M | 4.7                                                | 6.0                                       | 30.0                                      | 27.0                             | 32.0                             |
| LPM1050D-5R6M | 5.6                                                | 6.0                                       | 23.0                                      | 38.5                             | 45.0                             |
| LPM1050D-150M | 15.0                                               | 3.0                                       | 13.0                                      | 82.0                             | 95.0                             |
| LPM1050D-220M | 22.0                                               | 2.5                                       | 10.0                                      | 102.0                            | 115.0                            |
|               |                                                    |                                           |                                           |                                  |                                  |
|               |                                                    |                                           |                                           |                                  |                                  |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensional(mm)



Winding



### Notes

- Test Frequency: 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C.
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%.
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

## SMD MOLDED POWER INDUCTORS

### LPM1060C SERIES



#### FEATURES:

- High performance (Isat) realized by Carbonyl Iron powder
- Low profile: 11.3mm x 10mm x 6.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

#### COMMON APPLICATIONS:

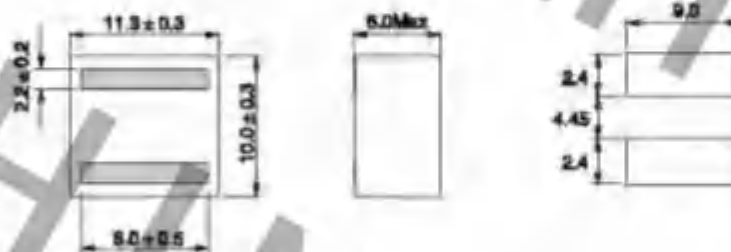
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, OSCs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

#### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance L0(μH) ±20% @ 0A <sub>dc</sub> | Heat rating current DC Amps IDC(A) | Saturation current DC Amps Isat(A) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|---------------|-------------------------------------------|------------------------------------|------------------------------------|---------------|---------------|
| LPM1060C-1R0M | 1.0                                       | 26.5                               | 43.0                               | 2.4           | 2.70          |
| LPM1060C-1R5M | 1.5                                       | 24.4                               | 36.0                               | 3.0           | 3.30          |
| LPM1060C-2R2M | 2.2                                       | 20.0                               | 32.0                               | 4.5           | 4.95          |
| LPM1060C-3R3M | 3.3                                       | 16.8                               | 26.0                               | 7.2           | 7.92          |
| LPM1060C-4R7M | 4.7                                       | 14.0                               | 25.0                               | 9.8           | 10.72         |
|               |                                           |                                    |                                    |               |               |
|               |                                           |                                    |                                    |               |               |
|               |                                           |                                    |                                    |               |               |

#### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



Notes

- Test Frequency: 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM1080D SERIES



### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low profile: 11.2mm x 11.2mm x 8.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

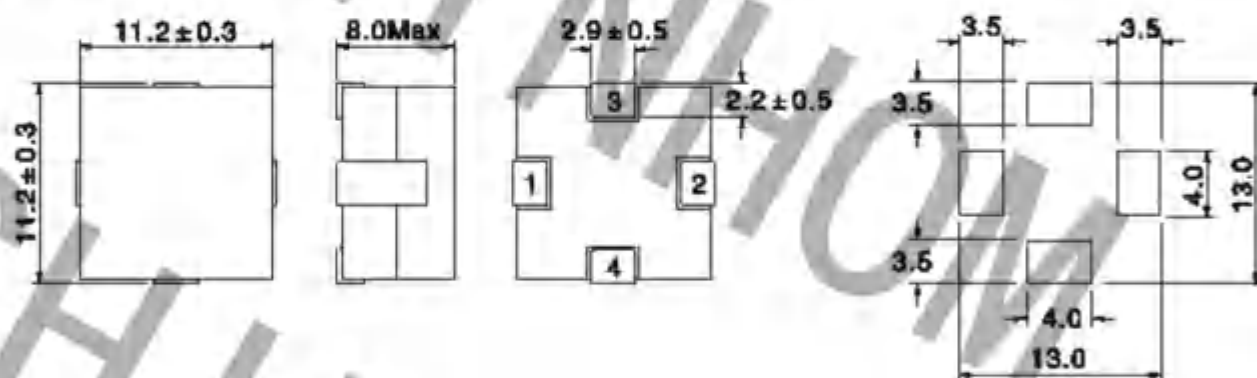
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- TV/r type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

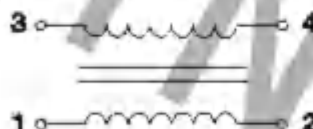
| Part Number   | Inductance<br>L0(μH) ±20%<br>@0A <sub>dc</sub> | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|------------------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM1080D-8R2M | 8.2                                            | 14.0                                     | 6.0                                      | 32.8             | 35.2             |
| LPM1080D-100M | 10.0                                           | 13.0                                     | 5.5                                      | 44.9             | 49.5             |
| LPM1080D-150M | 15.0                                           | 12.0                                     | 4.5                                      | 66.2             | 71.5             |
| LPM1080D-220M | 22.0                                           | 9.0                                      | 4.0                                      | 106.3            | 116.5            |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



### Notes

- Test Frequency : 100kHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 20%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM1090D SERIES

### FEATURES:

- Alloy iron powder Moulded structure
- Low profile: 11.5mm x 10.2mm x 9.0mm
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- Isolated converters, such as flyback converters
- Step-down, boost, SEPIC, Zeta, Cuk
- A switching regulator with a second, unregulated output voltage

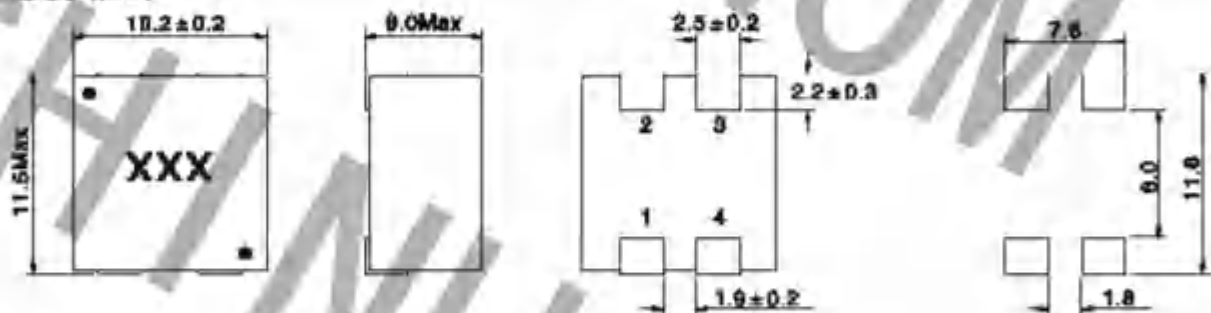


### ELECTRICAL CHARACTERISTICS:

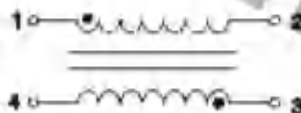
| Part Number   | Inductance L0(μH) ±20%<br>@0A dc<br>(1-2)=(3-4) | Heat rating current DC<br>Amps IDC(A) | Saturation current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ)<br>(1-2)=(3-4) | DCR Max.<br>(mΩ)<br>(1-2)=(3-4) |
|---------------|-------------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------|---------------------------------|
| LPM1090D-1R0M | 1.0                                             | 17.0                                  | 43.5                                  | 4.6                             | 5.6                             |
| LPM1090D-1R5M | 1.5                                             | 12.5                                  | 34.0                                  | 5.7                             | 6.4                             |
| LPM1090D-2R2M | 2.2                                             | 11.5                                  | 29.5                                  | 10.6                            | 12.5                            |
| LPM1090D-3R3M | 3.3                                             | 7.5                                   | 26.2                                  | 23.3                            | 26.0                            |
| LPM1090D-4R7M | 4.7                                             | 7.0                                   | 24.2                                  | 36.2                            | 40.0                            |
| LPM1090D-6R8M | 6.8                                             | 5.5                                   | 21.2                                  | 46.1                            | 51.5                            |
| LPM1090D-8R2M | 8.2                                             | 5.0                                   | 18.5                                  | 56.3                            | 63.0                            |
| LPM1090D-100M | 10.0                                            | 5.5                                   | 17.0                                  | 62.5                            | 69.0                            |
| LPM1090D-150M | 15.0                                            | 5.0                                   | 22.0                                  | 73.0                            | 87.0                            |
| LPM1090D-220M | 22.0                                            | 4.0                                   | 18.0                                  | 91.0                            | 100.0                           |
| LPM1090D-330M | 33.0                                            | 3.5                                   | 10.0                                  | 121.5                           | 145.0                           |
| LPM1090D-470M | 47.0                                            | 2.3                                   | 6.0                                   | 218.0                           | 240.0                           |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



Notes

- Test Frequency: 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM1213D SERIES



### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low profile: 13.8mm x 13.8mm x 13.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

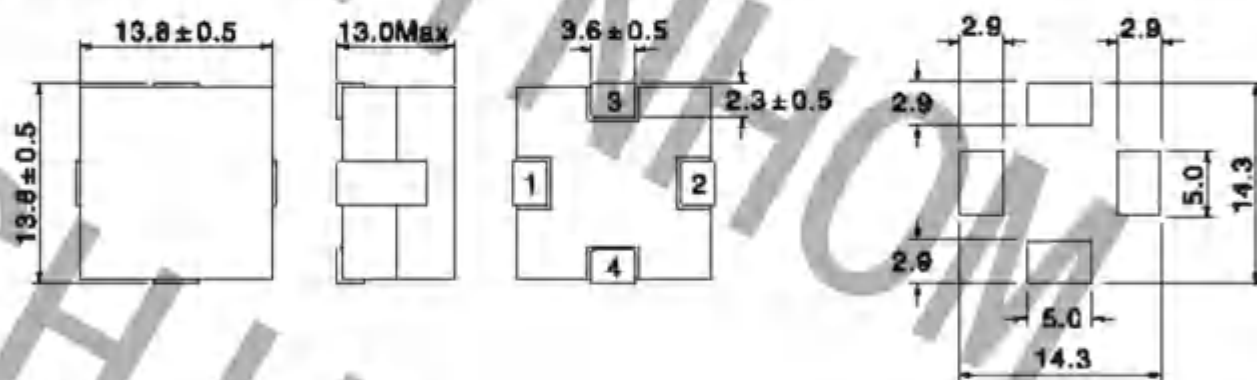
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- TVN type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

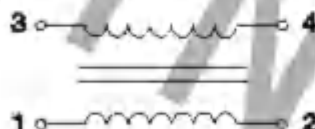
| Part Number   | Inductance<br>L0(μH) ±20%<br>@0A <sub>dc</sub> | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|------------------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM1213D-8R2M | 8.2                                            | 25.0                                     | 10.0                                     | 16.3             | 17.6             |
| LPM1213D-100M | 10.0                                           | 21.0                                     | 9.0                                      | 20.8             | 22.55            |
| LPM1213D-150M | 15.0                                           | 16.0                                     | 7.0                                      | 34.2             | 36.85            |
| LPM1213D-220M | 22.0                                           | 15.0                                     | 5.5                                      | 51.2             | 56.0             |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



### Notes

- Test Frequency : 100kHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 20%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM1235C SERIES



### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc..
- Thin type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance L0(μH) ±20% @0Adc | Heat rating current DC Amps (DC(A)) | Saturation current DC Amps (sat(A)) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|---------------|------------------------------|-------------------------------------|-------------------------------------|---------------|---------------|
| LPM1235C-R10M | 0.10                         | 48.0                                | 90.0                                | 0.78          | 0.98          |
| LPM1235C-R15M | 0.15                         | 48.0                                | 80.0                                | 0.85          | 0.85          |
| LPM1235C-R22M | 0.22                         | 44.0                                | 75.0                                | 0.85          | 0.85          |
| LPM1235C-R33M | 0.33                         | 36.0                                | 70.0                                | 1.10          | 1.40          |
| LPM1235C-R47M | 0.47                         | 30.0                                | 52.0                                | 1.10          | 1.40          |
| LPM1235C-R68M | 0.68                         | 28.0                                | 52.0                                | 2.10          | 2.80          |
| LPM1235C-R82M | 0.82                         | 23.0                                | 48.0                                | 2.50          | 3.50          |
| LPM1235C-1R0M | 1.00                         | 20.0                                | 43.0                                | 2.80          | 3.50          |
| LPM1235C-1R5M | 1.50                         | 18.0                                | 40.0                                | 4.70          | 5.50          |
| LPM1235C-2R2M | 2.20                         | 16.0                                | 32.0                                | 7.80          | 8.00          |
| LPM1235C-3R3M | 3.30                         | 13.0                                | 28.0                                | 11.0          | 19.5          |
| LPM1235C-4R7M | 4.70                         | 12.5                                | 22.0                                | 13.0          | 15.0          |
| LPM1235C-5R8M | 5.80                         | 12.0                                | 20.0                                | 19.2          | 23.0          |
| LPM1235C-8R8M | 8.80                         | 11.0                                | 18.0                                | 30.0          | 25.0          |
| LPM1235C-8R2M | 8.20                         | 8.5                                 | 15.0                                | 28.0          | 32.0          |
| LPM1235C-100M | 10.00                        | 7.0                                 | 14.0                                | 30.5          | 34.0          |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensional(mm)



Winding



Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions.Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature.Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

## SMD MOLDED POWER INDUCTORS

### LPM1250C SERIES

#### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

#### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type oil-cooled power supply module for exchanger
- VRM for server

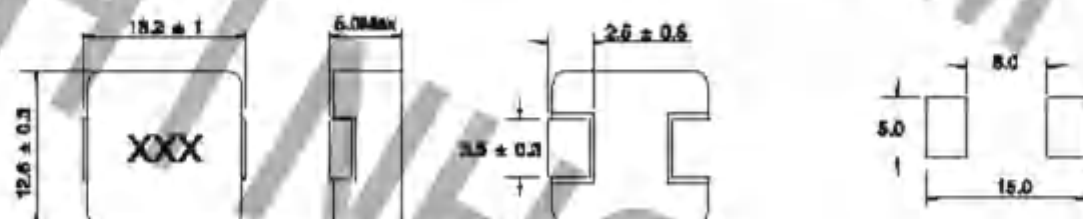


#### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance L0(μH) ±20% @0Adc | Heat rating current DC Amps (DC(A)) | Saturation current DC Ampe (sat(A)) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|---------------|------------------------------|-------------------------------------|-------------------------------------|---------------|---------------|
| LPM1250C-R10M | 0.10                         | 50.0                                | 90.0                                | 0.26          | 0.40          |
| LPM1250C-R33M | 0.33                         | 42.0                                | 85.0                                | 0.75          | 1.10          |
| LPM1250C-R66M | 0.36                         | 41.0                                | 80.0                                | 0.82          | 1.10          |
| LPM1250C-R47M | 0.47                         | 40.0                                | 75.0                                | 0.90          | 1.20          |
| LPM1250C-R66M | 0.66                         | 35.0                                | 65.0                                | 1.00          | 1.90          |
| LPM1250C-R82M | 0.82                         | 32.0                                | 60.0                                | 1.70          | 2.20          |
| LPM1250C-1R0M | 1.0                          | 29.0                                | 55.0                                | 2.10          | 2.50          |
| LPM1250C-1R5M | 1.5                          | 25.0                                | 50.0                                | 2.70          | 3.50          |
| LPM1250C-2R2M | 2.2                          | 20.0                                | 40.0                                | 4.30          | 5.50          |
| LPM1250C-3R3M | 3.3                          | 16.0                                | 35.0                                | 7.2           | 9.0           |
| LPM1250C-4R7M | 4.7                          | 14.0                                | 33.0                                | 10.4          | 13.0          |
| LPM1250C-6R8M | 6.8                          | 12.0                                | 28.0                                | 15.0          | 18.0          |
| LPM1250C-100M | 10.0                         | 10.0                                | 18.0                                | 25.5          | 30.0          |
| LPM1250C-220M | 22.0                         | 7.0                                 | 11.0                                | 45.0          | 53.0          |
|               |                              |                                     |                                     |               |               |
|               |                              |                                     |                                     |               |               |

#### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensional(mm)



Winding



Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions.Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature.Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

## SMD MOLDED POWER INDUCTORS

### LPM1260C SERIES

#### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

#### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

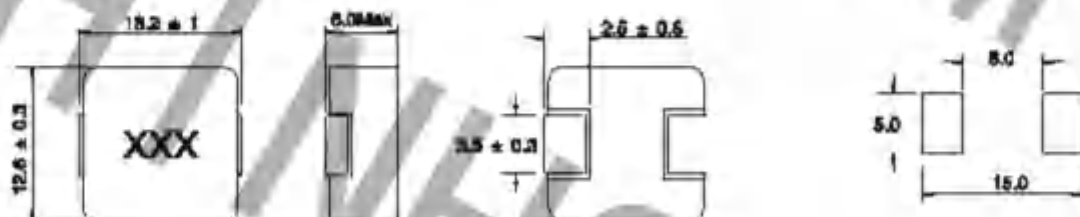


#### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps (DC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM1260C-R33M | 0.33                               | 45.0                                     | 90.0                                     | 0.75             | 1.00             |
| LPM1260C-R36M | 0.36                               | 42.0                                     | 85.0                                     | 1.00             | 1.30             |
| LPM1260C-R66M | 0.66                               | 36.0                                     | 70.0                                     | 1.10             | 1.40             |
| LPM1260C-R82M | 0.82                               | 33.0                                     | 66.0                                     | 2.00             | 2.50             |
| LPM1260C-1R0M | 1.0                                | 32.0                                     | 60.0                                     | 2.10             | 2.60             |
| LPM1260C-1R6M | 1.6                                | 27.0                                     | 52.0                                     | 2.60             | 3.30             |
| LPM1260C-2R2M | 2.2                                | 23.0                                     | 48.0                                     | 4.7              | 6.0              |
| LPM1260C-3R3M | 3.3                                | 18.0                                     | 43.0                                     | 6.2              | 8.0              |
| LPM1260C-4R7M | 4.7                                | 16.0                                     | 35.0                                     | 7.5              | 9.5              |
| LPM1260C-6R8M | 6.8                                | 13.0                                     | 26.0                                     | 12.8             | 15.0             |
| LPM1260C-100M | 10.0                               | 11.0                                     | 20.0                                     | 15.8             | 18.0             |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |

#### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensional(mm)



#### Winding



#### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions.Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature.Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

## SMD MOLDED POWER INDUCTORS

### LPM1265C SERIES

#### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

#### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server



#### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance L0(μH) ±20% @0Adc | Heat rating current DC Ampe (DC(A)) | Saturation current DC Ampe (sat(A)) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|---------------|------------------------------|-------------------------------------|-------------------------------------|---------------|---------------|
| LPM1265C-R15M | 0.15                         | 80.0                                | 120.0                               | 0.37          | 0.50          |
| LPM1265C-R22M | 0.22                         | 50.0                                | 110.0                               | 0.50          | 0.60          |
| LPM1265C-R33M | 0.33                         | 48.0                                | 100.0                               | 0.60          | 0.80          |
| LPM1265C-R47M | 0.47                         | 45.0                                | 90.0                                | 0.60          | 1.10          |
| LPM1265C-R56M | 0.56                         | 40.0                                | 80.0                                | 1.00          | 1.30          |
| LPM1265C-R68M | 0.68                         | 38.0                                | 72.0                                | 1.40          | 1.80          |
| LPM1265C-1R0M | 1.0                          | 32.0                                | 60.0                                | 1.7           | 2.2           |
| LPM1265C-1R5M | 1.5                          | 28.0                                | 55.0                                | 2.5           | 3.2           |
| LPM1265C-2R2M | 2.2                          | 23.0                                | 50.0                                | 4.1           | 5.0           |
| LPM1265C-3R3M | 3.3                          | 20.0                                | 40.0                                | 5.3           | 6.5           |
| LPM1265C-4R7M | 4.7                          | 18.0                                | 36.0                                | 7.6           | 9.5           |
| LPM1265C-5R6M | 5.6                          | 16.0                                | 34.0                                | 9.6           | 11.5          |
| LPM1265C-6R8M | 6.8                          | 13.0                                | 30.0                                | 11.4          | 14.0          |
| LPM1265C-100M | 10.0                         | 12.0                                | 21.0                                | 12.5          | 15.0          |
| LPM1265C-150M | 15.0                         | 10.0                                | 19.0                                | 27.5          | 33.0          |
| LPM1265C-220M | 22.0                         | 9.0                                 | 18.0                                | 36.5          | 42.0          |
| LPM1265C-330M | 33.0                         | 8.0                                 | 15.0                                | 47.0          | 55.0          |
| LPM1265C-470M | 47.0                         | 6.0                                 | 12.0                                | 90.0          | 105.0         |
| LPM1265C-560M | 56.0                         | 5.5                                 | 10.0                                | 100.0         | 120.0         |
| LPM1265C-680M | 68.0                         | 5.0                                 | 8.0                                 | 103.0         | 120.0         |

#### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

##### Dimensions(mm)



##### Winding



##### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM1280C SERIES



### FEATURES:

- High performance (fast) realized by Carbonyl iron powder
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

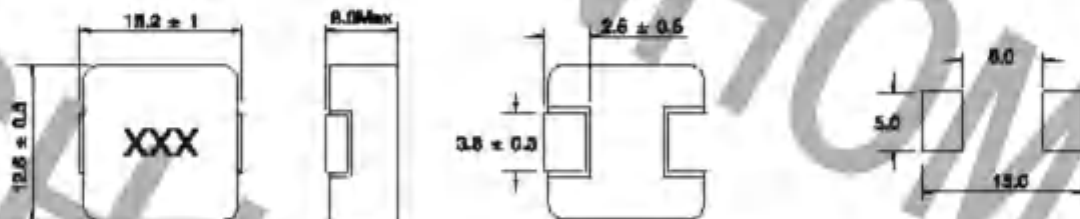
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DBOs, PDAs etc..
- Thin type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance L0(μH) ±20% @ 0Adc | Heat rating current DC Amps (DC(A)) | Saturation current DC Amps (sat(A)) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|---------------|-------------------------------|-------------------------------------|-------------------------------------|---------------|---------------|
| LPM1280C-1R0M | 1.0                           | 35.0                                | 36.0                                | 1.05          | 1.2           |
| LPM1280C-1R5M | 1.5                           | 30.0                                | 35.0                                | 1.35          | 1.5           |
| LPM1280C-2R2M | 2.2                           | 26.0                                | 30.0                                | 1.60          | 2.2           |
|               |                               |                                     |                                     |               |               |
|               |                               |                                     |                                     |               |               |
|               |                               |                                     |                                     |               |               |
|               |                               |                                     |                                     |               |               |
|               |                               |                                     |                                     |               |               |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

#### Dimensions(mm)



#### Winding



#### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM1770C SERIES

### FEATURES:

- High performance (least) realized by Carbonyl Iron powder
- Low profile: 16.0mm x17.2mm x 7.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

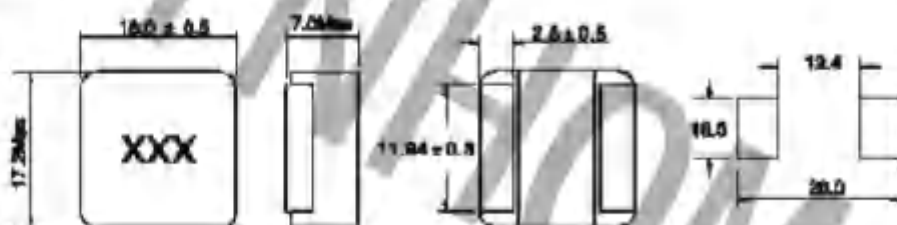


### ELECTRICAL CHARACTERISTICS:

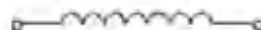
| Part Number   | Inductance<br>L0(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM1770C-1R0M | 1.0                                | 50.0                                     | 80.0                                     | 1.4              | 1.7              |
| LPM1770C-1R5M | 1.5                                | 45.0                                     | 70.0                                     | 1.7              | 2.1              |
| LPM1770C-2R2M | 2.2                                | 40.0                                     | 62.0                                     | 2.4              | 2.7              |
| LPM1770C-3R3M | 3.3                                | 35.0                                     | 50.0                                     | 3.5              | 4.2              |
| LPM1770C-4R7M | 4.7                                | 30.0                                     | 43.0                                     | 3.9              | 5.0              |
| LPM1770C-5R6M | 5.6                                | 25.0                                     | 40.0                                     | 4.4              | 5.5              |
| LPM1770C-6R8M | 6.8                                | 20.0                                     | 35.0                                     | 5.5              | 6.0              |
| LPM1770C-8R2M | 8.2                                | 18.0                                     | 31.0                                     | 5.5              | 6.5              |
| LPM1770C-100M | 10.0                               | 16.0                                     | 28.0                                     | 5.7              | 11.0             |
| LPM1770C-150M | 15.0                               | 14.0                                     | 26.0                                     | 18.0             | 23.0             |
| LPM1770C-220M | 22.0                               | 12.0                                     | 20.0                                     | 28.5             | 28.5             |
| LPM1770C-330M | 33.0                               | 10.0                                     | 17.0                                     | 27.0             | 35.0             |
| LPM1770C-470M | 47.0                               | 8.0                                      | 11.0                                     | 40.0             | 48.0             |
| LPM1770C-560M | 56.0                               | 8.0                                      | 13.0                                     | 55.0             | 62.0             |
| LPM1770C-680M | 68.0                               | 7.5                                      | 15.0                                     | 67.0             | 80.0             |
| LPM1770C-101M | 100.0                              | 7.0                                      | 12.0                                     | 102.0            | 115.0            |
| LPM1770C-151M | 150.0                              | 4.0                                      | 7.0                                      | 135.0            | 165.0            |
| LPM1770C-251M | 250.0                              | 3.0                                      | 6.0                                      | 375.0            | 405.0            |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



#### Notes

- Test Frequency : 100kHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 20%.
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

## SMD MOLDED POWER INDUCTORS

### LPM2010C SERIES



#### FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile: 2.0mm x 1.6mm x 1.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

#### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, D8Cs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

#### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0A dc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|-------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM2010C-R24M | 0.24                                | 6.3                                      | 7.2                                      | 16.5             | 20.0             |
| LPM2010C-R33M | 0.33                                | 3.8                                      | 5.5                                      | 42.0             | 46.0             |
| LPM2010C-R47M | 0.47                                | 4.5                                      | 7.0                                      | 30.0             | 35.0             |
| LPM2010C-R56M | 0.56                                | 3.3                                      | 4.8                                      | 51.0             | 59.0             |
| LPM2010C-R68M | 0.68                                | 4.0                                      | 4.5                                      | 46.0             | 52.0             |
| LPM2010C-1R0M | 1.00                                | 3.0                                      | 3.5                                      | 85.0             | 76.0             |
| LPM2010C-1R5M | 1.50                                | 2.1                                      | 3.0                                      | 105.0            | 120.0            |
| LPM2010C-2R2M | 2.20                                | 1.5                                      | 2.4                                      | 180.0            | 204.0            |

#### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



#### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

## SMD MOLDED POWER INDUCTORS

### LPM2213C SERIES

#### FEATURES:

- High performance (lead) realized by Carbonyl Iron powder
- Low profile: 22.5mm x 22.0mm x 13.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

#### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type on-board power supply module for exchange
- VFD for server

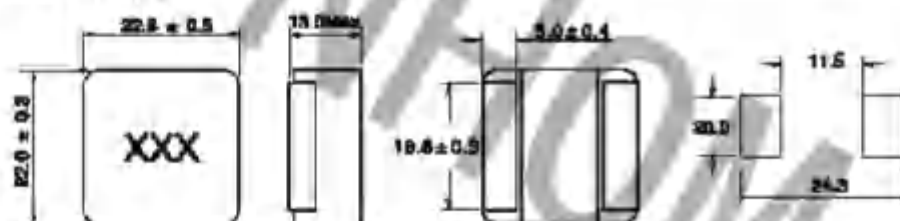


#### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance L0(μH) ±20% @0A DC | Heat rating current DC Amps IDC(A) | Saturation current DC Amps Isat(A) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|---------------|-------------------------------|------------------------------------|------------------------------------|---------------|---------------|
| LPM2213C-R47M | 0.47                          | 80.0                               | 100.0                              | 0.65          | 0.67          |
| LPM2213C-1R0M | 1.0                           | 80.0                               | 71.0                               | 0.85          | 0.89          |
| LPM2213C-1R5M | 1.5                           | 65.0                               | 53.0                               | 0.90          | 1.20          |
| LPM2213C-2R2M | 2.2                           | 58.0                               | 48.0                               | 1.10          | 1.25          |
| LPM2213C-3R3M | 3.3                           | 48.0                               | 41.0                               | 1.40          | 1.80          |
| LPM2213C-4R7M | 4.7                           | 47.0                               | 37.0                               | 1.70          | 1.84          |
| LPM2213C-5R6M | 5.6                           | 40.0                               | 36.5                               | 2.00          | 2.50          |
| LPM2213C-6R8M | 6.8                           | 36.0                               | 34.0                               | 2.90          | 3.09          |
| LPM2213C-100M | 10.0                          | 28.0                               | 28.0                               | 3.80          | 4.14          |
| LPM2213C-150M | 15.0                          | 23.5                               | 24.0                               | 5.80          | 6.11          |
| LPM2213C-220M | 22.0                          | 17.5                               | 16.0                               | 8.00          | 10.80         |
| LPM2213C-330M | 33.0                          | 15.5                               | 15.5                               | 14.50         | 15.40         |
| LPM2213C-470M | 47.0                          | 13.5                               | 10.0                               | 15.30         | 17.70         |
| LPM2213C-500M | 58.0                          | 13.0                               | 11.0                               | 23.00         | 28.00         |
| LPM2213C-680M | 68.0                          | 12.5                               | 13.0                               | 31.50         | 36.00         |
| LPM2213C-750M | 75.0                          | 12.0                               | 12.0                               | 30.00         | 32.95         |
| LPM2213C-820M | 82.0                          | 10.2                               | 9.0                                | 31.50         | 34.20         |
| LPM2213C-101M | 100.0                         | 8.1                                | 7.0                                | 37.00         | 38.40         |
| LPM2213C-151M | 150.0                         | 8.0                                | 8A Drop 30%                        | 85.00         | 80.00         |
| LPM2213C-201M | 200.0                         | 8.0                                | 7A Drop 30%                        | 92.00         | 108.00        |
| LPM2213C-221M | 220.0                         | 4.5                                | 6A Drop 30%                        | 108.00        | 125.00        |
| LPM2213C-401M | 400.0                         | 4.0                                | 6A Drop 30%                        | 208.00        | 230.00        |

#### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding

Notes

- Test Frequency : 100kHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM2510C SERIES



### FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile; 2.5mm x 2.0mm x 1.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

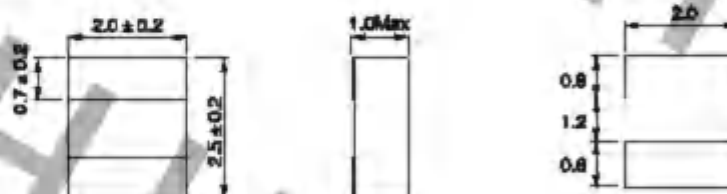
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVD's, D8Ds, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance L0(μH) ±20% @0Adc | Heat rating current DC Amps IDC(A) | Saturation current DC Amps Isat(A) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|---------------|------------------------------|------------------------------------|------------------------------------|---------------|---------------|
| LPM2510C-1R0M | 1.0                          | 3.5                                | 4.5                                | 45.0          | 52.0          |
| LPM2510C-2R2M | 2.2                          | 2.3                                | 3.0                                | 102.0         | 118.0         |
| LPM2510C-3R3M | 3.3                          | 1.8                                | 2.3                                | 125.0         | 142.0         |
| LPM2510C-4R7M | 4.7                          | 1.5                                | 1.8                                | 204.0         | 235.0         |
|               |                              |                                    |                                    |               |               |
|               |                              |                                    |                                    |               |               |
|               |                              |                                    |                                    |               |               |
|               |                              |                                    |                                    |               |               |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM2512C SERIES



### FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile: 2.5mm x 2.0mm x 1.2mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, D8Cs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM2512C-R22M | 0.22                               | 8.0                                      | 10.0                                     | 10.0             | 13.0             |
| LPM2512C-R33M | 0.33                               | 6.5                                      | 9.0                                      | 13.8             | 20.0             |
| LPM2512C-R47M | 0.47                               | 5.5                                      | 8.0                                      | 21.0             | 28.0             |
| LPM2512C-R68M | 0.68                               | 5.2                                      | 6.5                                      | 29.5             | 35.0             |
| LPM2512C-1R0M | 1.0                                | 5.0                                      | 5.5                                      | 30.0             | 35.0             |
| LPM2512C-1R5M | 1.5                                | 3.2                                      | 5.0                                      | 52.0             | 70.0             |
| LPM2512C-2R2M | 2.2                                | 2.8                                      | 3.5                                      | 85.0             | 92.0             |
| LPM2512C-3R3M | 3.3                                | 2.0                                      | 3.0                                      | 123.0            | 140.0            |
| LPM2512C-4R7M | 4.7                                | 1.8                                      | 2.5                                      | 175.0            | 195.0            |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding

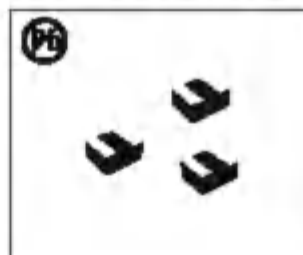


### Notes

- Test Frequency: 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM3210C SERIES



### FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile; 3.2mm x 2.5mm x 1.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVD's, D8Cs, PDAs etc..
- Thin type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM3210C-1R0M | 1.0                                | 4.0                                      | 6.0                                      | 40.0             | 48.0             |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |
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### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding

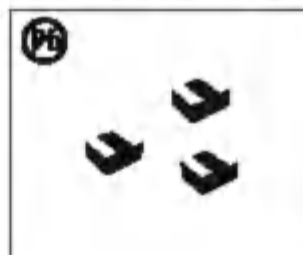


### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions.Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature.Part temperature should be verified in the end application.
- The rated current is listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM3212C SERIES



### FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile; 3.2mm x 2.5mm x 1.2mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVD's, D8Cs, PDAs etc..
- Thin type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM3212C-4R7M | 4.7                                | 2.0                                      | 9.0                                      | 166.0            | 192.0            |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |
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|               |                                    |                                          |                                          |                  |                  |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions.Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature.Part temperature should be verified in the end application.
- The rated current is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM3215C SERIES



### FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile; 8.2mm x 2.5mm x 1.5mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVD's, D8Ds, PDAs etc..
- Thin type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM3215C-R22M | 0.22                               | 19.0                                     | 11.0                                     | 7.0              | 7.9              |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |
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|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding

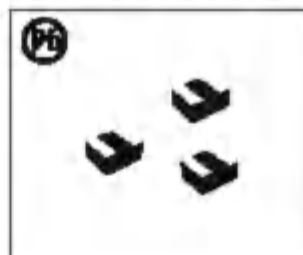


### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions.Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature.Part temperature should be verified in the end application.
- The rated current is listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM3220C SERIES



### FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile; 3.2mm x 2.5mm x 2.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVD's, D8Ds, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM3220C-1R0M | 1.00                               | 5.4                                      | 10.0                                     | 17.8             | 22.0             |
| LPM3220C-2R2M | 2.20                               | 4.0                                      | 7.0                                      | 42.0             | 60.0             |
| LPM3220C-3R3M | 3.30                               | 3.0                                      | 5.5                                      | 58.0             | 86.0             |
| LPM3220C-4R7M | 4.70                               | 2.8                                      | 4.5                                      | 98.0             | 120.0            |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding

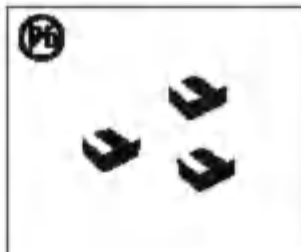


### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM4010C SERIES



### FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile; 4.0mm x 4.0mm x 1.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

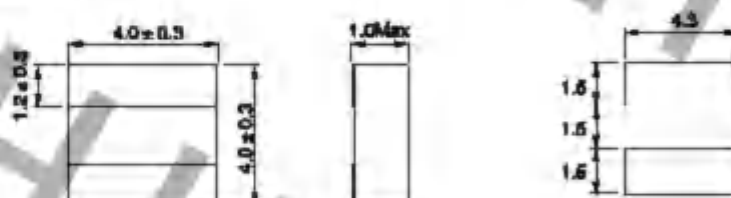
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVD's, D8Ds, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM4010C-1R0M | 1.0                                | 3.5                                      | 7.0                                      | 38.0             | 46.0             |
| LPM4010C-2R2M | 2.2                                | 3.2                                      | 4.5                                      | 72.0             | 86.0             |
| LPM4010C-3R3M | 3.3                                | 2.8                                      | 4.0                                      | 106.0            | 120.0            |
| LPM4010C-4R7M | 4.7                                | 2.5                                      | 3.0                                      | 138.0            | 160.0            |
| LPM4010C-6R8M | 6.8                                | 2.0                                      | 2.5                                      | 185.0            | 185.0            |
| LPM4010C-100M | 10.0                               | 1.5                                      | 2.0                                      | 290.0            | 330.0            |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |
|               |                                    |                                          |                                          |                  |                  |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions.Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature.Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM4012C SERIES



### FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile: 4.0mm x 4.0mm x 1.2mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, D8Cs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VPM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM4012C-R25M | 0.25                               | 8.0                                      | 11.0                                     | 8.0              | 10.0             |
| LPM4012C-R47M | 0.47                               | 7.0                                      | 9.5                                      | 20.0             | 25.0             |
| LPM4012C-R68M | 0.68                               | 6.0                                      | 8.0                                      | 25.0             | 30.0             |
| LPM4012C-1R0M | 1.0                                | 5.0                                      | 7.0                                      | 27.0             | 33.0             |
| LPM4012C-1R5M | 1.5                                | 4.2                                      | 6.5                                      | 43.0             | 55.0             |
| LPM4012C-2R2M | 2.2                                | 4.0                                      | 6.0                                      | 52.0             | 65.0             |
| LPM4012C-3R3M | 3.3                                | 3.5                                      | 5.0                                      | 78.0             | 90.0             |
| LPM4012C-4R7M | 4.7                                | 3.0                                      | 4.5                                      | 98.0             | 110.0            |
| LPM4012C-5R6M | 5.6                                | 2.5                                      | 4.0                                      | 121.0            | 140.0            |
| LPM4012C-6R8M | 6.8                                | 2.3                                      | 3.5                                      | 140.0            | 160.0            |
| LPM4012C-100M | 10.0                               | 1.8                                      | 2.5                                      | 210.0            | 240.0            |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

#### Dimensions(mm)



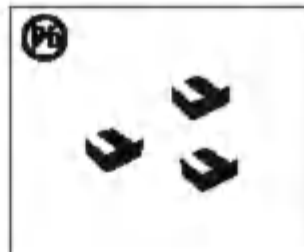
#### Winding



#### Notes

- Test Frequency: 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (lrms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

**SMD MOLDED POWER INDUCTORS**  
**LPM4015C SERIES**



### FEATURES:

- High performances (fast) realized by Cathanyl iron powder
- Low profile: 4.0mm x 4.0mm x 1.5mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

**COMMON APPLICATIONS:**

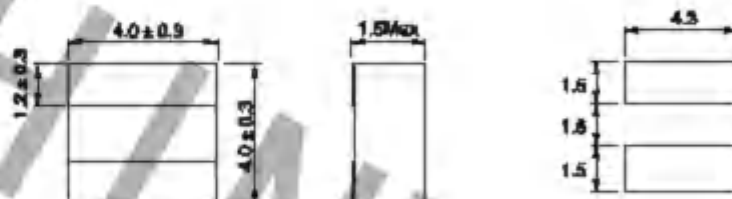
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVDs, D8Cs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

[illegible]

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

Dimensions (mm)

**Wine**

**Notes**

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate  $\Delta T$  of 40°C
- Saturation Current (Isat) DC current (A) that will cause LD to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

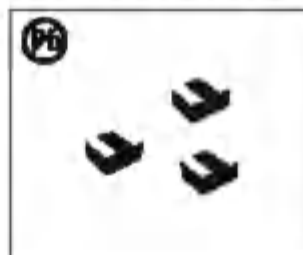
## LPM4020C SERIES

### FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile; 4.0mm x 4.0mm x 2.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, D8Cs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

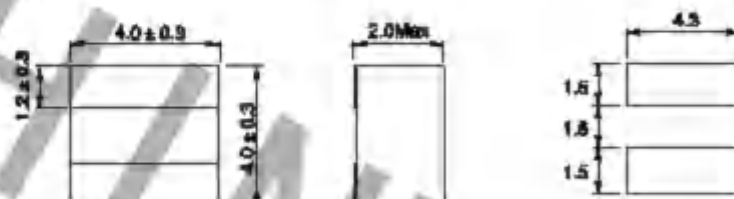


### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0Adc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM4020C-R33M | 0.33                               | 18.0                                     | 20.0                                     | 5.00             | 6.00             |
| LPM4020C-R47M | 0.47                               | 12.0                                     | 18.0                                     | 7.80             | 9.00             |
| LPM4020C-R68M | 0.68                               | 10.0                                     | 15.0                                     | 9.8              | 13.0             |
| LPM4020C-1R0M | 1.0                                | 8.0                                      | 12.0                                     | 14.0             | 17.0             |
| LPM4020C-1R5M | 1.5                                | 6.0                                      | 10.0                                     | 18.0             | 20.0             |
| LPM4020C-2R2M | 2.2                                | 5.0                                      | 8.0                                      | 27.0             | 34.0             |
| LPM4020C-3R3M | 3.3                                | 4.5                                      | 6.0                                      | 36.0             | 43.0             |
| LPM4020C-4R7M | 4.7                                | 4.0                                      | 5.5                                      | 52.0             | 63.0             |
| LPM4020C-100M | 10.0                               | 2.8                                      | 4.0                                      | 110.0            | 125.0            |
| LPM4020C-220M | 22.0                               | 1.7                                      | 2.8                                      | 256.0            | 260.0            |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

#### Dimensions(mm)



#### Winding



#### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM4030C SERIES

### FEATURES:

- High performance (test) realized by Carbonyl iron powder
- Low profile: 4.0mm x 4.0mm x 3.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, D8Cs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

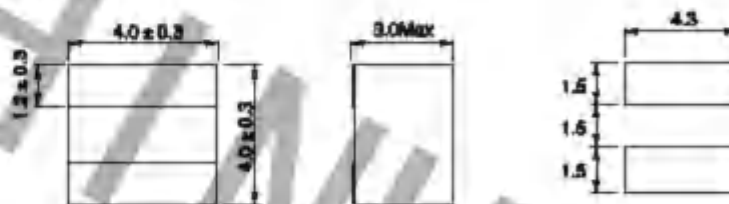


### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0A dc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|-------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM4030C-R15M | 0.15                                | 28.0                                     | 24.0                                     | 1.8              | 1.9              |
| LPM4030C-R30M | 0.30                                | 24.0                                     | 17.0                                     | 2.5              | 2.9              |
| LPM4030C-R47M | 0.47                                | 21.2                                     | 14.2                                     | 3.4              | 3.9              |
| LPM4030C-R68M | 0.68                                | 14.0                                     | 12.0                                     | 4.2              | 4.8              |
| LPM4030C-1R0M | 1.0                                 | 18.0                                     | 10.8                                     | 8.5              | 7.2              |
| LPM4030C-1R5M | 1.5                                 | 10.2                                     | 8.8                                      | 9.5              | 10.5             |
| LPM4030C-2R2M | 2.2                                 | 8.7                                      | 7.0                                      | 13.5             | 15.0             |
| LPM4030C-3R3M | 3.3                                 | 7.5                                      | 5.3                                      | 18.9             | 21.9             |
| LPM4030C-4R7M | 4.7                                 | 6.8                                      | 4.4                                      | 28.5             | 31.5             |
| LPM4030C-6R8M | 6.8                                 | 4.7                                      | 3.65                                     | 43.5             | 47.9             |
| LPM4030C-8R2M | 8.2                                 | 4.2                                      | 3.45                                     | 50.6             | 56.7             |
| LPM4030C-100M | 10.0                                | 3.8                                      | 3.1                                      | 63.0             | 69.5             |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



#### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (I<sub>ma</sub>) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (I<sub>sat</sub>) DC current (A) that will cause L0 to drop approximately 20%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current is listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM4040C SERIES



### FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile; 4.0mm x 4.0mm x 4.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVD's, DSD's, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance L0(μH) ±20% @0A <sub>dc</sub> | Heat rating current DC Amps IDC(A) | Saturation current DC Amps Isat(A) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|---------------|------------------------------------------|------------------------------------|------------------------------------|---------------|---------------|
| LPM4040C-R15M | 0.15                                     | 90.2                               | 21.0                               | 1.5           | 1.8           |
| LPM4040C-R30M | 0.30                                     | 24.8                               | 15.3                               | 2.2           | 2.6           |
| LPM4040C-R47M | 0.47                                     | 20.8                               | 12.2                               | 2.8           | 3.2           |
| LPM4040C-R68M | 0.68                                     | 18.3                               | 10.5                               | 3.5           | 4.0           |
| LPM4040C-1R0M | 1.00                                     | 14.8                               | 9.9                                | 4.8           | 5.6           |
| LPM4040C-1R5M | 1.50                                     | 12.5                               | 7.9                                | 6.6           | 7.9           |
| LPM4040C-2R2M | 2.20                                     | 11.0                               | 6.4                                | 10.1          | 11.5          |
| LPM4040C-3R3M | 3.30                                     | 8.7                                | 5.5                                | 19.0          | 16.6          |
| LPM4040C-4R7M | 4.70                                     | 7.1                                | 4.4                                | 22.2          | 24.5          |
| LPM4040C-6R8M | 6.80                                     | 5.6                                | 4.0                                | 31.5          | 34.7          |
| LPM4040C-100M | 10.00                                    | 5.0                                | 2.8                                | 46.8          | 50.5          |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (I<sub>HR</sub>) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (I<sub>sat</sub>) DC current (A) that will cause L0 to drop approximately 20%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current is listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM5020C SERIES



### FEATURES:

- High performance (test) realized by Carbonyl iron powder
- Low profile; 5.2mm x 5.4mm x 2.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVD's, D8Ds, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0A dc | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|-------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM5020C-R15M | 0.15                                | 20.4                                     | 27.0                                     | 1.8              | 2.1              |
| LPM5020C-R33M | 0.33                                | 24.4                                     | 18.8                                     | 2.7              | 3.2              |
| LPM5020C-R47M | 0.47                                | 22.1                                     | 15.7                                     | 3.7              | 4.3              |
| LPM5020C-R68M | 0.68                                | 17.8                                     | 14.0                                     | 5.3              | 6.1              |
| LPM5020C-1R0M | 1.0                                 | 15.0                                     | 11.4                                     | 7.5              | 8.7              |
| LPM5020C-1R5M | 1.5                                 | 12.8                                     | 8.9                                      | 11.4             | 13.2             |
| LPM5020C-2R2M | 2.2                                 | 10.7                                     | 7.6                                      | 16.3             | 18.8             |
| LPM5020C-3R3M | 3.3                                 | 9.4                                      | 6.5                                      | 23.4             | 27.0             |
| LPM5020C-4R7M | 4.7                                 | 7.9                                      | 5.8                                      | 36.0             | 41.5             |
| LPM5020C-6R8M | 6.8                                 | 4.9                                      | 4.3                                      | 55.0             | 63.5             |
|               |                                     |                                          |                                          |                  |                  |
|               |                                     |                                          |                                          |                  |                  |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (I<sub>HR</sub>) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (I<sub>sat</sub>) DC current (A) that will cause L0 to drop approximately 20%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions.Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature.Part temperature should be verified in the end application.
- The rated current is listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM5030C SERIES



### FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile; 5.2mm x 5.4mm x 3.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

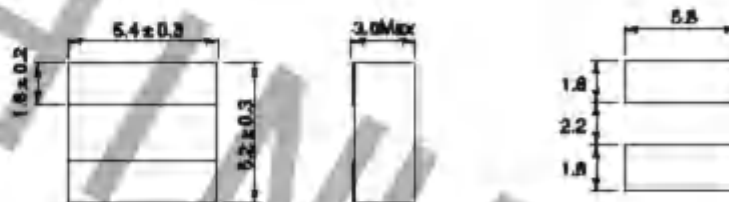
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVD's, D8Ds, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance L0(μH) ±20% @0A <sub>dc</sub> | Heat rating current DC Amps I <sub>DC</sub> (A) | Saturation current DC Amps Isat(A) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|---------------|------------------------------------------|-------------------------------------------------|------------------------------------|---------------|---------------|
| LPM5030C-R15M | 0.15                                     | 32.0                                            | 30.0                               | 1.3           | 1.8           |
| LPM5030C-R33M | 0.33                                     | 30.8                                            | 24.5                               | 1.8           | 2.2           |
| LPM5030C-R47M | 0.47                                     | 25.0                                            | 20.5                               | 2.5           | 3.0           |
| LPM5030C-R68M | 0.68                                     | 21.2                                            | 17.5                               | 3.3           | 4.0           |
| LPM5030C-1R0M | 1.0                                      | 17.8                                            | 14.0                               | 4.8           | 5.8           |
| LPM5030C-1R5M | 1.5                                      | 15.4                                            | 12.2                               | 6.8           | 7.9           |
| LPM5030C-2R2M | 2.2                                      | 12.9                                            | 9.4                                | 9.2           | 10.8          |
| LPM5030C-3R3M | 3.3                                      | 10.0                                            | 8.4                                | 13.3          | 14.9          |
| LPM5030C-4R7M | 4.7                                      | 8.6                                             | 6.7                                | 21.8          | 24.5          |
| LPM5030C-6R8M | 6.8                                      | 7.3                                             | 5.5                                | 28.8          | 32.1          |
| LPM5030C-100M | 10.0                                     | 5.7                                             | 4.5                                | 43.0          | 48.4          |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (I<sub>mr</sub>) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (I<sub>sat</sub>) DC current (A) that will cause L0 to drop approximately 20%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current is listed is either the saturation current or the heating current depending on which value is lower.

## SMD MOLDED POWER INDUCTORS

### LPM6030C SERIES

#### FEATURES:

- High performance (test) realized by Carbonyl iron powder
- Low profile: 6.0mm x 6.4mm x 3.0mm
- Lower loss realized with low DCR
- 100% lead (Pb) free sheet RoHS standard
- RoHS compliant

#### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVDs, DVCs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VPSM for server

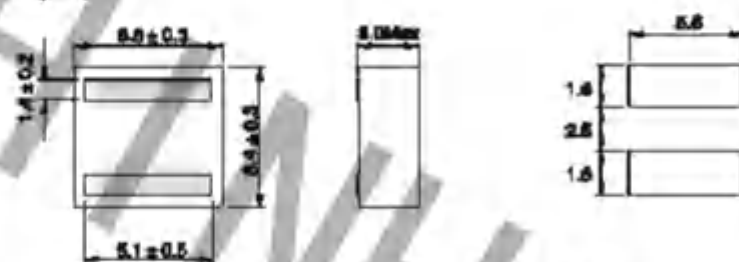


#### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance<br>L0(μH) ±20%<br>@0Ato | Heat rating<br>current DC<br>Amps IDC(A) | Saturation<br>current DC<br>Amps Isat(A) | DCR Typ.<br>(mΩ) | DCR Max.<br>(mΩ) |
|---------------|------------------------------------|------------------------------------------|------------------------------------------|------------------|------------------|
| LPM6030C-R15M | 0.15                               | 55.0                                     | 43.0                                     | 1.0              | 1.2              |
| LPM6030C-R22M | 0.22                               | 52.0                                     | 39.0                                     | 1.2              | 1.5              |
| LPM6030C-R36M | 0.36                               | 29.0                                     | 29.0                                     | 2.0              | 2.4              |
| LPM6030C-R47M | 0.47                               | 26.0                                     | 26.5                                     | 2.2              | 2.7              |
| LPM6030C-R68M | 0.68                               | 22.5                                     | 22.0                                     | 2.9              | 3.5              |
| LPM6030C-1R0M | 1.0                                | 18.1                                     | 17.7                                     | 4.2              | 4.8              |
| LPM6030C-1R5M | 1.5                                | 15.0                                     | 14.5                                     | 6.3              | 7.3              |
| LPM6030C-2R2M | 2.2                                | 12.0                                     | 12.2                                     | 8.7              | 10.3             |
| LPM6030C-3R3M | 3.3                                | 10.3                                     | 10.4                                     | 13.1             | 15.4             |
| LPM6030C-4R7M | 4.7                                | 10.0                                     | 8.6                                      | 17.5             | 21.0             |
| LPM6030C-6R8M | 6.8                                | 8.2                                      | 7.3                                      | 25.1             | 29.5             |
| LPM6030C-100M | 10.0                               | 7.0                                      | 6.3                                      | 33.0             | 44.0             |

#### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding

#### Notes:

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 80%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions.Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature.Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

# SMD MOLDED POWER INDUCTORS

## LPM6060C SERIES

### FEATURES:

- High performance (test) realized by Carbonyl Iron powder
- Low profile: 6.0mm ± 0.4mm ± 0.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, OSCs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

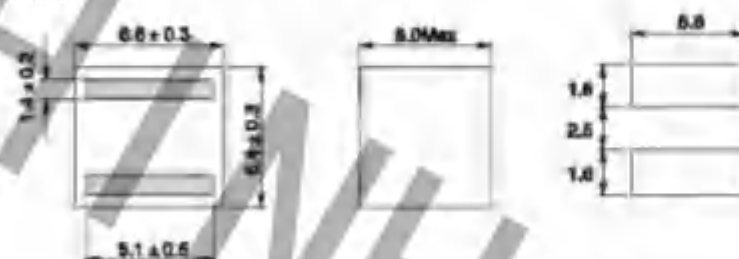


### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance L0(μH) ±20% @0A <sub>dc</sub> | Heat rating current DC Amps (I <sub>DC</sub> (A)) | Saturation current DC Amps (I <sub>sat</sub> (A)) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|---------------|------------------------------------------|---------------------------------------------------|---------------------------------------------------|---------------|---------------|
| LPM6060C-R22M | 0.22                                     | 29.0                                              | 38.0                                              | 1.1           | 1.3           |
| LPM6060C-R47M | 0.47                                     | 26.0                                              | 29.5                                              | 1.5           | 1.8           |
| LPM6060C-R68M | 0.68                                     | 22.7                                              | 26.6                                              | 2.0           | 2.3           |
| LPM6060C-1R0M | 1.0                                      | 22.0                                              | 23.0                                              | 2.5           | 2.9           |
| LPM6060C-1R5M | 1.5                                      | 20.2                                              | 18.3                                              | 3.3           | 3.8           |
| LPM6060C-2R2M | 2.2                                      | 17.2                                              | 16.0                                              | 4.3           | 4.8           |
| LPM6060C-3R3M | 3.3                                      | 16.8                                              | 13.4                                              | 5.9           | 6.5           |
| LPM6060C-4R7M | 4.7                                      | 13.5                                              | 10.2                                              | 9.1           | 10.1          |
| LPM6060C-6R8M | 6.8                                      | 11.5                                              | 8.9                                               | 12.7          | 14.0          |
| LPM6060C-100M | 10.0                                     | 9.1                                               | 7.3                                               | 18.5          | 20.4          |
| LPM6060C-150M | 15.0                                     | 7.4                                               | 5.8                                               | 28.2          | 31.1          |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



Notes

- Test Frequency: 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (I<sub>ma</sub>) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (I<sub>sat</sub>) DC current (A) that will cause L0 to drop approximately 50%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.

## SMD MOLDED POWER INDUCTORS

### LPM6030B SERIES

#### FEATURES:

- High performance (Isat) realized by Carbonyl iron powder
- Low profile: 6.6mm x 6.4mm x 3.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

#### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc..
- Thin type on-board power supply module for exchanger
- VRM for server

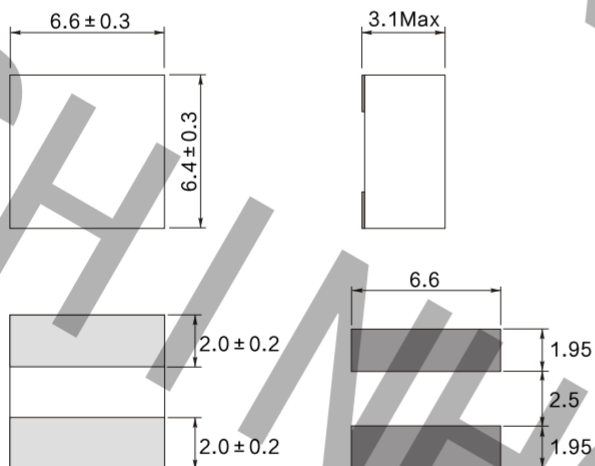


#### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance L0(μH) ±20% @0Adc | Heat rating current DC Amps IDC(A) | Saturation current DC Amps Isat(A) | DCR Typ. (mΩ). | DCR Max. (mΩ). | SRF Typ. (MHz) |
|---------------|------------------------------|------------------------------------|------------------------------------|----------------|----------------|----------------|
| LPM6060B-R18M | 0.18                         | 32                                 | 39                                 | 1.59           | 1.75           | 141            |
| LPM6030B-R33M | 0.33                         | 25                                 | 30                                 | 2.3            | 2.53           | 89             |
| LPM6030B-R56M | 0.56                         | 22                                 | 29                                 | 3.01           | 3.31           | 61             |
| LPM6030B-1R0M | 1                            | 18                                 | 23                                 | 5.62           | 6.18           | 50             |
| LPM6030B-1R2M | 1.2                          | 16                                 | 22                                 | 6.82           | 7.5            | 43             |
| LPM6030B-1R8M | 1.8                          | 14                                 | 18.2                               | 9.57           | 10.52          | 34             |
| LPM6030B-2R2M | 2.2                          | 10                                 | 15.9                               | 12.7           | 13.97          | 30             |
| LPM6030B-3R3M | 3.3                          | 8                                  | 12.2                               | 19.92          | 20.81          | 26             |

#### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

##### Dimensions(mm)



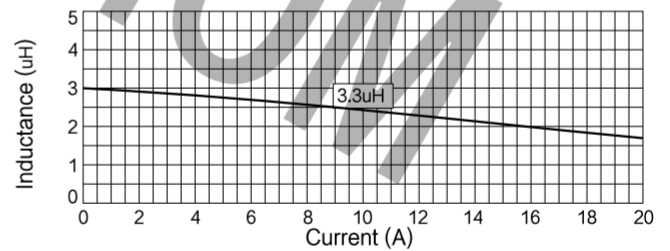
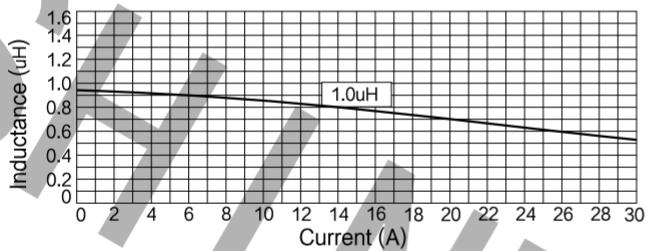
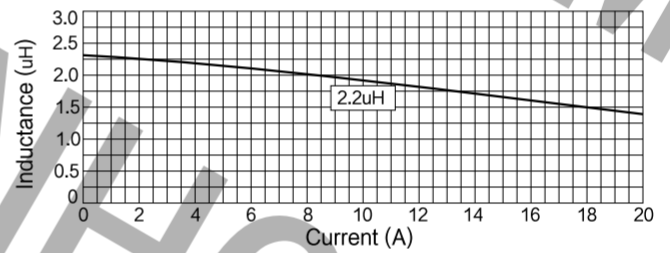
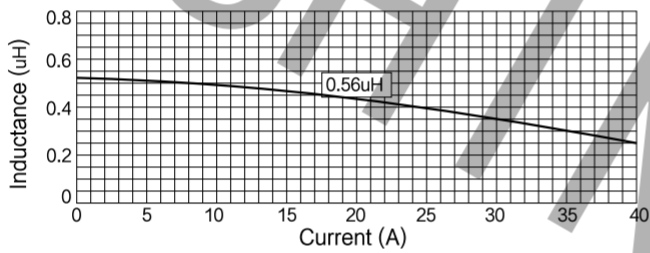
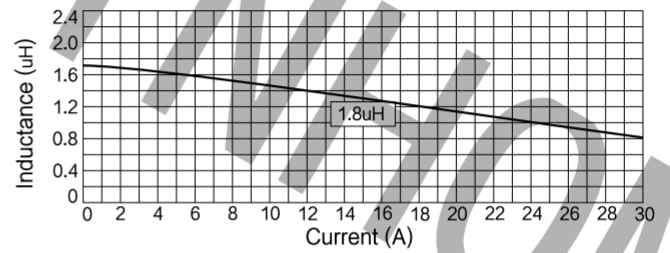
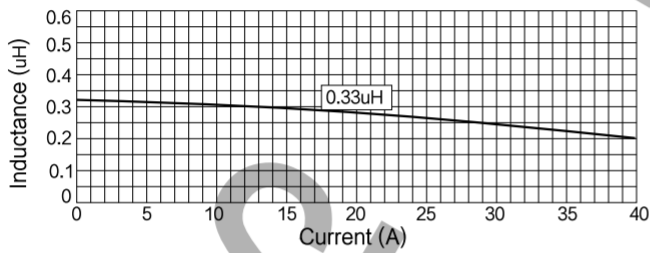
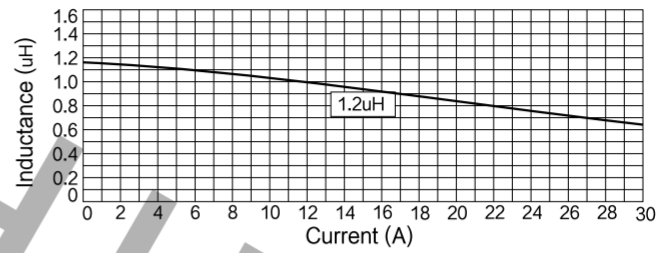
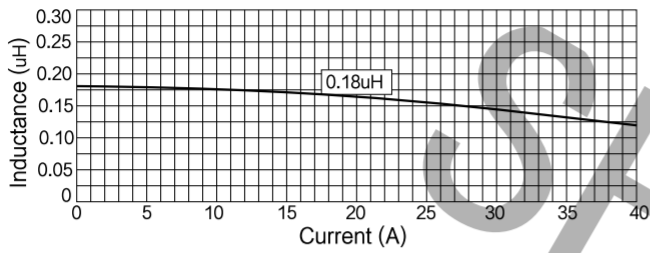
##### Winding



##### Notes

- Test Frequency : 1.0MHz / 0.1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range: -40°C to +165°C(ambient + temp rise)
- Storage Temperature Range: -55°C to +165°C
- Tape and reel packaging: -55°C to +80°C

## L VS CURRENT:



## SMD MOLDED POWER INDUCTORS

### LPM6060B SERIES

#### FEATURES:

- High performance (Isat) realized by Carbonyl iron powder
- Low profile: 6.6mm x 6.4mm x 6.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

#### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc..
- Thin type on-board power supply module for exchanger
- VRM for server

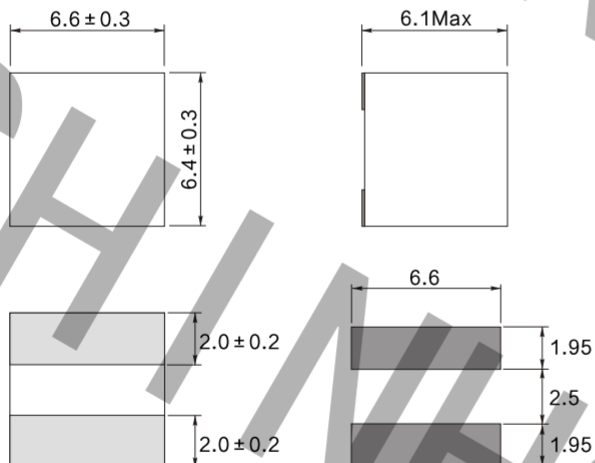


#### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance L0(μH) ±20% @0Adc | Heat rating current DC Amps IDC(A) | Saturation current DC Amps Isat(A) | DCR Typ. (mΩ). | DCR Max. (mΩ). | SRF Typ. (MHz) |
|---------------|------------------------------|------------------------------------|------------------------------------|----------------|----------------|----------------|
| LPM6060B-4R7M | 4.7                          | 11                                 | 10.5                               | 13.1           | 14.4           | 21             |
| LPM6060B-5R6M | 5.6                          | 10                                 | 9.9                                | 14.46          | 15.9           | 20             |
| LPM6060B-6R8M | 6.8                          | 9                                  | 9.2                                | 18.9           | 20.8           | 18             |
| LPM6060B-8R2M | 8.2                          | 8                                  | 8.4                                | 24             | 26.4           | 16             |
| LPM6060B-100M | 10                           | 7                                  | 7.6                                | 27             | 29.82          | 14             |
| LPM6060B-150M | 15                           | 6                                  | 5.8                                | 39.77          | 43.75          | 11             |
| LPM6060B-220M | 22                           | 5                                  | 5.6                                | 55.12          | 60.63          | 9              |
| LPM6060B-330M | 33                           | 3.6                                | 3.7                                | 95.68          | 105            | 7              |

#### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

##### Dimensions(mm)



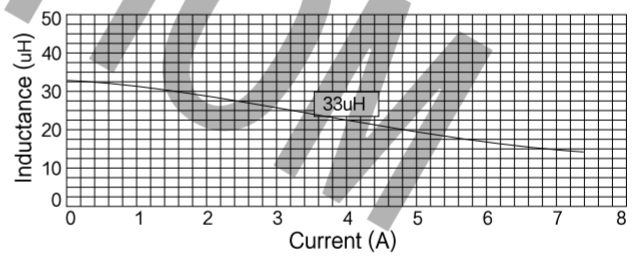
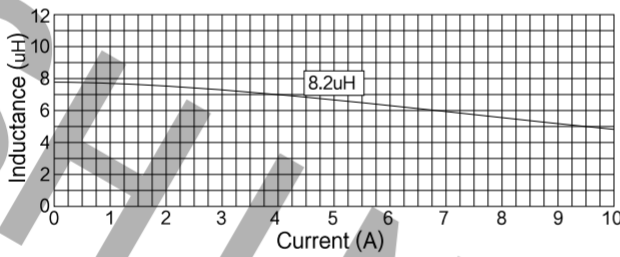
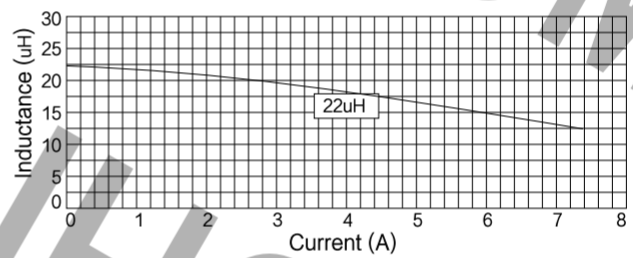
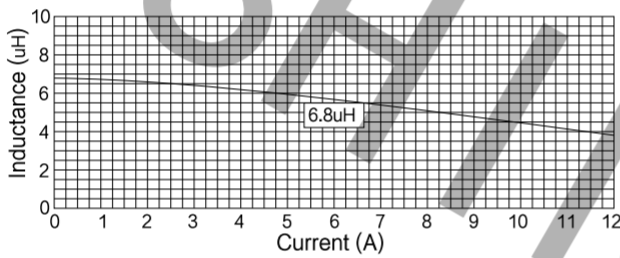
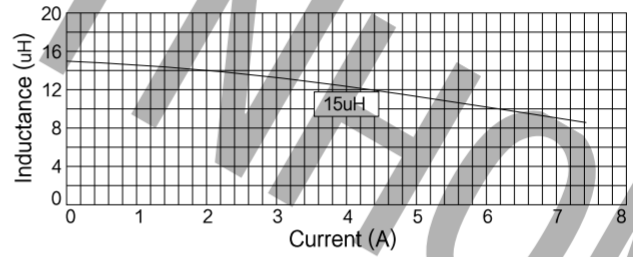
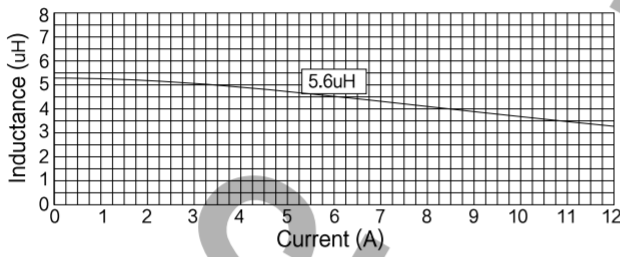
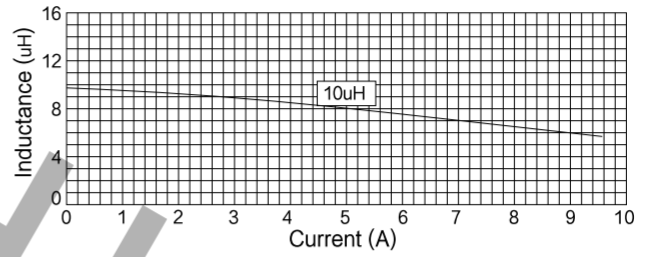
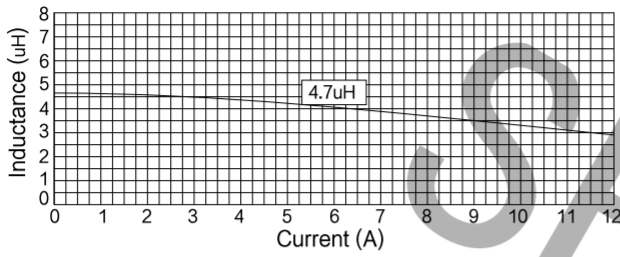
##### Winding



##### Notes

- Test Frequency : 1.0MHz / 0.1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range: -40°C to +165°C(ambient + temp rise)
- Storage Temperature Range: -55°C to +165°C
- Tape and reel packaging: -55°C to +80°C

## L VS CURRENT:



# SMD MOLDED POWER INDUCTORS

## LPM10100C SERIES



### FEATURES:

- High performance (test) realized by Carbonyl Iron powder
- Low profile: 11.3mm x 10mm x 10mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

### ELECTRICAL CHARACTERISTICS:

| Part Number    | Inductance L0(μH) ±20% @0A <sub>DC</sub> | Heat rating current DC Amps IDC(A) | Saturation current DC Amps Isat(A) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|----------------|------------------------------------------|------------------------------------|------------------------------------|---------------|---------------|
| LPM10100C-1R0M | 1.0                                      | 43.5                               | 55.0                               | 1.00          | 1.10          |
| LPM10100C-1R5M | 1.5                                      | 40.5                               | 35.5                               | 1.60          | 1.75          |
| LPM10100C-2R2M | 2.2                                      | 32.0                               | 34.0                               | 2.55          | 2.80          |
| LPM10100C-3R3M | 3.3                                      | 25.0                               | 27.4                               | 3.70          | 4.10          |
| LPM10100C-4R7M | 4.7                                      | 24.0                               | 25.4                               | 5.20          | 5.70          |
| LPM10100C-6R8M | 6.8                                      | 18.5                               | 21.5                               | 8.1           | 8.9           |
| LPM10100C-100M | 10.0                                     | 15.5                               | 17.5                               | 13.4          | 14.8          |
| LPM10100C-150M | 15.0                                     | 13.8                               | 15.5                               | 18.9          | 18.8          |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding



Notes

- Test Frequency: 100kHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (Irms) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- This part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all effect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.



## SMD MOLDED POWER INDUCTORS

# LPM 1707 SERIES

### FEATURES:

- Lowest height in this package footprint.
- Shielded construction.
- Lowest DCR/ $\mu$ H, in this package size.
- Handles high transient current spikes without saturation.
- Ultra low buzz noise, due to composite construction.

### OPTIONS:

- Tape & Reel is Standard (Qty:1000pcs.)
- Bulk packaging Available for Smaller Quantities

### COMMON APPLICATIONS:

- Excellent for power line DC-DC conversion
- Applications used in power switching
- Personal computers and other handheld electronic equipment.

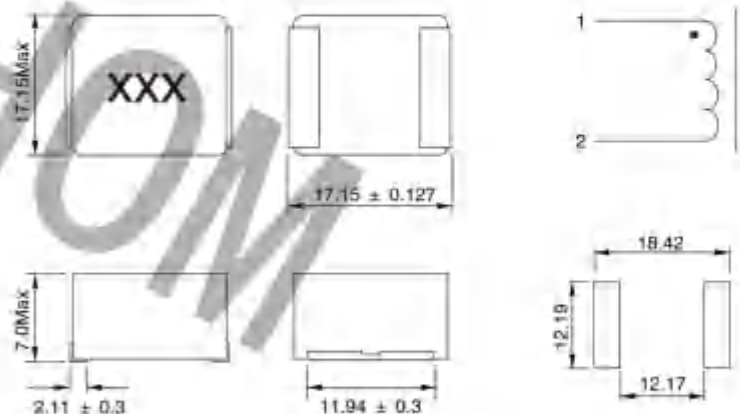
### ELECTRICAL CHARACTERISTICS:

| Part Number  | Inductance L0( $\mu$ H) $\pm 20\%$ @0Adc | Heat rating current DC Amps IDC(A) | Saturation current DC Amps Isat(A) | DCR Typ (m $\Omega$ ) | DCR Max. (m $\Omega$ ). |
|--------------|------------------------------------------|------------------------------------|------------------------------------|-----------------------|-------------------------|
| LPM1707-R22M | 0.22                                     | 80                                 | 129                                | 0.63                  | 0.75                    |
| LPM1707-R33M | 0.33                                     | 85                                 | 126                                | 0.71                  | 0.82                    |
| LPM1707-R47M | 0.47                                     | 62                                 | 123                                | 0.90                  | 1.03                    |
| LPM1707-R56M | 0.56                                     | 56                                 | 88                                 | 0.91                  | 1.05                    |
| LPM1707-R82M | 0.82                                     | 50                                 | 73                                 | 1.17                  | 1.29                    |
| LPM1707-1R0M | 1.0                                      | 48                                 | 73                                 | 1.28                  | 1.38                    |
| LPM1707-1R5M | 1.5                                      | 42                                 | 65                                 | 1.78                  | 1.88                    |
| LPM1707-1R8M | 1.8                                      | 38                                 | 65                                 | 1.96                  | 2.10                    |
| LPM1707-2R2M | 2.2                                      | 35                                 | 62                                 | 2.40                  | 2.53                    |
| LPM1707-3R3M | 3.3                                      | 28                                 | 54                                 | 3.68                  | 3.88                    |
| LPM1707-4R7M | 4.7                                      | 25                                 | 41                                 | 4.84                  | 5.11                    |
| LPM1707-5R6M | 5.6                                      | 21                                 | 40                                 | 6.68                  | 7.05                    |
| LPM1707-6R8M | 6.8                                      | 19                                 | 32                                 | 8.37                  | 8.83                    |
| LPM1707-8R2M | 8.2                                      | 18                                 | 25                                 | 10.10                 | 10.56                   |
| LPM1707-100M | 10.0                                     | 16.5                               | 25                                 | 11.6                  | 12.0                    |
| LPM1707-150M | 15.0                                     | 12.5                               | 25                                 | 15.8                  | 19.9                    |
| LPM1707-220M | 22.0                                     | 11                                 | 23                                 | 25.1                  | 26.5                    |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

- Test Frequency : 100KHz / 0.25Vdc @ 25°C.
- Testing Instrument : LHP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH18502, Agilent33420A MICRO OHMMETER.
- Heat Rated Current (Irms) will cause the coil temperature rise approximately,  $\Delta T=40^{\circ}\text{C}$  without core loss.
- Saturation Current (Isat) will cause L0 to drop approximately 20%.
- The part temperature (ambient + temp rise) should not exceed  $125^{\circ}\text{C}$  under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating Temperature & Storage Temperature:  $-55^{\circ}\text{C}$  -  $+125^{\circ}\text{C}$ .

Dimensions(mm)



Note: All specifications subject to change without notice.

## MOLDED UNSHIELDED RF COILS

### LTM0409 SERIES

#### FEATURES:

- Wire-wound Construction
- High Reliability
- Axial lead fixed inductors
- Moulded Polypropylene

#### CORE:

- Phenolic core up to 4.7  $\mu$ H
- Iron core above 4.7  $\mu$ H

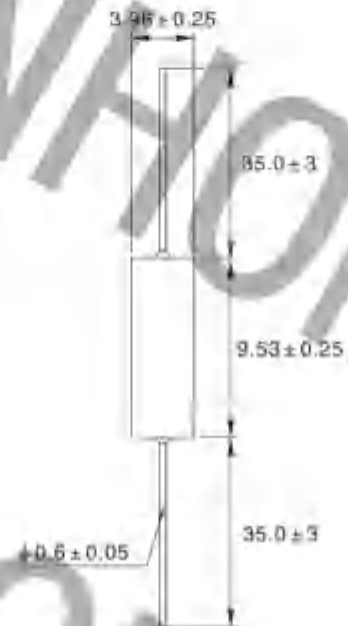


#### ELECTRICAL CHARACTERISTICS:

| Part Number    | Inductance LQ( $\mu$ H) | Q   |       | SFR(MHz) Typ | DCR Max (m $\Omega$ ) | Rated Current (mA) |
|----------------|-------------------------|-----|-------|--------------|-----------------------|--------------------|
|                |                         | Min | @ MHz |              |                       |                    |
| LTM0409-R15M   | 0.15                    | 50  | 25    | 525          | 0.03                  | 2740               |
| LTM0409-R22M   | 0.22                    | 50  | 25    | 450          | 0.055                 | 3000               |
| LTM0409-R33M   | 0.33                    | 45  | 25    | 360          | 0.09                  | 1580               |
| LTM0409-R47M   | 0.47                    | 45  | 25    | 310          | 0.12                  | 1370               |
| LTM0409-R56K   | 0.56                    | 50  | 25    | 280          | 0.135                 | 1290               |
| LTM0409-R68K   | 0.68                    | 50  | 25    | 250          | 0.15                  | 1250               |
| LTM0409-R82K   | 0.82                    | 50  | 25    | 220          | 0.22                  | 1020               |
| LTM0409-1R0K   | 1.00                    | 50  | 25    | 200          | 0.29                  | 880                |
| LTM0409-1R2K   | 1.20                    | 33  | 7.9   | 180          | 0.42                  | 730                |
| LTM0409-1R5K   | 1.50                    | 33  | 7.9   | 160          | 0.50                  | 670                |
| LTM0409-1R8K   | 1.80                    | 33  | 7.9   | 150          | 0.65                  | 590                |
| LTM0409-2R2K   | 2.20                    | 33  | 7.9   | 135          | 0.95                  | 485                |
| LTM0409-2R7K   | 2.70                    | 33  | 7.9   | 120          | 1.20                  | 430                |
| LTM0409-3R3K   | 3.30                    | 33  | 7.9   | 110          | 2.00                  | 335                |
| LTM0409-3R9K   | 3.90                    | 33  | 7.9   | 100          | 2.30                  | 310                |
| LTM0409-4R7K   | 4.70                    | 33  | 7.9   | 90           | 2.60                  | 294                |
| LTM0409-5R6K   | 5.60                    | 45  | 7.9   | 80           | 0.32                  | 565                |
| LTM0409-6R8K   | 6.80                    | 50  | 7.9   | 55           | 0.50                  | 430                |
| LTM0409-8R2K   | 8.20                    | 50  | 7.9   | 50           | 0.60                  | 410                |
| LTM0409-10R0K  | 10.0                    | 55  | 7.9   | 45           | 0.38                  | 385                |
| LTM0409-12R0K  | 12.0                    | 65  | 2.5   | 42           | 1.10                  | 305                |
| LTM0409-15R0K  | 15.0                    | 55  | 2.5   | 40           | 1.40                  | 271                |
| LTM0409-18R0K  | 18.0                    | 75  | 2.5   | 34           | 2.25                  | 213                |
| LTM0409-22R0K  | 22.0                    | 75  | 2.5   | 30           | 2.50                  | 202                |
| LTM0409-24R0K  | 24.0                    | 60  | 2.5   | 26           | 2.50                  | 202                |
| LTM0409-27R0K  | 27.0                    | 50  | 2.5   | 25           | 2.60                  | 198                |
| LTM0409-27R0J  | 27.0                    | 60  | 2.5   | 25           | 2.60                  | 198                |
| LTM0409-30R0K  | 30.0                    | 65  | 2.5   | 21           | 2.80                  | 191                |
| LTM0409-33R0K  | 33.0                    | 65  | 2.5   | 19           | 3.00                  | 185                |
| LTM0409-33R0J  | 33.0                    | 65  | 2.5   | 19           | 3.00                  | 185                |
| LTM0409-36R0K  | 36.0                    | 60  | 2.5   | 15.5         | 2.50                  | 202                |
| LTM0409-39R0K  | 39.0                    | 60  | 2.5   | 14.5         | 2.60                  | 198                |
| LTM0409-43R0K  | 43.0                    | 60  | 2.5   | 13.7         | 2.7                   | 194                |
| LTM0409-47R0K  | 47.0                    | 55  | 2.5   | 13.0         | 2.75                  | 193                |
| LTM0409-51R0K  | 51.0                    | 55  | 2.5   | 12.7         | 2.85                  | 189                |
| LTM0409-56R0K  | 56.0                    | 55  | 2.5   | 12.0         | 3.0                   | 184                |
| LTM0409-62R0K  | 62.0                    | 55  | 2.5   | 11.5         | 3.15                  | 180                |
| LTM0409-68R0K  | 68.0                    | 55  | 2.5   | 11.0         | 3.3                   | 176                |
| LTM0409-75R0K  | 75.0                    | 55  | 2.5   | 10.5         | 3.7                   | 166                |
| LTM0409-82R0K  | 82.0                    | 50  | 2.5   | 10.3         | 3.9                   | 162                |
| LTM0409-91R0K  | 91.0                    | 50  | 2.5   | 10.0         | 4.3                   | 154                |
| LTM0409-101R0K | 100.0                   | 50  | 2.5   | 9.5          | 4.5                   | 151                |
| LTM0409-111R0K | 110.0                   | 60  | 0.79  | 8.9          | 4.9                   | 144                |
| LTM0409-121R0K | 120.0                   | 65  | 0.79  | 8.7          | 5.2                   | 140                |
| LTM0409-131R0K | 130.0                   | 65  | 0.79  | 8.5          | 5.45                  | 137                |
| LTM0409-151R0K | 150.0                   | 55  | 0.79  | 8.0          | 6.05                  | 130                |
| LTM0409-161R0K | 160.0                   | 65  | 0.79  | 7.5          | 6.40                  | 126                |
| LTM0409-181R0K | 180.0                   | 65  | 0.79  | 7.0          | 6.75                  | 123                |
| LTM0409-201R0K | 200.0                   | 65  | 0.79  | 6.5          | 7.10                  | 120                |
| LTM0409-221R0K | 220.0                   | 65  | 0.79  | 6.2          | 7.45                  | 117                |
| LTM0409-241R0K | 240.0                   | 65  | 0.79  | 5.9          | 7.80                  | 115                |

#### SIZE:

Dimensions(mm)



#### WINDING:



#### NOTES:

##### Core

0-4.7 $\mu$ H: Phenolic core

4.7-240 $\mu$ H: Iron core

##### Current rating at 90°C ambient

0-4.7 $\mu$ H: 35°C Rise

4.7 $\mu$ H-240 $\mu$ H: 15°C Rise

##### Operating temperature range

0-4.7 $\mu$ H: -55°C to +125°C

4.7 $\mu$ H-240 $\mu$ H: -55°C to 105°C

Note: J=  $\pm$  5%, K=  $\pm$  10%, M=  $\pm$  20%

## MOLDED UNSHIELDED RF COILS

### LTM0511 SERIES

#### FEATURES:

- Wire-wound Construction
- High Reliability
- Axial lead fixed inductors
- Moulded Polypropylene

#### CORE:

- Thermoset plastic core up to 0.68  $\mu$ H
- Ferrite core above 0.68  $\mu$ H



#### ELECTRICAL CHARACTERISTICS:

| Part Number  | Inductance L0( $\mu$ H) | Q   |       | SRF(MHz) Typ | DCR Typ. ( $\Omega$ ) | Rated current(A) |
|--------------|-------------------------|-----|-------|--------------|-----------------------|------------------|
|              |                         | Typ | @ MHz |              |                       |                  |
| LTM0511-R10K | 0.1                     | 65  | 25    | 400          | 0.025                 | 3.0              |
| LTM0511-R15K | 0.15                    | 65  | 25    | 400          | 0.035                 | 2.5              |
| LTM0511-R22K | 0.22                    | 55  | 25    | 400          | 0.045                 | 2.0              |
| LTM0511-R33K | 0.33                    | 55  | 25    | 350          | 0.055                 | 2.0              |
| LTM0511-R47K | 0.47                    | 55  | 25    | 320          | 0.07                  | 1.7              |
| LTM0511-R68K | 0.68                    | 45  | 15    | 290          | 0.09                  | 1.5              |
| LTM0511-1R0K | 1.0                     | 45  | 15    | 190          | 0.04                  | 2.2              |
| LTM0511-1R5K | 1.5                     | 65  | 8     | 155          | 0.05                  | 2.0              |
| LTM0511-2R2K | 2.2                     | 60  | 8     | 130          | 0.06                  | 1.8              |
| LTM0511-3R3K | 3.3                     | 50  | 8     | 110          | 0.07                  | 1.7              |
| LTM0511-4R7K | 4.7                     | 50  | 8     | 95           | 0.12                  | 1.3              |
| LTM0511-6R8K | 6.8                     | 60  | 8     | 85           | 0.22                  | 1.0              |
| LTM0511-100K | 10                      | 50  | 8     | 65           | 0.35                  | 0.75             |
| LTM0511-150K | 15                      | 55  | 2.5   | 55           | 0.6                   | 0.6              |
| LTM0511-220K | 22                      | 65  | 2.5   | 45           | 1.1                   | 0.43             |
| LTM0511-330K | 33                      | 85  | 2.5   | 35           | 2.0                   | 0.3              |
| LTM0511-470K | 47                      | 70  | 2.5   | 20           | 2.5                   | 0.27             |
| LTM0511-680K | 68                      | 65  | 2.5   | 16           | 3.0                   | 0.25             |
| LTM0511-101K | 100                     | 65  | 1.5   | 14           | 4.0                   | 0.22             |
| LTM0511-151K | 150                     | 80  | 0.8   | 9.5          | 5.8                   | 0.23             |
| LTM0511-221K | 220                     | 80  | 0.8   | 8.0          | 7.3                   | 0.2              |
| LTM0511-331K | 330                     | 80  | 0.8   | 9.5          | 12                    | 0.16             |
| LTM0511-471K | 470                     | 80  | 0.8   | 6.5          | 20                    | 0.12             |
| LTM0511-681K | 680                     | 85  | 0.8   | 5.0          | 24                    | 0.11             |
| LTM0511-102K | 1000                    | 85  | 0.8   | 3.0          | 30                    | 0.1              |

Note: J=  $\pm 5\%$ , K=  $\pm 10\%$ , M=  $\pm 20\%$

#### SIZE & WINDING:

Dimensions(mm)



#### NOTES:

Core

0~0.68 $\mu$ H: Thermoset plastic core

0.68~1000 $\mu$ H: Ferrite core

Coating: Moulded polypropylene

Working temperature: -55 $^{\circ}$ C to +85 $^{\circ}$ C ambient

Rated current max: Maximum current at 85 $^{\circ}$ C ambient