

HIGH CURRENT THROUGH-HOLE INDUCTOR DEP2520 SERIES

APPLICATIONS:

- High current and high temperature applications
- DC/DC converters
- High current motor and switching noise suppression
- Inverters

FEATURES:

- High temperature operation, up to 180°C continuous with no aging
- Low DCR to minimize losses and reduce temperature rise
- Powdered iron alloy core technology provides stable inductance and saturation over operating temperature with satisfactory core losses
- Soft saturation gives predictable inductance decrease with increasing DC current independent of temperature
- Standard terminal is stripped and tinned for through hole mounting but other terminal configurations such as bare copper, SMD, and press fit pin are available upon request
- Custom options are available



ELECTRICAL CHARACTERISTICS@25°C

Part Number	Inductance (uH) $\pm 20\%$ 100KHz, 0.25V	DCR (mΩ) Max	SRF (MHz) Typ	Heat rating current I _{rms} (A)	Saturation current Isat 1 (A)	Saturation current Isat 2 (A)
DEP2520-1R2M	1.2	0.30	90	80	110	150
DEP2520-2R2M	2.2	0.40	45	70	75	110
DEP2520-3R3M	3.3	0.70	25	50	60	90
DEP2520-4R7M	4.7	0.85	15	45	50	70
DEP2520-6R8M	6.8	1.15	10	40	45	60
DEP2520-8R2M	8.2	1.50	9	35	35	50
DEP2520-100M	10	2.00	8	30	30	45

TECHNICAL INFORMATION & WINDING



Part Number	A	B
DEP2520-1R2M	3.2	10.14
DEP2520-2R2M	2.5	10.84
DEP2520-3R3M	2.0	11.34
DEP2520-4R7M	1.8	11.54
DEP2520-6R8M	1.6	11.74
DEP2520-8R2M	1.4	11.94
DEP2520-100M	1.1	12.24

Note:

- All test data is referenced to 25°C ambient
- Operating temperature range -40°C to +180°C
- The part temperature (ambient + temp. rise) should not exceed 180°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application
- Isolation voltage, coil to core: 350 VDC, 60s, 5 mA max.
- Heat Rated Current (I_{rms}) will cause the coil temperature rise approximately, $\Delta T=40^\circ\text{C}$ without core loss.
- Saturation Current (Isat 1) will cause LQ to drop approximately 20%
- Saturation Current (Isat 2) will cause LQ to drop approximately 30%

Note: All specifications subject to change without notice.

HIGH CURRENT POWER INDUCTOR DEP3231 SERIES



APPLICATIONS:

- PV inverter/Industrial control/New energy
- DC/DC converters/Motherboards/Filter
- High current switching regulators

FEATURES:

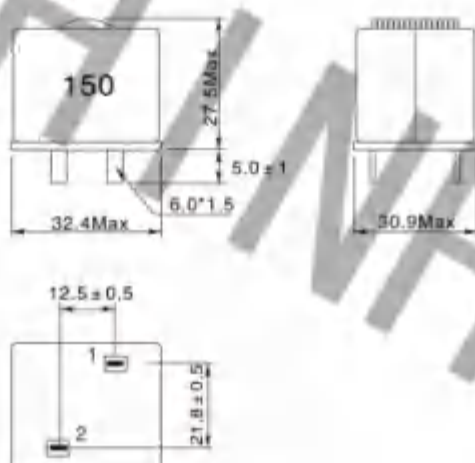
- Excellent DC bias capability to handle instantaneous peak current.
- Flat wire winding, achieving very low DC resistance.
- The inductance value and DC bias characteristic are little affected by temperature.
- Magnetically shielded structure, excellent resistance to electromagnetic interference.
- Compact design saves PCB mounting area.
- Operating temperature: $-55^{\circ}\text{C} \sim +155^{\circ}\text{C}$ (including coil's temperature rise)

ELECTRICAL CHARACTERISTICS@25°C

Part Number	Inductance (uH) $\pm 20\%$ 100KHz, 0.1V	DCR (mΩ) Typ	DCR (mΩ) Max	Heat rating current I _{rms} (A)	Saturation current I _{sat} (A)
DEP3231-6R2M	6.2	0.55	0.66	68.0	100
DEP3231-8R2M	8.2	0.70	0.85	60.0	88.0
DEP3231-100M	10	0.88	1.05	50.0	78.0
DEP3231-120M	12	1.10	1.30	45.0	70.0
DEP3231-150M	15	1.35	1.60	42.0	64.0
DEP3231-180M	18	1.55	1.85	38.0	58.0
DEP3231-220M	22	1.8	2.15	35.0	54.0
DEP3231-250M	25	2.10	2.50	32.0	50.0
DEP3231-300M	30	2.45	2.95	30.0	47.0

TECHNICAL INFORMATION & WINDING

Dimensions(mm)



Winding

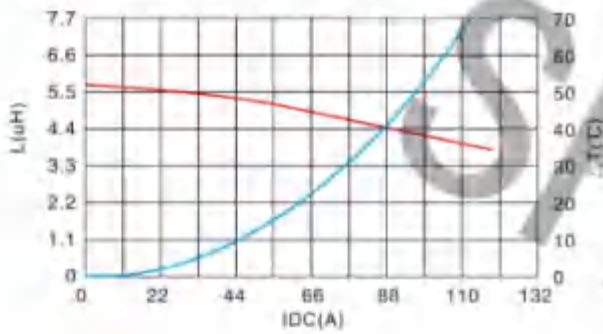


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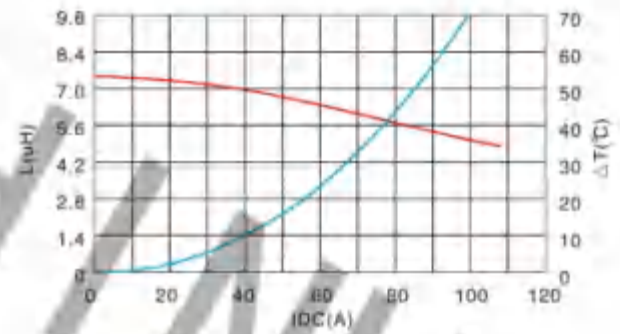
- All test data is referenced to 25°C ambient
- Operating temperature range -55°C to $+155^{\circ}\text{C}$
- Heat Rated Current (I_{rms}) will cause the coil temperature rise approximately $\Delta T=50^{\circ}\text{C}$ without core loss.
- Saturation Current (I_{sat}) will cause L0 to drop approximately 30%.

SATURATION CURRENT VS TEMPERATURE RISE CURRENT CURVE

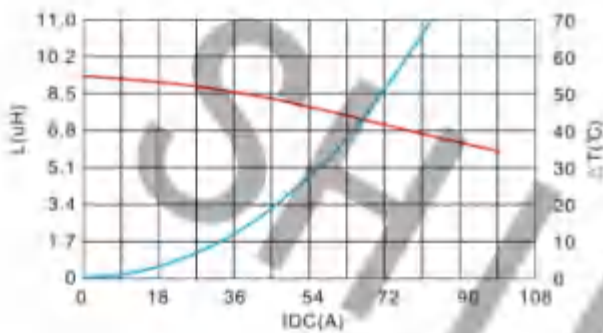
DEP3231-6R2M



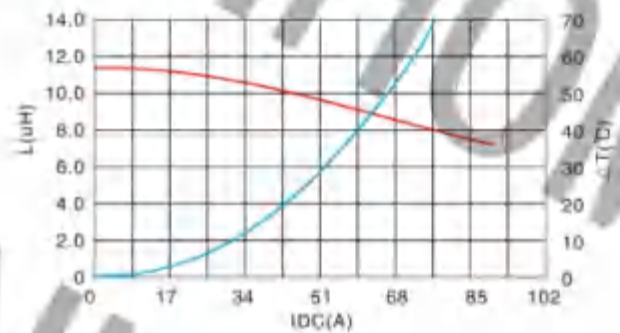
DEP3231-8R2M



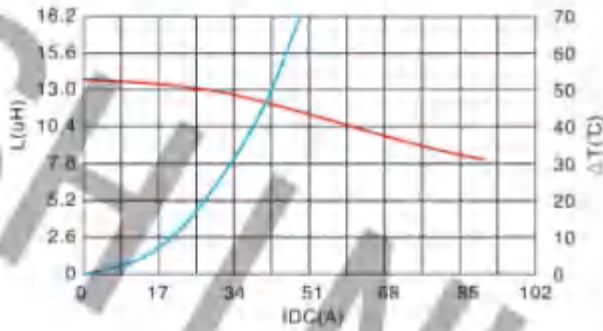
DEP3231-100M



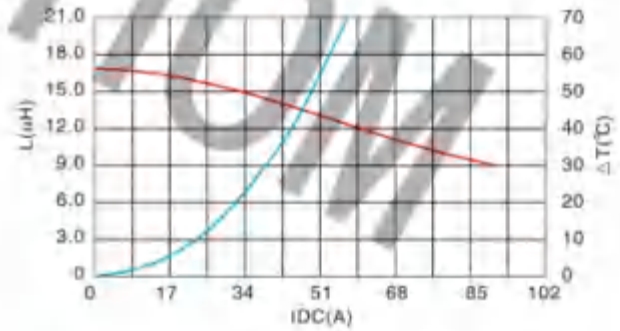
DEP3231-120M



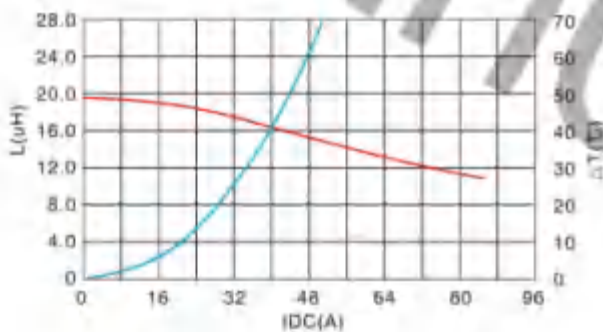
DEP3231-150M



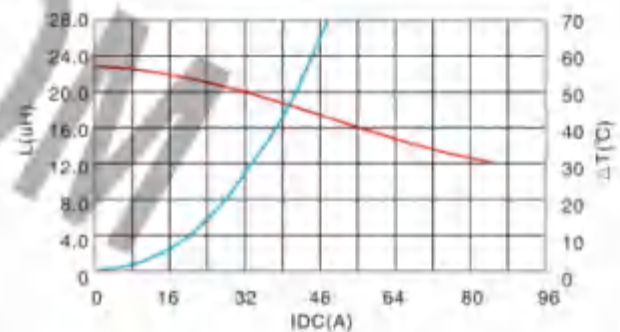
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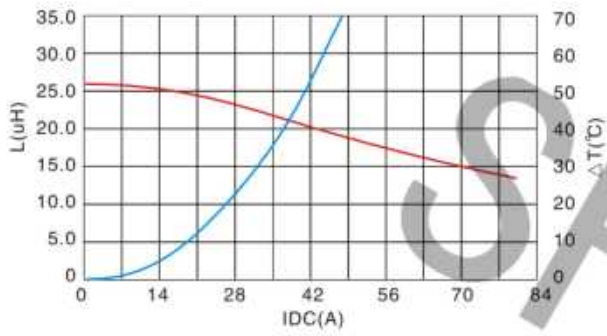
DEP3231-220M



DEP3231-250M



DEP3231-300M



HIGH CURRENT POWER INDUCTOR DEPM4233 SERIES



FEATURES:

- Core material Ferrite
- AEC-Q200 Grade 1 (40°C to +125°C)
- Flat wire windings provide extremely low DC and AC resistance.
- Through-hole mounting for excellent board adhesion
- Cover has solderable tabs for additional mounting stability.
- High current, high inductance power inductors designed for high current power supply applications
- RoHS compliant

ELECTRICAL CHARACTERISTICS@25°C

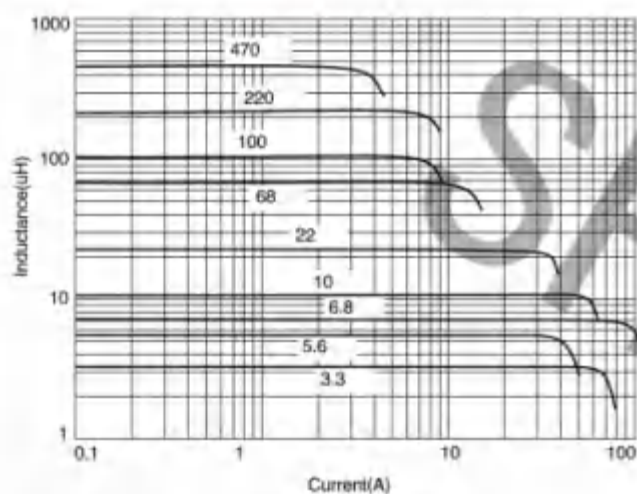
Part Number	Inductance (uH) $\pm 20\%$, 100kHz, 0.1V	DCR (mΩ) Max	SRF (MHz) Typ	Heat rating current I _{rms} (A)	Saturation current I _{sat} (A)		
					10% drop	20% drop	30% drop
DEPM4233-3R3M	3.3	0.75	27.7	44	92.0	95.0	98.0
DEPM4233-5R6M	5.6	0.75	22.8	44	63.0	65.0	67.0
DEPM4233-6R8M	6.8	2.95	21.7	34	92.0	97.8	101.8
DEPM4233-100M	10	2.95	16.8	34	56.0	60.0	63.0
DEPM4233-150M	15	2.95	15.2	34	45.0	47.0	49.0
DEPM4233-220M	22	2.95	12.0	34	32.6	35.4	36.6
DEPM4233-330M	33	2.95	10.0	34	22.5	24.7	25.8
DEPM4233-470M	47	2.95	8.5	34	16.0	17.6	18.6
DEPM4233-680M	68	2.95	6.4	34	10.6	12.2	13.0
DEPM4233-101M	100	2.95	5.2	34	6.88	7.8	8.36
DEPM4233-151M	150	2.95	4.2	34	4.18	4.96	5.4
DEPM4233-221M	220	11.55	5.0	17.5	6.4	7.2	7.6
DEPM4233-331M	330	11.55	4.1	17.5	4.6	5.2	5.6
DEPM4233-471M	470	11.55	3.8	17.5	3.0	3.6	3.8

Note:

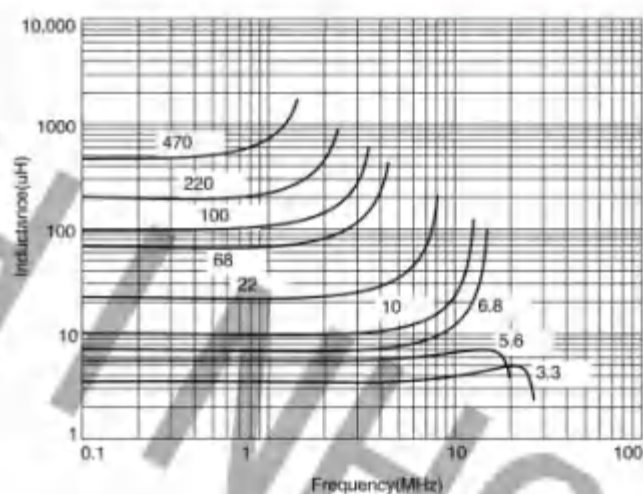
- All test data is referenced to 25°C ambient
- Ambient temperature 40°C to +125°C with I_{rms} current, +125°C to +165°C with derated current
- Storage temperature Component: 40°C to +165°C. Tray packaging: 40°C to +80°C
- Inductance tested at 100kHz, 0.1Vrms on Agilent/HP4192A.
- DCR measured on a Keithley 580 micro-ohmmeter or equivalent.
- Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)
- Packaging 9 parts per tray
- PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash.

Note: All specifications subject to change without notice.

TYPICAL L VS CURRENT



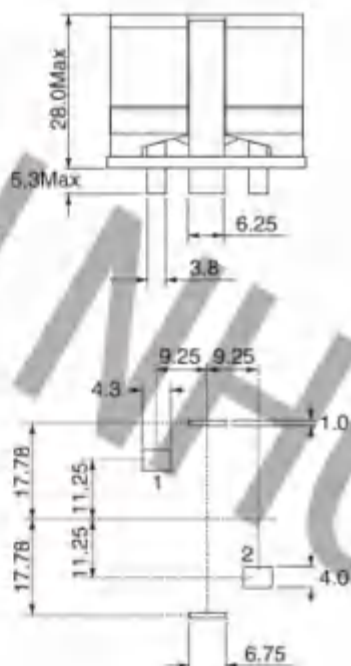
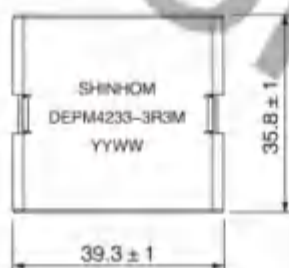
TYPICAL L VS FREQUENCY



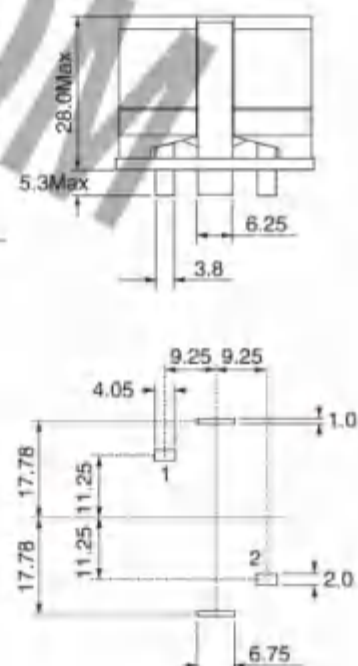
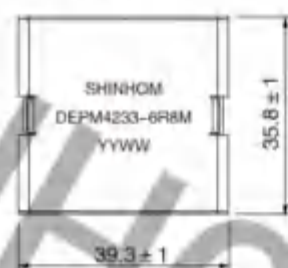
TECHNICAL INFORMATION & WINDING

Dimensions(mm)

3.3~5.6uH



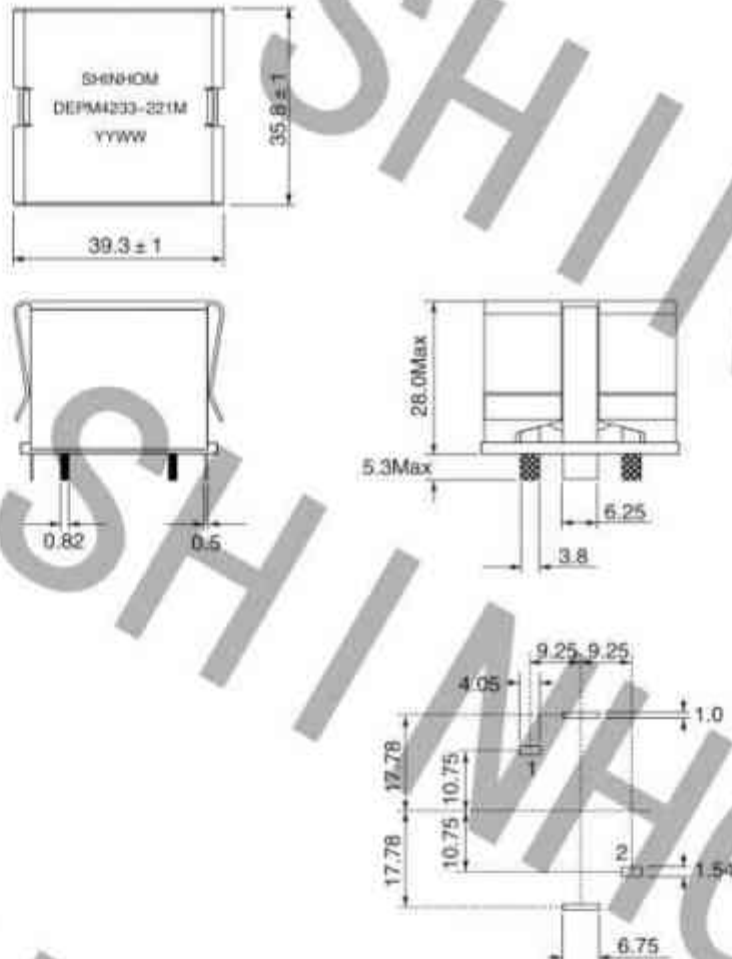
6.8~150uH



TECHNICAL INFORMATION & WINDING

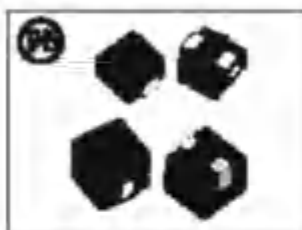
Dimensions(mm)

220~470uH



Winding





HIGH CURRENT POWER INDUCTORS

HCB0404 0505 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 22nH to 110nH
- Current range from 14A to 40A
- Ferrite core material

OPTIONS:

- Tape & Reel is Standard
- Bulk packaging Available for Smaller Quantities

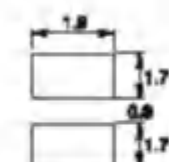
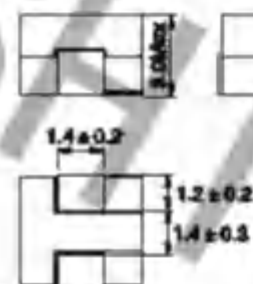
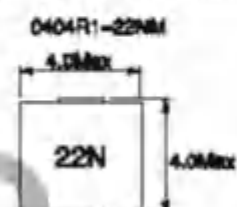
APPLICATIONS:

- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

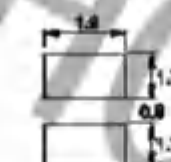
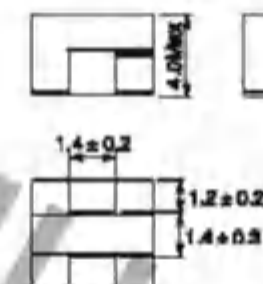
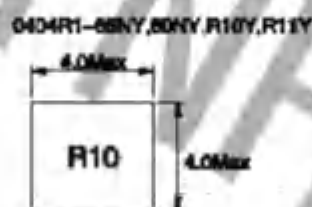
ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 15\%$ @0A DC	Inductance (nH) @1A DC	Heat rating current DC (mA) (A)	Saturation current DC (mA) (A)	Saturation current DC (mA) (A)	DCR @25°C (mΩ) $\pm 20\%$
HCB0404R1-22N	22 $\pm 20\%$	15	19	40	32	0.32 $\pm 15\%$
HCB0404R1-65NY	65	44	19	24	20	0.32
HCB0404R1-80NY	80	54	19	20	16	0.32
HCB0404R1-R10Y	100	66	19	16	13	0.32
HCB0404R1-R11Y	110	74	19	14	12	0.32
HCB0505R1-R10K	100	88	30	34	24	0.38

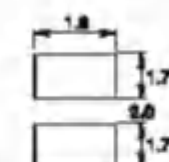
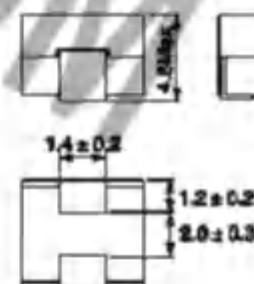
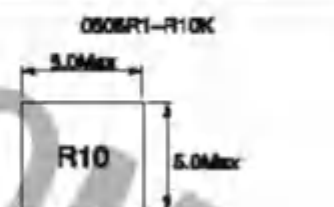
DIMENSIONS:(mm)



Recommended pad layout



Recommended pad layout



Recommended pad layout

NOTES:

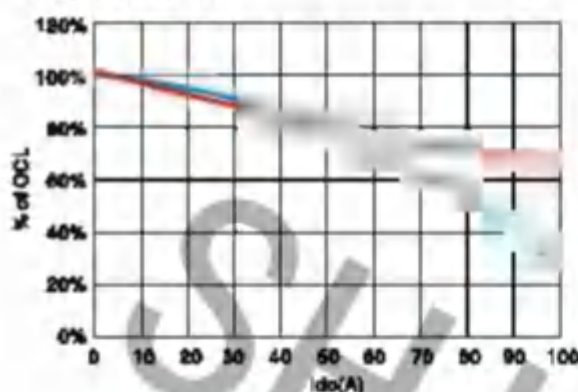
- Test Frequency: 100kHz / 0.1V @ 25°C (1MHz/0.1V for 22nH)
- I_{DC}: DC current for an approximate temperature rise of 40°C without core loss
- I_{test1}: Peak current for approximately 30% rolloff at 25°C
- I_{test2}: Peak current for approximately 80% rolloff at +125°C
- Operating temperature: -40°C to +125°C (ambient plus self-temperature rise)
- Storage temperature: -40°C to +125°C



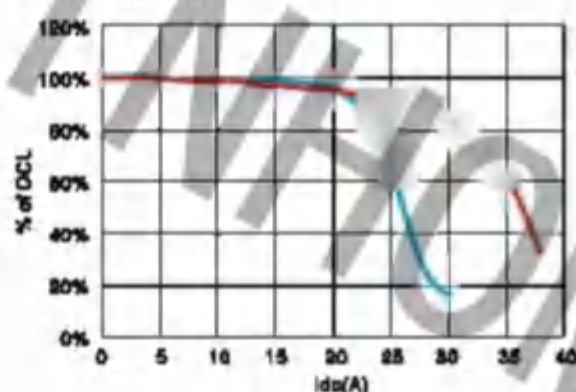
HIGH CURRENT POWER INDUCTORS HCB0404 0505 SERIES

INDUCTANCE CHARACTERISTICS:

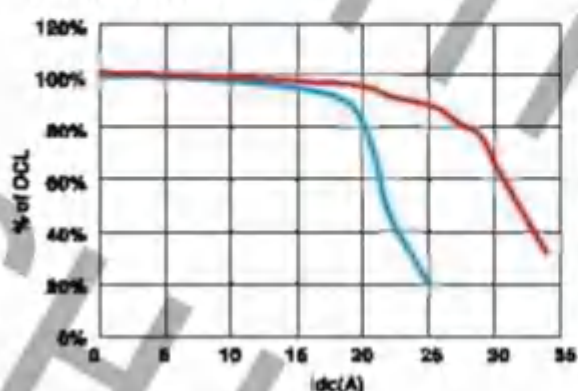
HCB0404R1-22NM



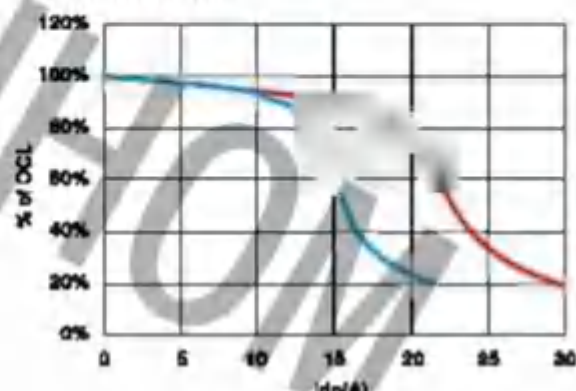
HCB0404R1-55NV



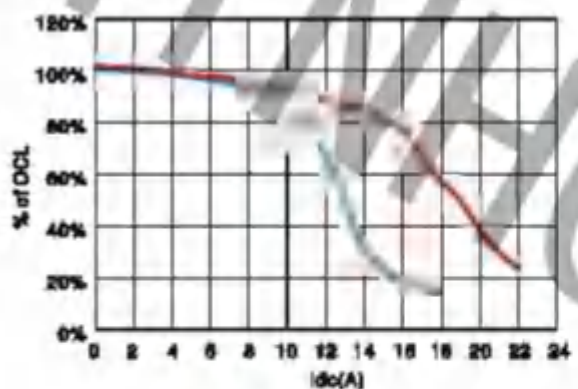
HCB0404R1-80NV



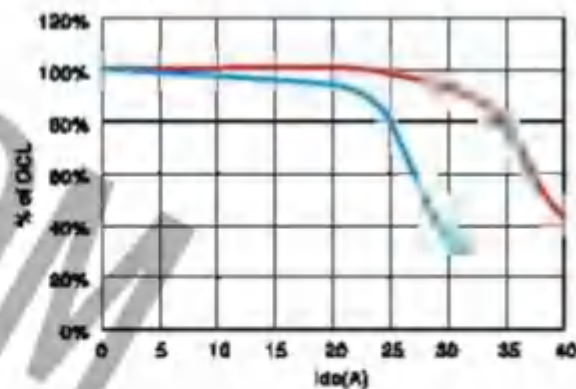
HCB0404R1-R10V



HCB0404R1-R11V



HCB0505R1-R10K



— +25°C
— +125°C



HIGH CURRENT POWER INDUCTORS

HCB0703 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 80nH to 150nH
- Current range from 16A to 32A
- Ferrite core material

OPTIONS:

- Tape & Reel is Standard
- Bulk packaging Available for Smaller Quantities

APPLICATIONS:

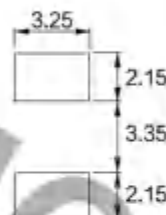
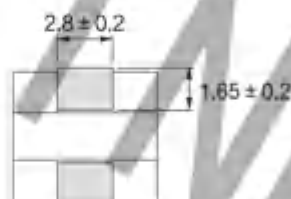
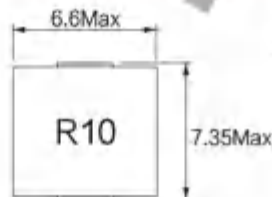
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 10\%$ @0Adc	Inductance (nH)Min @Isat1	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat1(A)	Saturation current DC Amps Isat2(A)	DCR@25°C (mΩ) $\pm 10\%$
HCB0703R1-80NK	80	54	28	32	27	1.35
HCB0703R1-R10K	100	72	28	27	23	1.35
HCB0703R1-R12K	120	86	28	22	19	1.35
HCB0703R1-R15K	150	108	28	16	13	1.35

DIMENSIONS(mm) :

SCHEMATIC :



Recommended pad layout



NOTES:

- Test Frequency : 100KHz / 0.1V@25°C
- Irms: DC current for an approximate temperature rise of 40°C without core loss
- Isat1: Peak current for approximately 20% rolloff at +25°C
- Isat2: Peak current for approximately 20% rolloff at +125°C
- Operating temperature: -40°C to +125°C (ambient plus self-temperature rise)
- Storage temperature: -40°C to +125°C

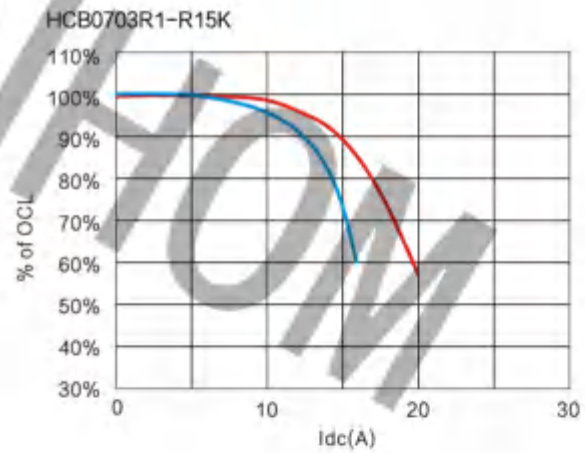
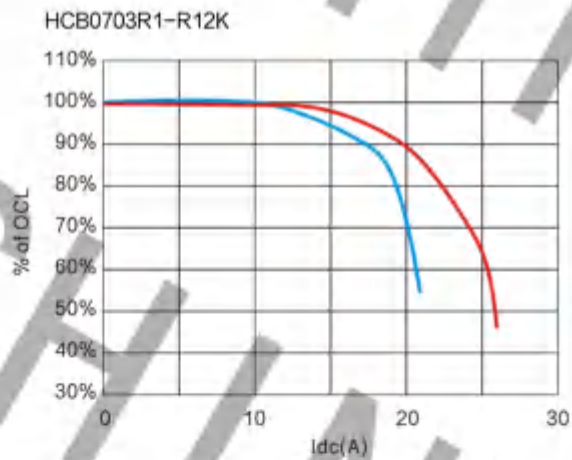
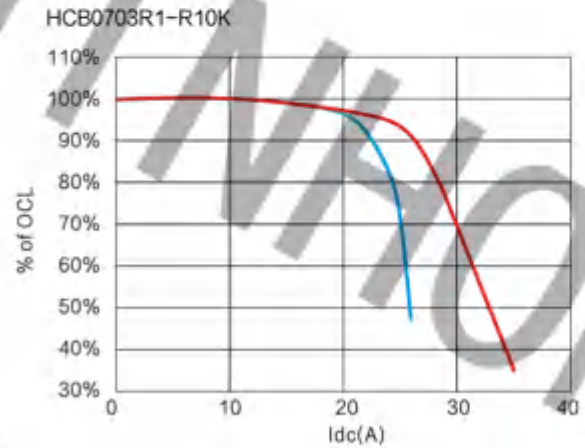
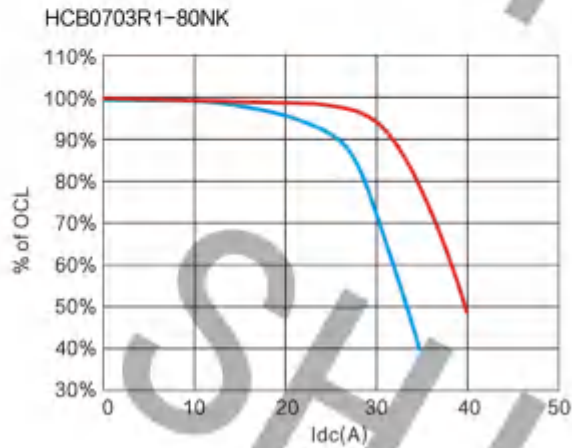
Note: All specifications subject to change without notice.



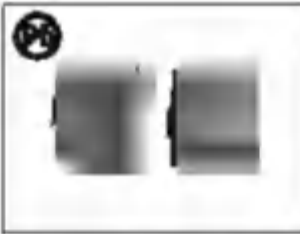
HIGH CURRENT POWER INDUCTORS

HCB0703 SERIES

INDUCTANCE CHARACTERISTICS:



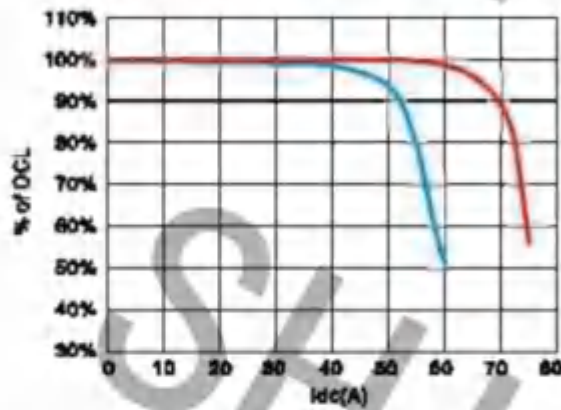
— +25°C
— +125°C



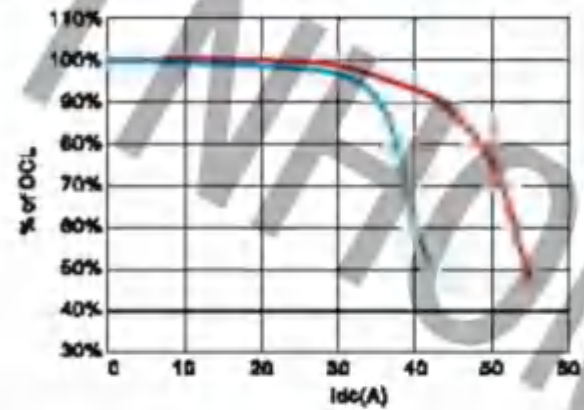
HIGH CURRENT POWER INDUCTORS HCB0705 SERIES

INDUCTANCE CHARACTERISTICS:

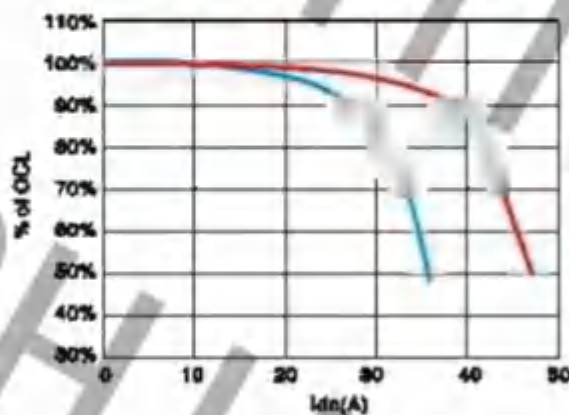
HCB0705RX-72NK



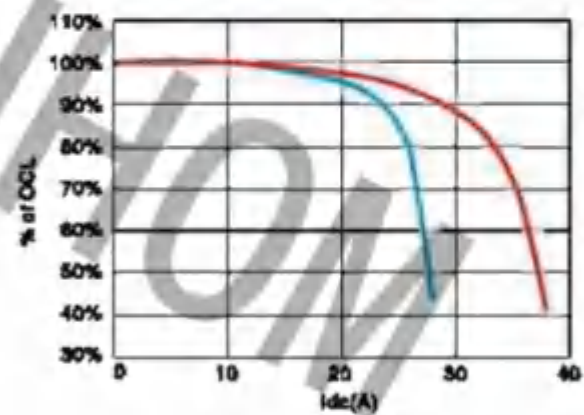
HCB0705RX-R10K



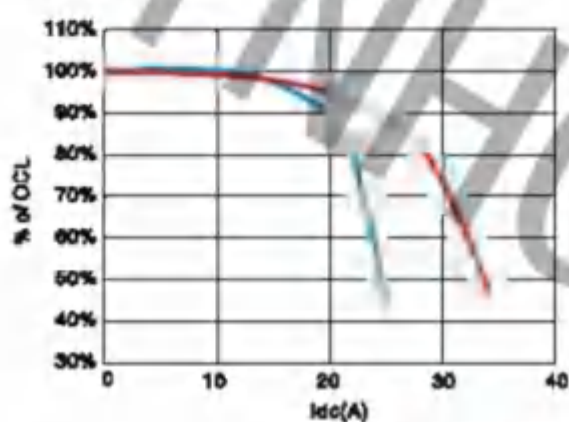
HCB0705RX-R12K



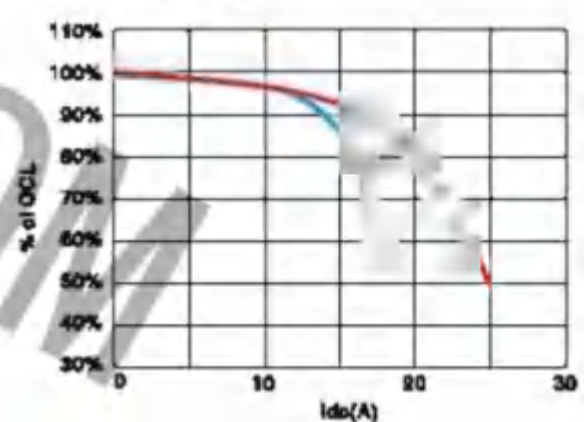
HCB0705RX-R15K



HCB0705RX-R18K



HCB0705RX-R22K



— +25°C — +125°C



HIGH CURRENT POWER INDUCTORS

HCB0805 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 32nH to 200nH
- Current range from 30A to 110A
- Ferrite core material

OPTIONS:

- Tape & Reel is Standard
- Bulk packaging Available for Smaller Quantities

APPLICATIONS:

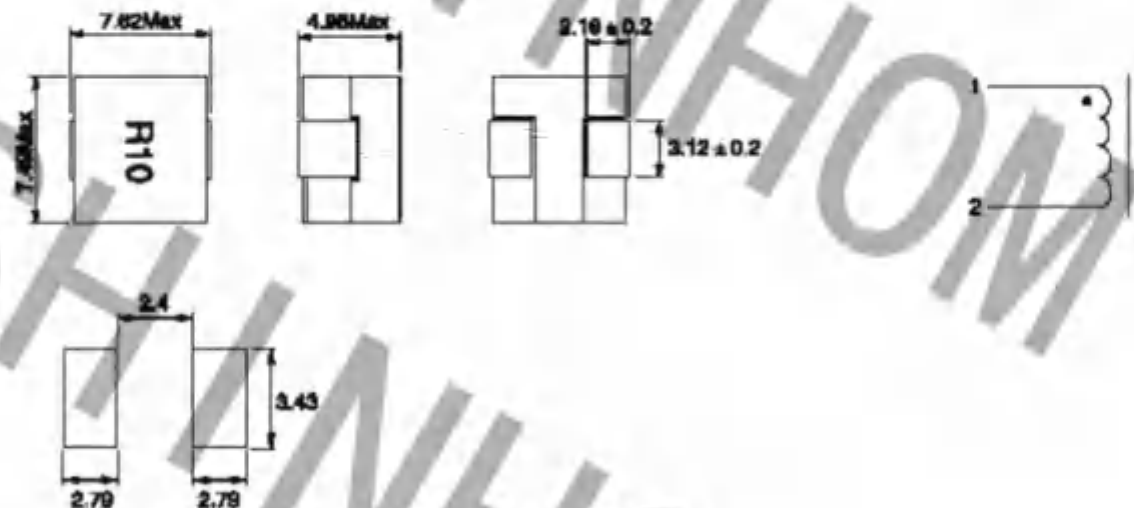
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 10\%$ @0Ato	Inductance (nH)Min @1Ato1	Heat rating current DC Ampe I _{ms} (A)	Saturation current DC Ampe I _{sat1} (A)	Saturation current DC Ampe I _{sat2} (A)	DCR @25 °C (mΩ)
HCB0805R1-32nH	32	23	65	110	95	0.17 $\pm 8\%$
HCB0805R1-56nH	56	42	65	83	81	0.17 $\pm 8\%$
HCB0805R1-72nH	72	52	65	67	49	0.17 $\pm 8\%$
HCB0805R1-100nH	100	72	65	50	35	0.17 $\pm 8\%$
HCB0805R1-200nH	200	144	65	20	16	0.17 $\pm 8\%$

DIMENSIONS(mm) :

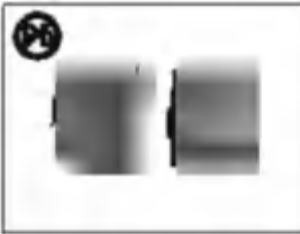
SCHEMATIC :



Recommended pad layout:

NOTES:

- Test Frequency : 100kHz / 0.1V @25°C
- I_{ms}: DC current for an approximate temperature rise of 40°C without core loss
- I_{sat1}: Peak current for approximately 20% roll-off at +25°C
- I_{sat2}: Peak current for approximately 20% roll-off at +125°C
- Operating temperature: -40°C to +125°C (ambient plus self-temperature rise)
- Storage temperature: -40°C to +125°C

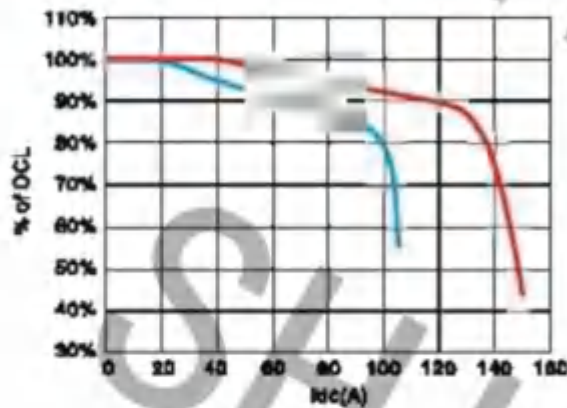


HIGH CURRENT POWER INDUCTORS

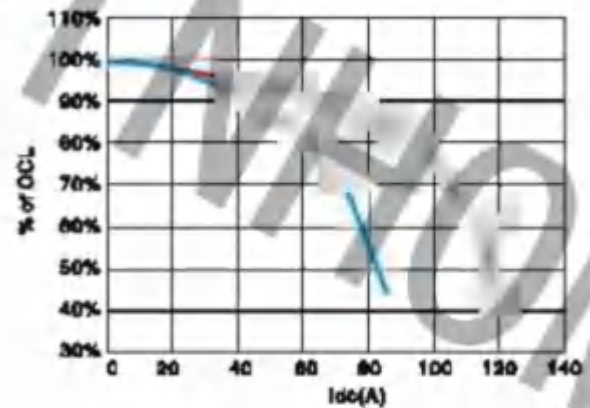
HCB0805 SERIES

INDUCTANCE CHARACTERISTICS:

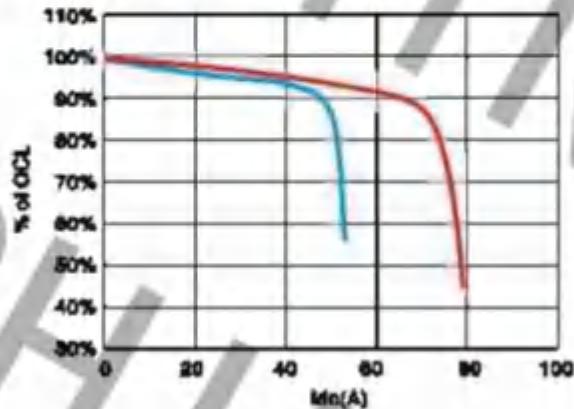
HCB0805R1-32NK



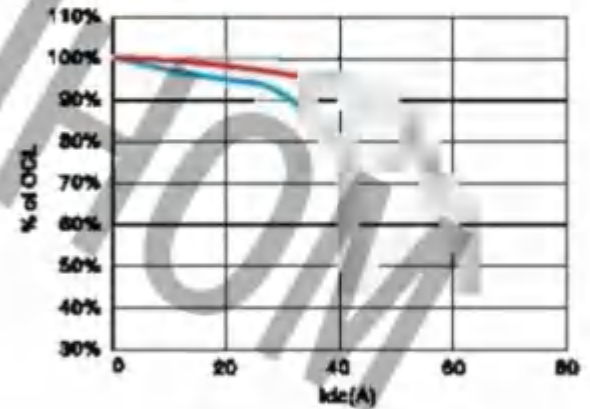
HCB0805R1-56NK



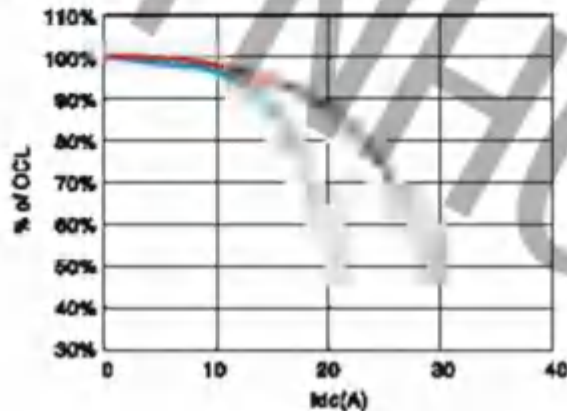
HCB0805R1-72NK



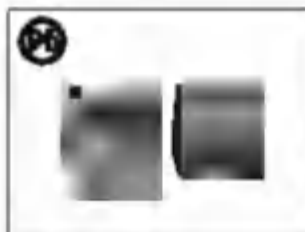
HCB0805R1-R10K



HCB0805R1-R20K



— +25°C
— +125°C



HIGH CURRENT POWER INDUCTORS

HCB0906 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 100nH to 500nH
- Current range from 32.5A to 84A
- Ferrite core material

OPTIONS:

- Tape & Reel is Standard
- Bulk packaging Available for Smaller Quantities

APPLICATIONS:

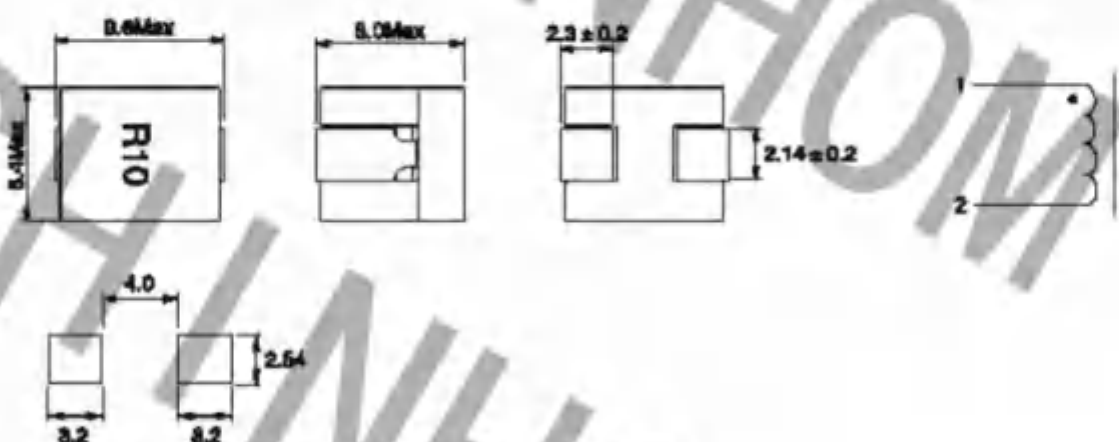
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 10\%$ @ 1A dc	Inductance (nH) Min @ Isat1	Heat rating current DC Ampe I _{ms} (A)	Saturation current DC Ampe Isat1(A)	Saturation current DC Ampe Isat2(A)	DCR @ 25 °C (mΩ)
HCB0906R1-R10K	100	72	51	84	81	0.29 $\pm 5\%$
HCB0906R1-R12K	120	86	51	79	68	0.29 $\pm 5\%$
HCB0906R1-R15K	150	108	51	65	54.5	0.29 $\pm 5\%$
HCB0906R1-R22K	220	155	51	44	37.5	0.29 $\pm 5\%$
HCB0906R1-R28K	280	200	51	34	29	0.29 $\pm 5\%$
HCB0906R1-R30K	300	218	51	32.5	27.5	0.29 $\pm 5\%$

DIMENSIONS(mm) :

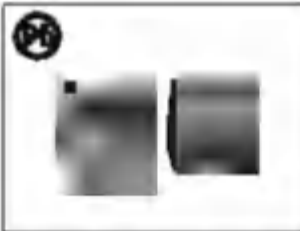
SCHEMATIC :



Recommended pad layout:

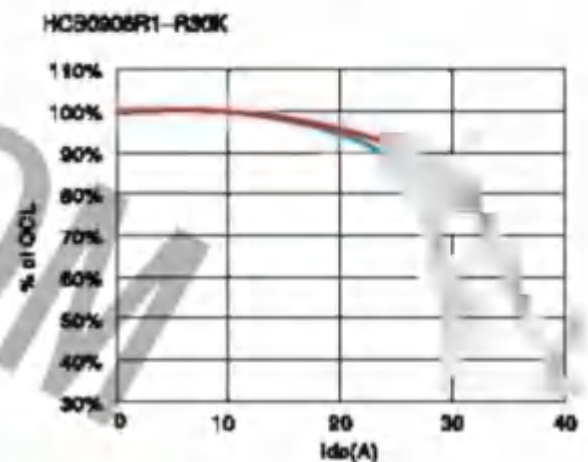
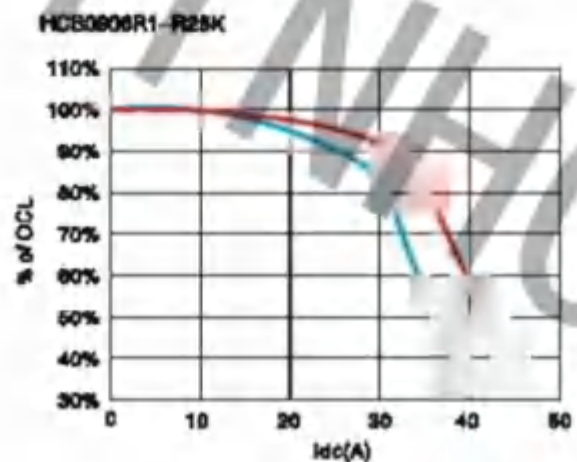
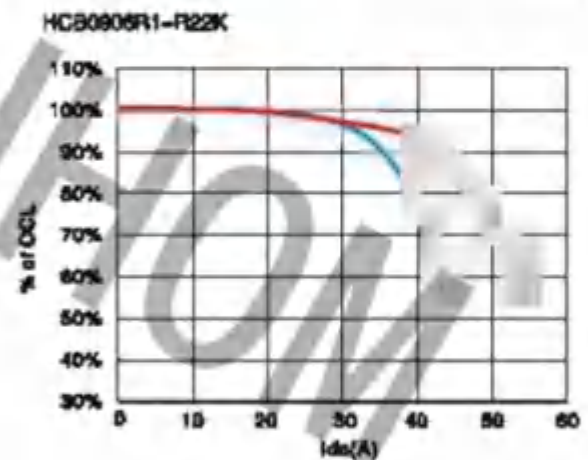
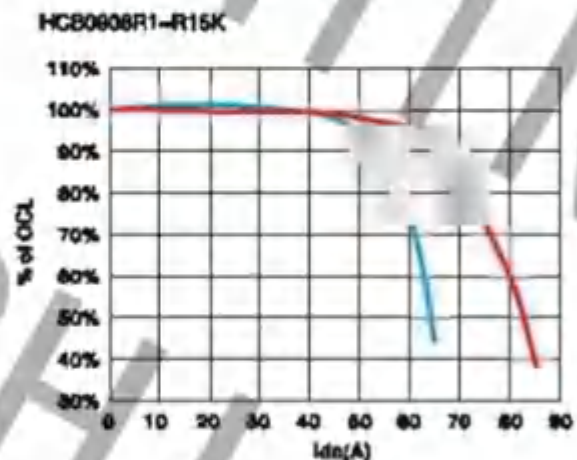
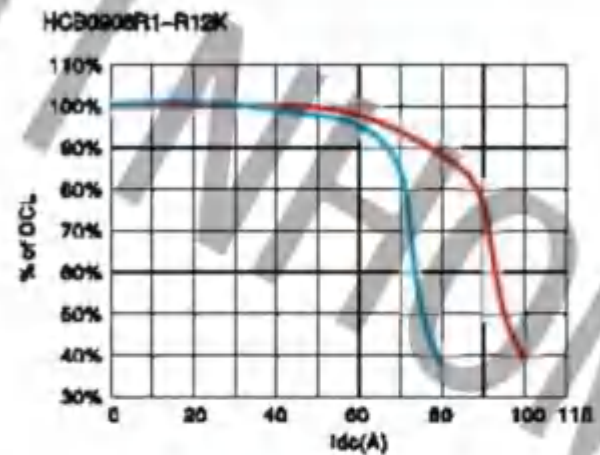
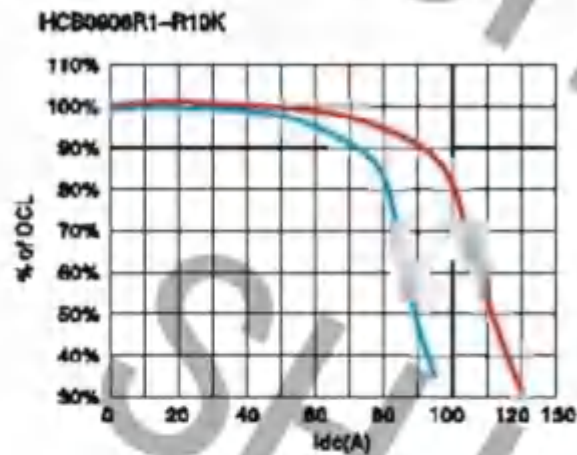
NOTES:

- Test Frequency : 100KHz / 0.1V @ 25°C
- I_{ms}: DC current for an approximate temperature rise of 40°C without core loss
- Isat1: Peak current for approximately 20% roll-off at +25°C
- Isat2: Peak current for approximately 80% roll-off at +125°C
- Operating temperature: -40°C to +125°C (ambient plus self-temperature rise)
- Storage temperature: -40°C to +125°C



HIGH CURRENT POWER INDUCTORS HCB0906 SERIES

INDUCTANCE CHARACTERISTICS:



— +25°C — +125°C



HIGH CURRENT POWER INDUCTORS

HCB1005 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 80nH to 220nH
- Current range from 33A to 90A
- Ferrite core material

OPTIONS:

- Tape & Reel is standard
- Bulk packaging available for smaller quantities

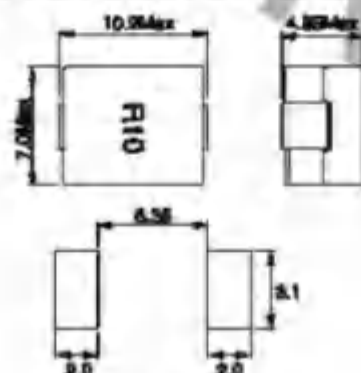
APPLICATIONS:

- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 10\%$ @ 0A dc	Inductance (nH) Min @ 1A dc	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat1(A)	Saturation current DC Amps Isat2(A)	DCR @ 25°C (mΩ)
HCB1005R1-80nH	80	60	53	60	64	0.36 $\pm 7.5\%$
HCB1005R1-R10K	100	72	53	73	67	0.36 $\pm 7.5\%$
HCB1005R1-R12K	120	86	53	80	48	0.36 $\pm 7.5\%$
HCB1005R1-R15K	150	108	53	47	37	0.36 $\pm 7.5\%$
HCB1005R1-R22K	220	158	53	33	28	0.36 $\pm 7.5\%$
HCB1005R2-80nH	80	60	60	60	64	0.47 $\pm 6.5\%$
HCB1005R2-R10K	100	72	60	73	57	0.47 $\pm 6.5\%$
HCB1005R2-R12K	120	86	60	60	48	0.47 $\pm 6.5\%$
HCB1005R2-R15K	150	108	60	47	37	0.47 $\pm 6.5\%$
HCB1005R2-R22K	220	158	60	33	28	0.47 $\pm 6.5\%$
HCB1005R3-80nH	80	60	60	60	64	0.55 $\pm 5.4\%$
HCB1005R3-R10K	100	72	60	73	57	0.55 $\pm 5.4\%$
HCB1005R3-R12K	120	86	60	60	48	0.55 $\pm 5.4\%$
HCB1005R3-R15K	150	108	60	47	37	0.55 $\pm 5.4\%$
HCB1005R3-R22K	220	158	60	33	28	0.55 $\pm 5.4\%$
HCB1005R4-80nH	80	60	53	60	64	0.31 $\pm 7.0\%$
HCB1005R4-R10K	100	72	53	73	57	0.31 $\pm 7.0\%$
HCB1005R4-R12K	120	86	53	80	48	0.31 $\pm 7.0\%$
HCB1005R4-R15K	150	108	53	47	37	0.31 $\pm 7.0\%$
HCB1005R4-R22K	220	158	53	33	28	0.31 $\pm 7.0\%$

DIMENSIONS(mm) :



Recommended pad layout

SCHEMATIC :



NOTES:

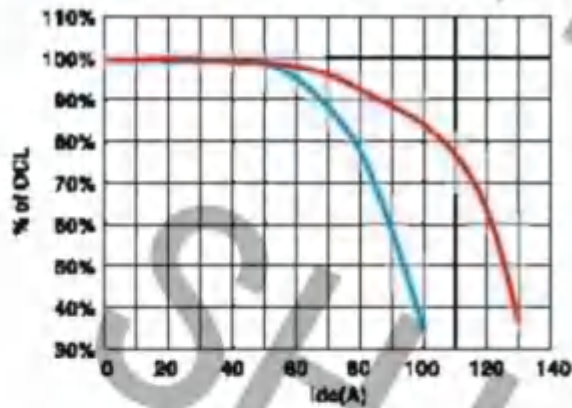
- Test Frequency: 100kHz / 0.1V @ 25°C
- Irms: DC current for an approximate temperature rise of 40°C without core loss
- Isat1: Peak current for approximately 20% softfall at +25°C
- Isat2: Peak current for approximately 20% softfall at +125°C
- Operating temperature: -40°C to +125°C (ambient plus self-temperature rise)
- Storage temperature: -40°C to +125°C



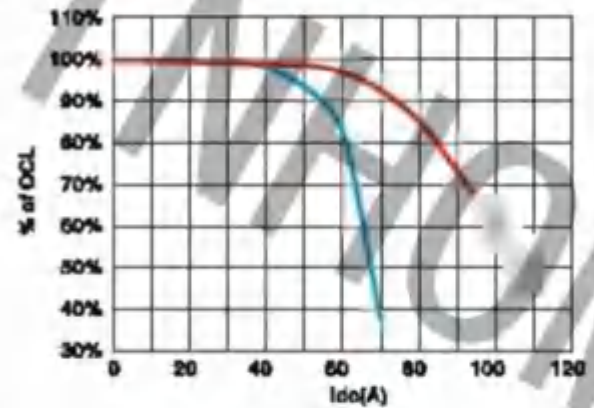
HIGH CURRENT POWER INDUCTORS HCB1005 SERIES

INDUCTANCE CHARACTERISTICS:

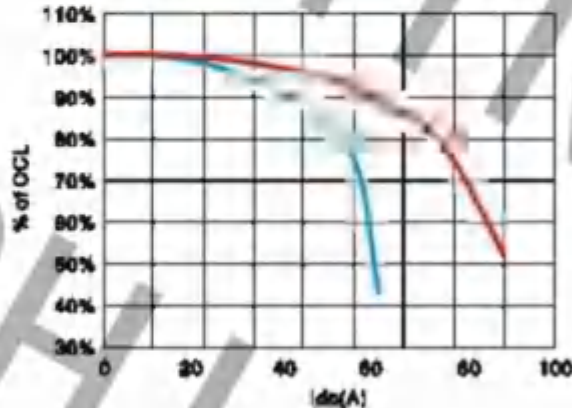
HCB1005RX-80HK



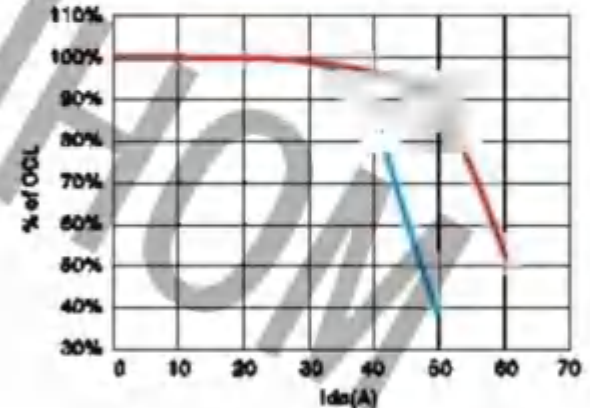
HCB1005RX-R10K



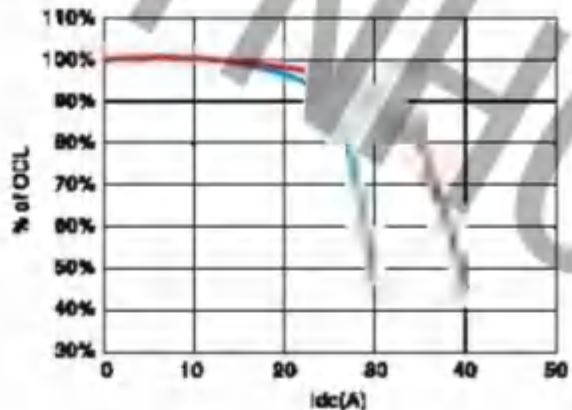
HCB1005RX-R12K



HCB1005RX-R15K



HCB1005RX-R22K



— +25°C
— +125°C



HIGH CURRENT POWER INDUCTORS

HCB1007 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 115nH to 470nH
- Current range from 23.5A to 84A
- Ferrite core material

OPTIONS:

- Tape & Reel is Standard
- Bulk packaging Available for Smaller Quantities

APPLICATIONS:

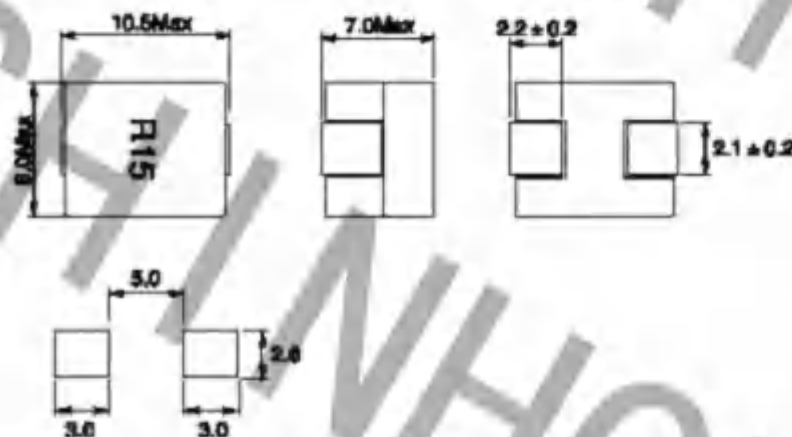
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 10\%$ @ 0A dc	Inductance (nH) Min @ 1A dc	Heat rating current DC Amps I _{ms} (A)	Saturation current DC Amps I _{sat1} (A)	Saturation current DC Amps I _{sat2} (A)	DCR @ 25 °C (mΩ)
HCB1007R1-R11K	115	83	81	94	88	0.29 $\pm 5\%$
HCB1007R1-R15K	150	108	81	75	80	0.28 $\pm 5\%$
HCB1007R1-R18K	180	129	81	60	50	0.29 $\pm 5\%$
HCB1007R1-R22K	220	158	81	50	40	0.29 $\pm 5\%$
HCB1007R1-R27K	270	194	61	41	33	0.28 $\pm 5\%$
HCB1007R1-R30K	300	216	61	36	30	0.29 $\pm 5\%$
HCB1007R1-R33K	330	237	61	33	28.5	0.29 $\pm 5\%$
HCB1007R1-R36K	360	260	61	28	22.5	0.29 $\pm 5\%$
HCB1007R1-R47K	470	338	61	23.5	19	0.29 $\pm 5\%$

DIMENSIONS(mm) :

SCHEMATIC :



Recommended pad layout

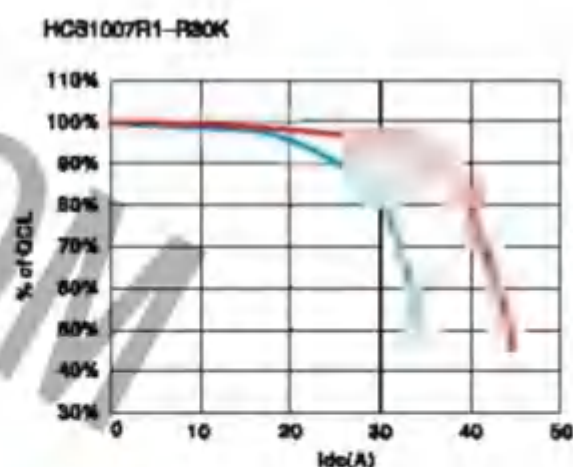
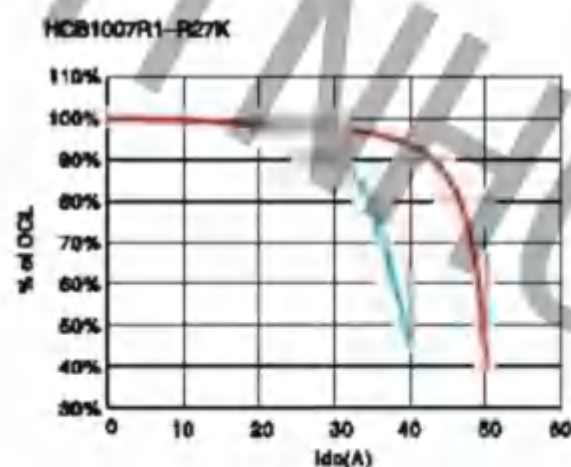
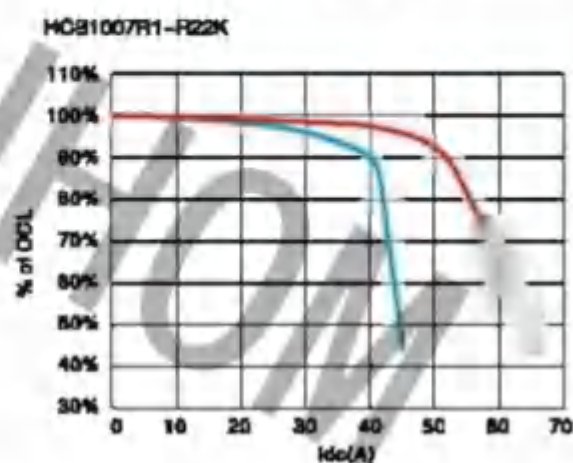
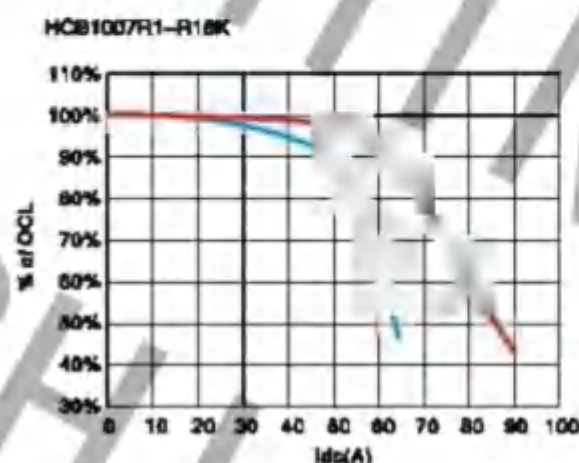
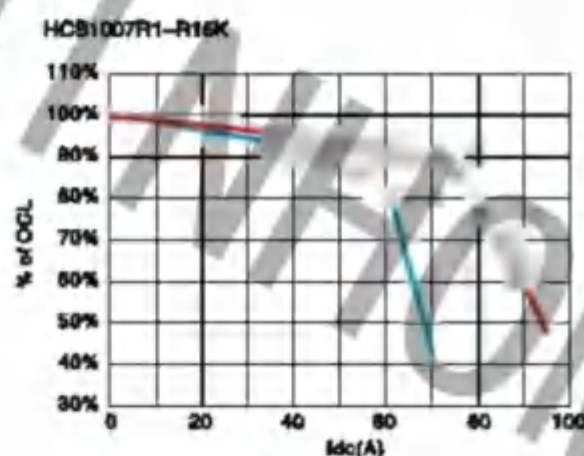
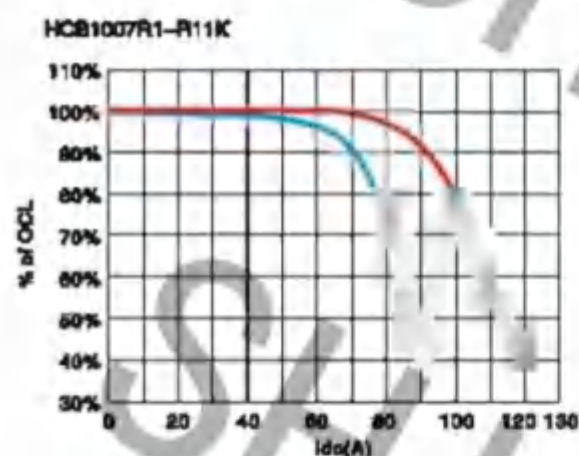
NOTES:

- Test Frequency : 100kHz / 0.1V @ 25°C
- I_{ms}: DC current for an approximate temperature rise of 40°C without core loss
- I_{sat1}: Peak current for approximately 30% rolloff at +25°C
- I_{sat2}: Peak current for approximately 30% rolloff at +125°C
- Operating temperature: -40°C to +125°C (ambient plus self-temperature rise)
- Storage temperature: -40°C to +125°C



HIGH CURRENT POWER INDUCTORS HCB1007 SERIES

INDUCTANCE CHARACTERISTICS:



— +25°C

— +125°C

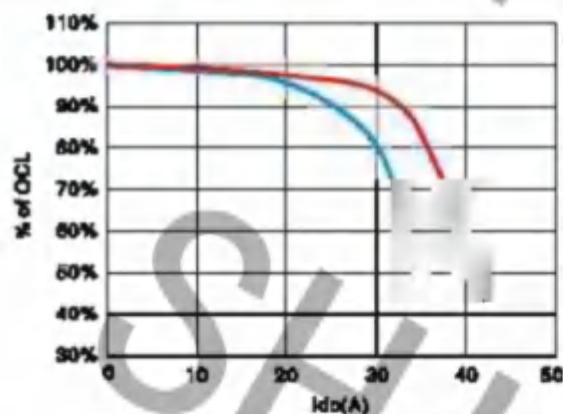


HIGH CURRENT POWER INDUCTORS

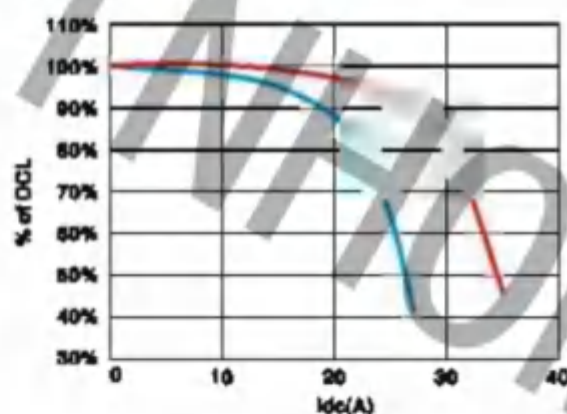
HCB1007 SERIES

INDUCTANCE CHARACTERISTICS:

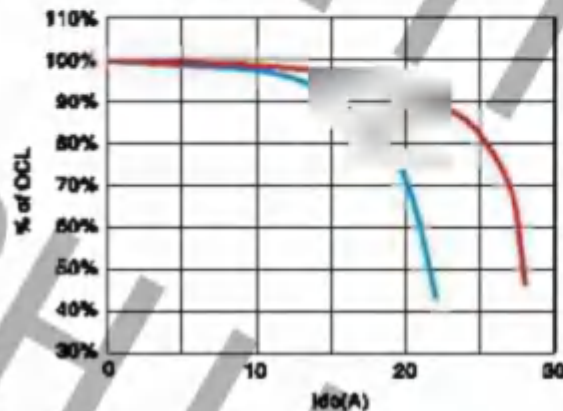
HCB1007R1-R30K



HCB1007R1-R30K



HCB1007R1-R47K



— +25°C — +125°C



HIGH CURRENT POWER INDUCTORS

HCB1008 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 120nH to 220nH
- Current range from 55A to 95A
- Ferrite core material

OPTIONS:

- Tape & Reel is Standard
- Bulk packaging Available for Smaller Quantities

APPLICATIONS:

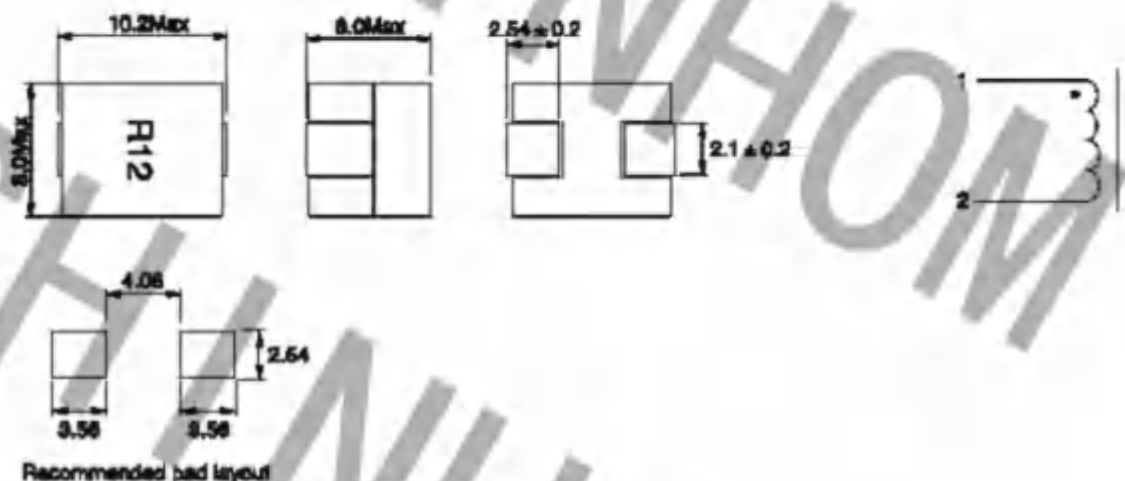
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 10\%$ @ 1A dc	Inductance (nH)/mm @ 1A dc	Heat rating current DC Amps $I_{HRT}(A)$	Saturation current DC Amps $I_{SAT1}(A)$	Saturation current DC Amps $I_{SAT2}(A)$	DCR @ 25 °C (mΩ)
HCB1008R1-R12K	120	86.4	66	66	77	$0.18 \pm 5\%$
HCB1008R1-R15K	150	108	66	79	66	$0.18 \pm 5\%$
HCB1008R1-R16K	160	129.6	66	82	52	$0.18 \pm 5\%$
HCB1008R1-R22K	220	158.4	66	58	47	$0.18 \pm 5\%$

DIMENSIONS(mm) :

SCHEMATIC :



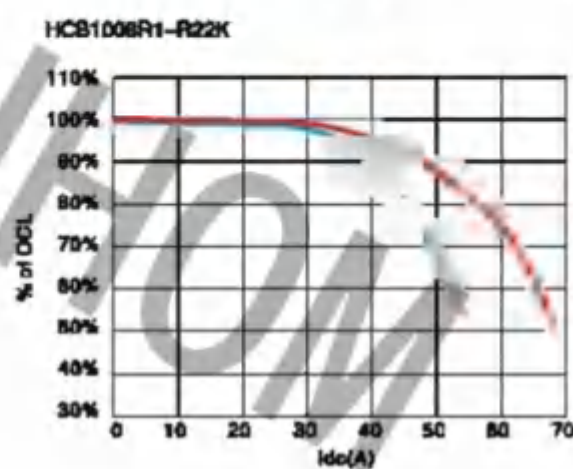
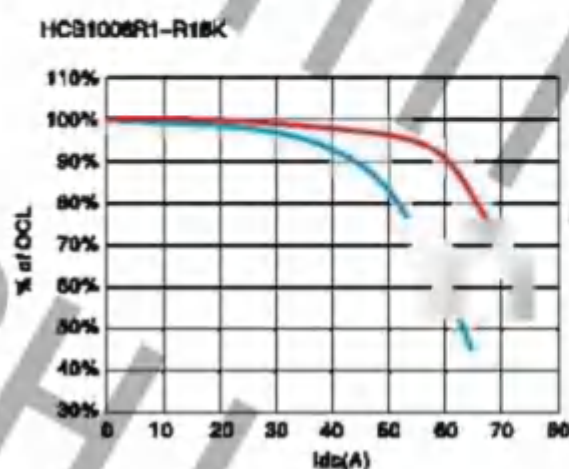
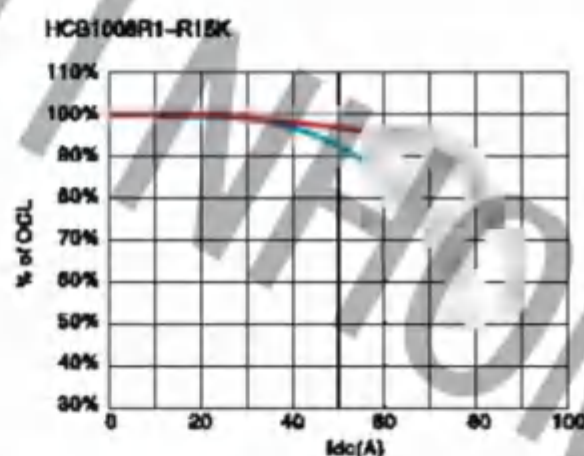
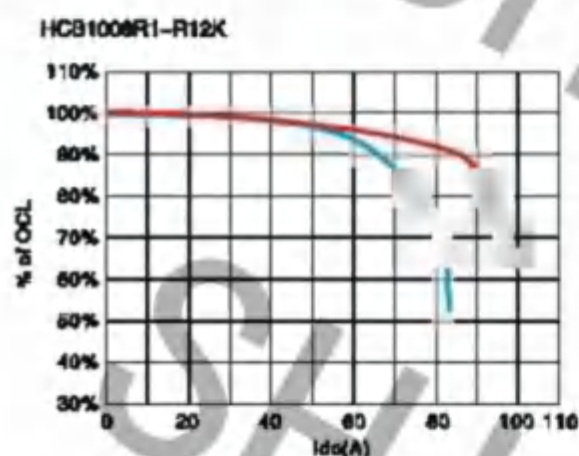
NOTES:

- Test Frequency : 100KHz / 0.1V @ 25°C
- I_{HRT} : DC current for an approximate temperature rise of 40°C without core loss
- I_{SAT1} : Peak current for approximately 20% roll-off at +25°C
- I_{SAT2} : Peak current for approximately 20% roll-off at +125°C
- Operating temperature: -40°C to +125°C (ambient plus self-temperature rise)
- Storage temperature: -40°C to +125°C



HIGH CURRENT POWER INDUCTORS HCB1008 SERIES

INDUCTANCE CHARACTERISTICS:



— +25°C — +125°C



HIGH CURRENT POWER INDUCTORS

HCB1107 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 120nH to 510mH
- Current range from 15A to 90A
- Ferrite core material

OPTIONS:

- Tape & Reel Standard
- Bulk packaging Available for Smaller Quantities

APPLICATIONS:

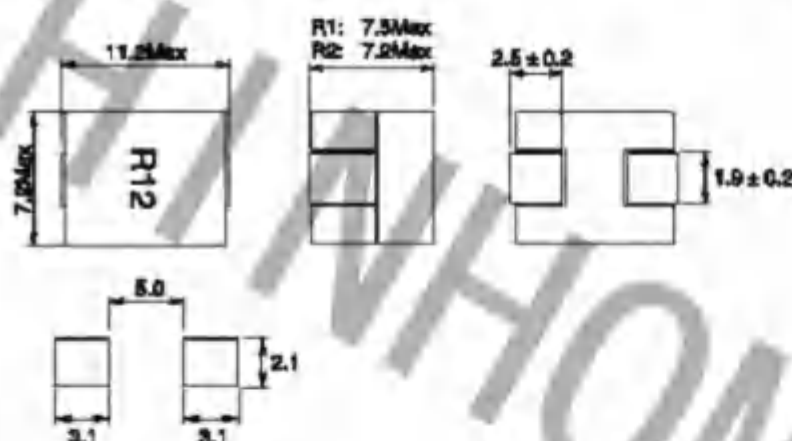
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 10\%$ @ 0.4A	Inductance (nH) Min @ 1A	Heat rating current DC Amps I _{ms} (A)	Saturation current 50C Amps I _{sat1} (A)	Saturation current 100C Amps I _{sat2} (A)	DCR @ 25 °C (mΩ)
HCB1107R1-R12K	120	88	55	60	72	0.29 $\pm 5\%$
HCB1107R1-R15K	150	108	55	70	88	0.29 $\pm 5\%$
HCB1107R1-R23K	230	168	65	45	36	0.29 $\pm 5\%$
HCB1107R1-R30K	300	217	86	36	28	0.29 $\pm 5\%$
HCB1107R1-R40K	400	288	85	25	20	0.29 $\pm 5\%$
HCB1107R1-R51K	510	364	85	18	14.5	0.29 $\pm 5\%$
HCB1107R2-R12K	120	88	42	60	72	0.47 $\pm 6\%$
HCB1107R2-R15K	150	108	42	70	88	0.47 $\pm 6\%$
HCB1107R2-R23K	230	168	42	48	38	0.47 $\pm 6\%$
HCB1107R2-R30K	300	217	42	36	28	0.47 $\pm 6\%$
HCB1107R2-R40K	400	288	42	25	20	0.47 $\pm 6\%$
HCB1107R2-R51K	510	364	42	18	14.5	0.47 $\pm 6\%$

DIMENSIONS(mm) :

SCHEMATIC :



Recommended pad layout

NOTE:

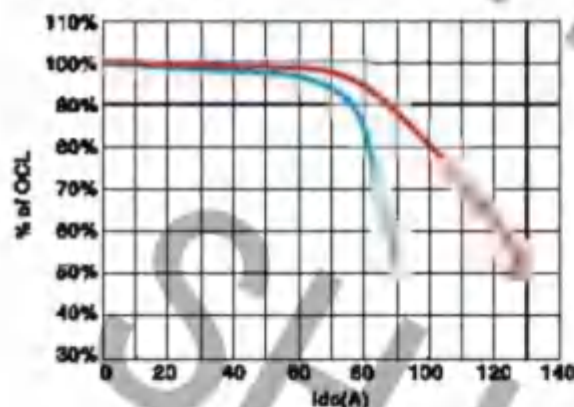
- Test Frequency : 1000Hz / 0.1V @ 25°C
- I_{ms}: DC current for an approximate temperature rise of 40°C without core loss
- I_{sat1}: Peak current for approximately 20% rolloff at +25°C
- I_{sat2}: Peak current for approximately 20% rolloff at +125°C
- Operating temperature: -40°C to +125°C (subject plus self-temperature rise)
- Storage temperature: -40°C to +125°C



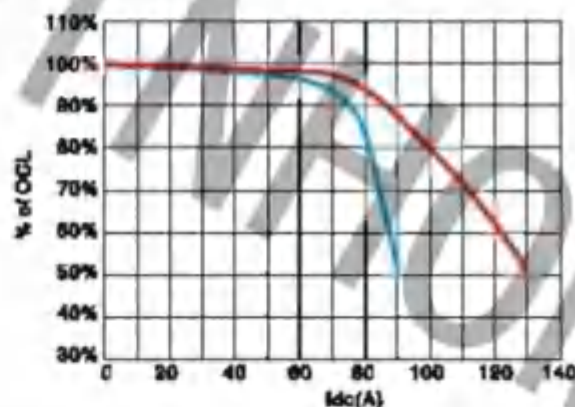
HIGH CURRENT POWER INDUCTORS HCB1107 SERIES

INDUCTANCE CHARACTERISTICS:

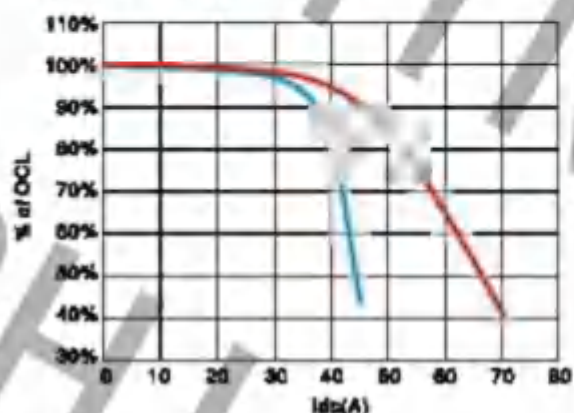
HCB1107RX-R12K



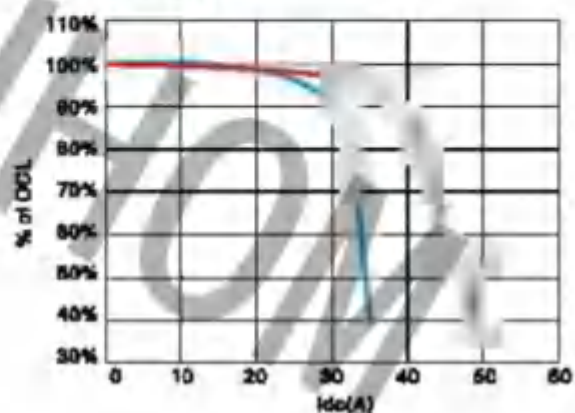
HCB1107RX-R15K



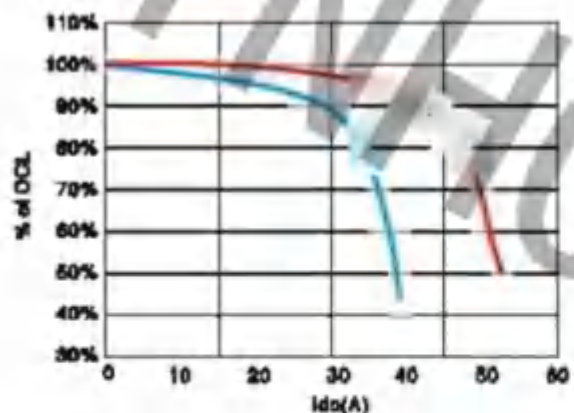
HCB1107RX-R20K



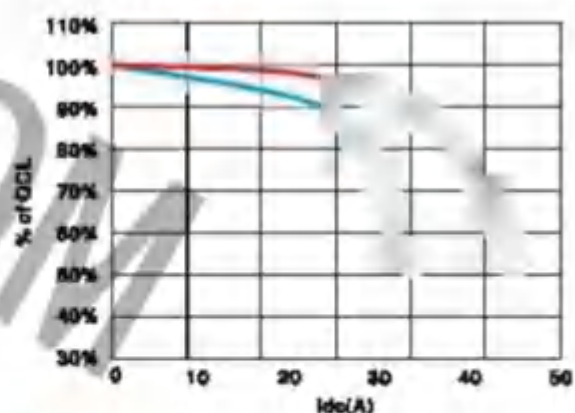
HCB1107RX-R30K



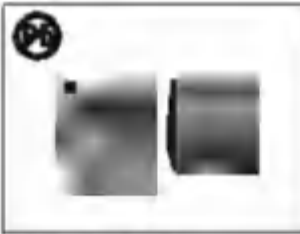
HCB1107RX-R40K



HCB1107RX-R51K



— +25°C — +125°C



HIGH CURRENT POWER INDUCTORS

HCB1208 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 150nH to 250nH
- Current range from 55A to 85A
- Ferrite core material

OPTIONS:

- Tape & Reel is standard
- Bulk packaging Available for Smaller Quantities

APPLICATIONS:

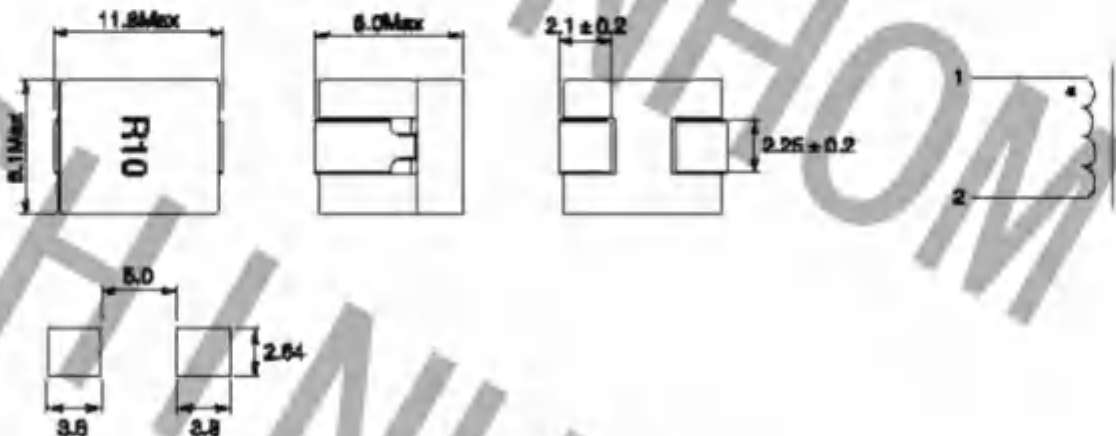
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 10\%$ @ 0.1A	Inductance (nH) Min @ 1A	Heat rating current DC Amps I _{ms} (A)	Saturation current DC Amps I _{sat1} (A)	Saturation current DC Amps I _{sat2} (A)	DCR @ 25 °C (mΩ)
HCB1208R1-R15K	150	114	50	85	72	0.29 $\pm 5\%$
HCB1208R1-R18K	180	137	50	72	63	0.29 $\pm 5\%$
HCB1208R1-R21K	210	160	50	65	55	0.29 $\pm 5\%$
HCB1208R1-R23K	230	178	50	61	50	0.29 $\pm 5\%$
HCB1208R1-R25K	250	191	80	55	44	0.29 $\pm 5\%$

DIMENSIONS(mm) :

SCHEMATIC :



Recommended part layout:

NOTES:

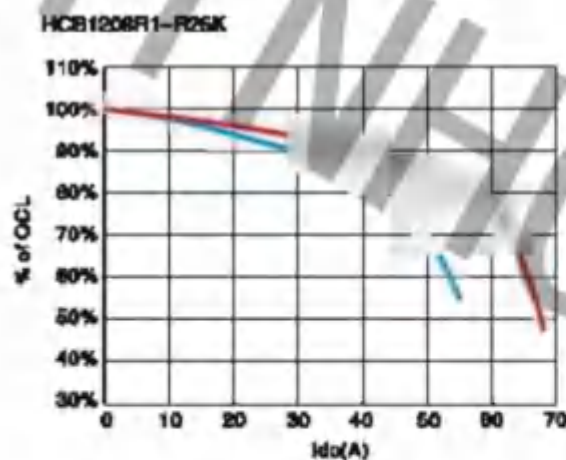
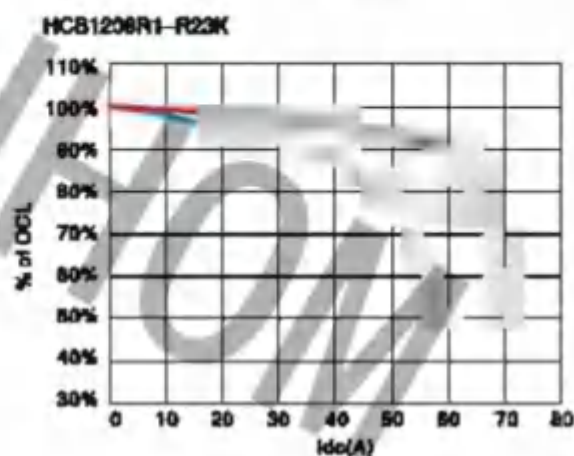
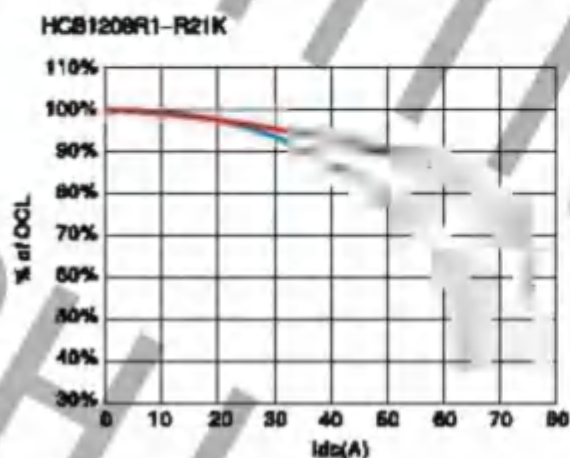
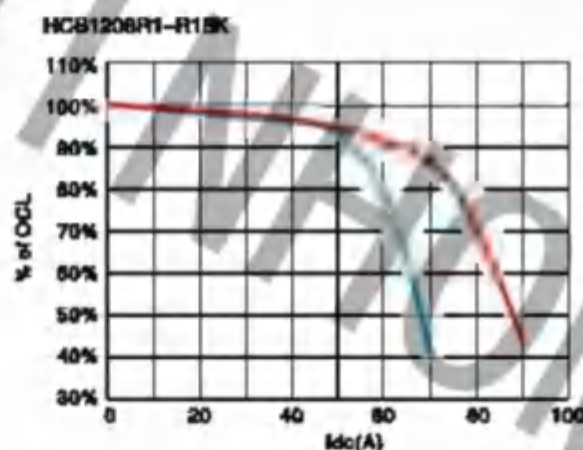
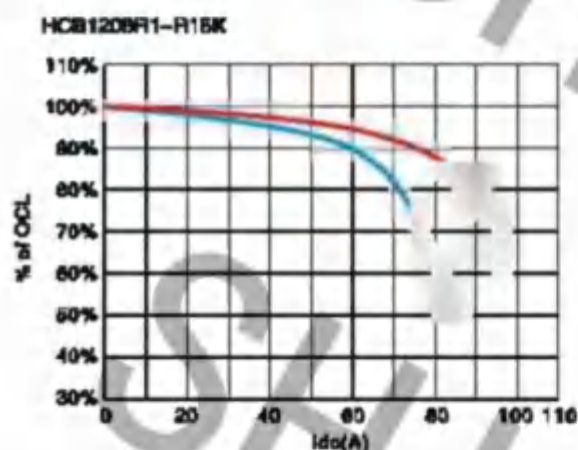
- Test Frequency : 100kHz / 0.1V @ 25°C
- I_{ms}: DC current for an approximate temperature rise of 40°C without core loss
- I_{sat1}: Peak current for approximately 20% roll-off at +25°C
- I_{sat2}: Peak current for approximately 20% roll-off at +125°C
- Operating temperature: -40°C to +125°C (ambient plus self-temperature rise)
- Storage temperature: -40°C to +125°C



HIGH CURRENT POWER INDUCTORS

HCB1208 SERIES

INDUCTANCE CHARACTERISTICS:





HIGH CURRENT POWER INDUCTORS

HCB1211 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 230nH to 540nH
- Current range from 26A to 80A
- Ferrite core material

OPTIONS:

- Tape & Reel is Standard
- Bulk packaging Available for Smaller Quantities

APPLICATIONS:

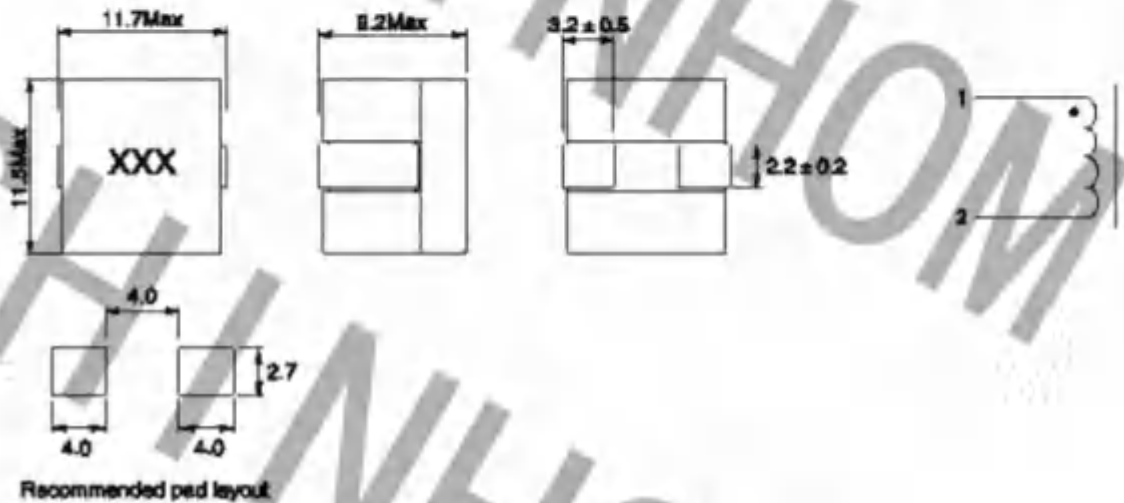
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 15\%$ @0Adc	Inductance (nH) Min @Isat1	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat(A)	DCR @25 °C (mΩ)
HCB1211R1-R23K	230	184	40	60	$0.3 \pm 7\%$
HCB1211R1-R32K	320	256	40	45	$0.3 \pm 7\%$
HCB1211R1-R38K	380	304	40	40	$0.3 \pm 7\%$
HCB1211R1-R48K	480	368	40	32	$0.3 \pm 7\%$
HCB1211R1-R54K	540	432	40	28	$0.3 \pm 7\%$

DIMENSIONS(mm) :

SCHEMATIC :



NOTES:

- Test Frequency : 100kHz / 0.1V @25°C
- Irms: DC current for an approximate temperature rise of 40°C without core loss
- Isat: Peak current for approximately 20% rolloff at +25°C
- Operating temperature: -40°C to +125°C (ambient plus self-temperature rise)
- Storage temperature: -40°C to +125°C



HIGH CURRENT POWER INDUCTORS

HCB1313 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 210nH to 620nH
- Current range from 15A to 71A
- Ferrite core material

OPTIONS:

- Tape & Reel is Standard
- Bulk packaging Available for Smaller Quantities

APPLICATIONS:

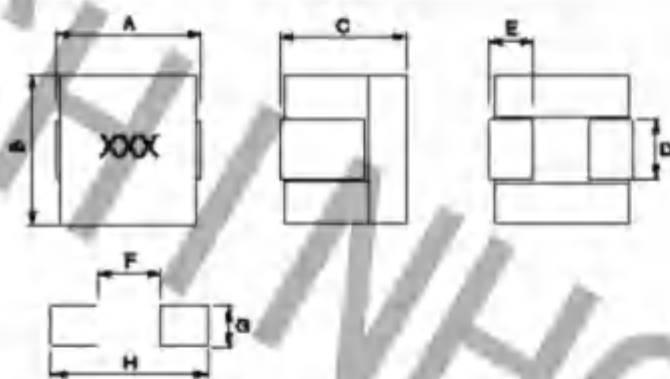
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 15\%$ @0A dc	Inductance (nH)Mk @10A dc	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat(A)	DCR @ 25 °C (mΩ)
HCB1313R1-R22K	220	176	50	40	0.155 $\pm 10\%$
HCB1313R1-R25K	250	224	50	30	0.155 $\pm 10\%$
HCB1313R1-R31K	310	246	50	24	0.155 $\pm 10\%$
HCB1313R1-R40K	400	320	50	18	0.155 $\pm 10\%$
HCB1313R1-R52K	520	416	50	13	0.155 $\pm 10\%$
HCB1313R2-R21K	210	166	45	71	0.32 $\pm 9.4\%$
HCB1313R2-R26K	260	206	45	60	0.32 $\pm 9.4\%$
HCB1313R2-R32K	320	256	45	60	0.32 $\pm 9.4\%$
HCB1313R2-R44K	440	352	45	36	0.32 $\pm 9.4\%$
HCB1313R2-R50K	500	400	45	26	0.32 $\pm 9.4\%$

DIMENSIONS(mm) :

SCHEMATIC :



Recommended pad layout

Dimensions

Part No.	A	B	C	D	E	F	G	H
R1	13.5max	13.2max	6.3max	5.0 ± 0.2	2.0 ± 0.2	6.0	5.5	14.0
R2	13.46max	13.0max	6.0max	5.0 ± 0.2	2.54 ± 0.3	7.11	7.62	13.47

NOTES:

- Test Frequency : 100KHz / 0.1V @ 25°C
- Irms: DC current for an approximate temperature rise of 40°C without core loss
- Isat: Peak current for approximately 20% roll off at +25°C
- Operating temperature: -40°C to +125°C (ambient plus self-temperature rise)
- Storage temperature: -40°C to +125°C



HIGH CURRENT POWER INDUCTORS

HCB1413 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 300nH to 680nH
- Current range from 34A to 80A
- Ferrite core material

OPTIONS:

- Tape & Reel is Standard
- Bulk packaging Available for Smaller Quantities

APPLICATIONS:

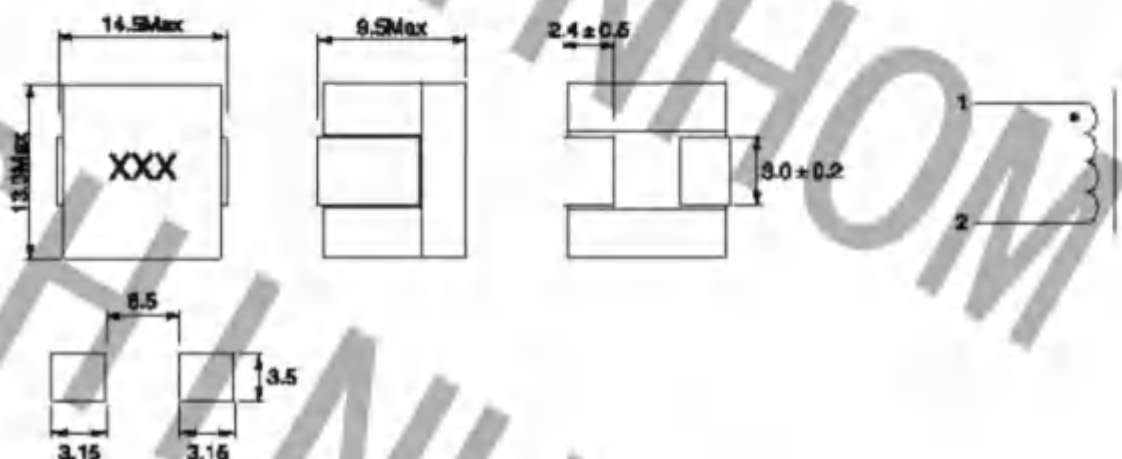
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 15\%$ @0A dc	Inductance (nH)Min @1sat	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat(A)	DCR @25 °C (mΩ)
HCB1413R1-R30K	300	240	45	60	$0.25 \pm 7\%$
HCB1413R1-R36K	360	288	45	52	$0.25 \pm 7\%$
HCB1413R1-R46K	450	360	45	43	$0.25 \pm 7\%$
HCB1413R1-R53K	530	424	45	34	$0.25 \pm 7\%$
HCB1413R1-R68K	680	544	45	24	$0.25 \pm 7\%$

DIMENSIONS(mm) :

SCHEMATIC :



Recommended pad layout

NOTES:

- Test Frequency : 100KHz / 0.1V @25°C
- Irms: DC current for an approximate temperature rise of 40°C without core loss
- Isat: Peak current for approximately 20% rolloff at +25°C
- Operating temperature: -40°C to +125°C (ambient plus self-temperature rise)
- Storage temperature: -40°C to +125°C

Low Profile, High Current Power Inductors



Features

- SMD inductors
- High current and lower DCR
- Ferrite core material
- Operating temperature range: -40 to +125°C (including self-temperature rise)
- Shielded construction

Applications

- Servers
- Multi-phase and Vcore regulators
- Voltage Regulator Modules (VRMs)
 - Server and desktop
 - Central processing unit (CPU)
 - Graphics processing unit (GPU)
 - Specific integrated circuit (ASIC)
 - High power density
- Notebook regulators
- Battery power systems
- Graphics cards

Environmental Data

- Storage Conditions (In Original Packaging):
-40°C ; <75%RH
- Operating temperature range: -40°C to +125°C
(Ambient plus self temperature rise)
- Solder reflow temperature: J-STD-020D
compliant

Product Specifications

Part Number ⁵	OCL ¹ (nH) ±15%	I _{rms} ² (Amps)	I _{sat} ² (Amps)	Height (max.)	DCR(mΩ) typical @ +20 °C
HCB040404R32-R05	55	19	30	4.0	0.32
HCB040404R32-R06	65	19	26	4.0	0.32
HCB040404R32-R08	80	19	22	4.0	0.32
HCB040404R32-R10	100	19	17	4.0	0.32

Notes:

1. Open Circuit Inductance (OCL) Test Parameters:
100 kHz, 1 V_{rms}, 0.0 A_{dc}, +25 °C
2. I_{rms}: DC current for an approximate temperature rise of 40 °C without core loss. Derating is necessary for AC currents. PCB layout, trace thickness and width, air-flow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed +125 °C under worst case operating conditions verified in the end application
3. I_{sat}: Peak current for approximately 20% rolloff @+25 °C
4. Measurement Equipment: WK3260B+WK3265B

5. Part Number Definition:

HCB 040404 Rxxx - Ryy

Inductance value in μH. R = decimal point

DCR value in mΩ,
R = decimal pointMax. product size
(L*W*H)=4.0*4.0*4.0(Max.)

Product code



Technical Data

HC040404R32 Series

Dimensions:[mm]



Product Marking:

Part Code	Ryy
Date Code	YYWW

Recommended Pad Layout:[mm]

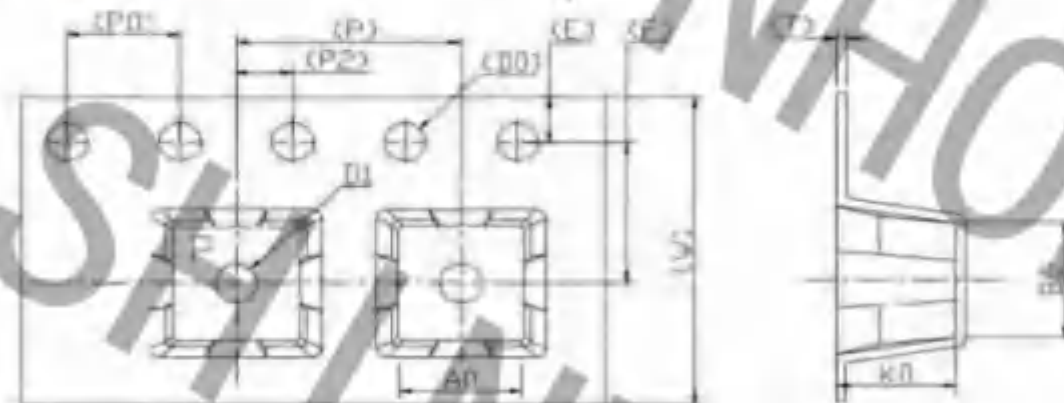


Schematic:

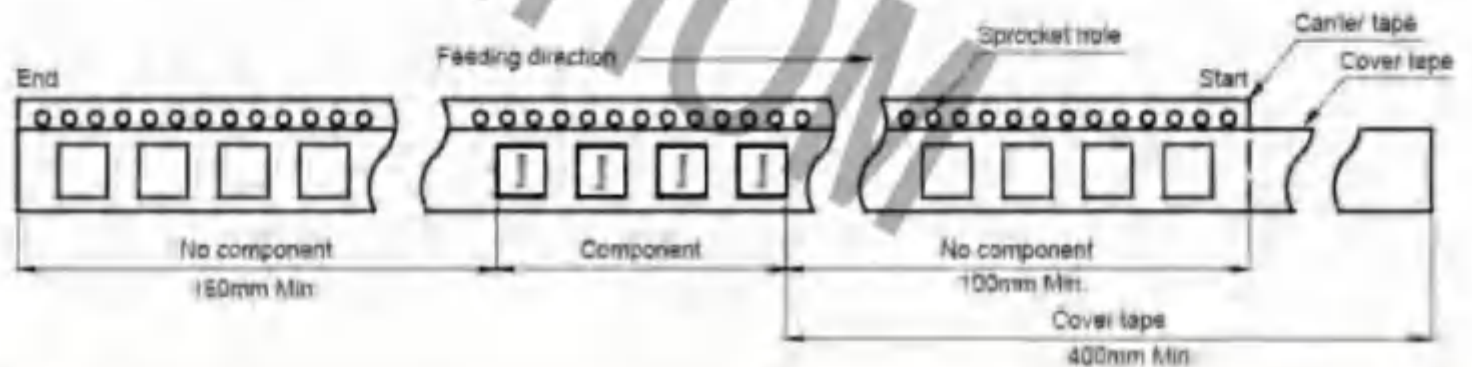


Packaging Information:[mm]

Tape Dimensions

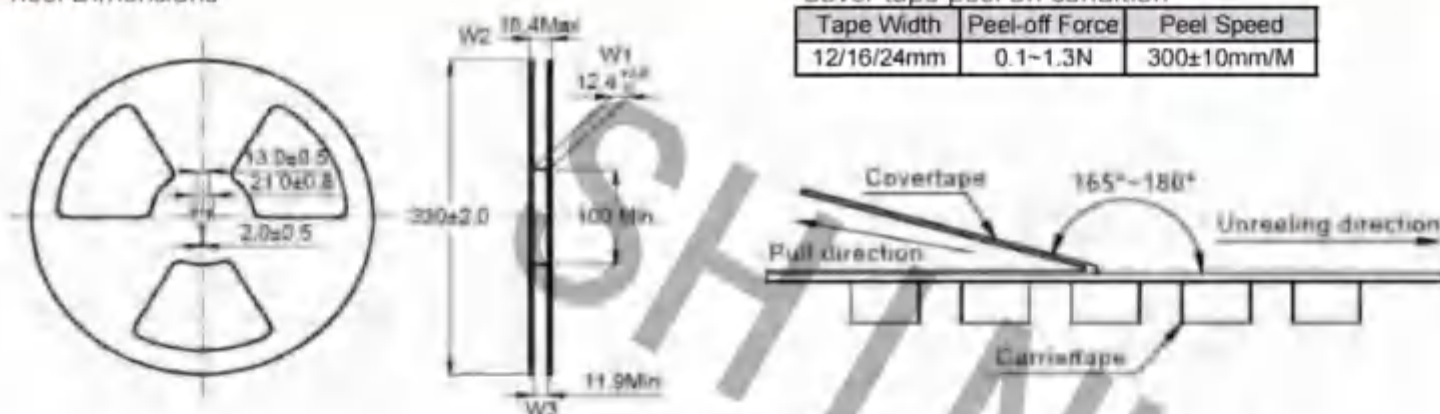


Material	A0(±0.1)	B0(±0.1)	W(±0.3)	T(±0.05)	K0(±0.1)	P(±0.1)	F(±0.1)	E(±0.1)	D0(±0.1)	P0(±0.1)	P2(±0.1)	D1(±0.1)
Polystyrene	4.50	4.50	12.00	0.40	4.20	8.00	5.50	1.75	1.50	4.00	2.00	1.50



Cover tape peel off condition

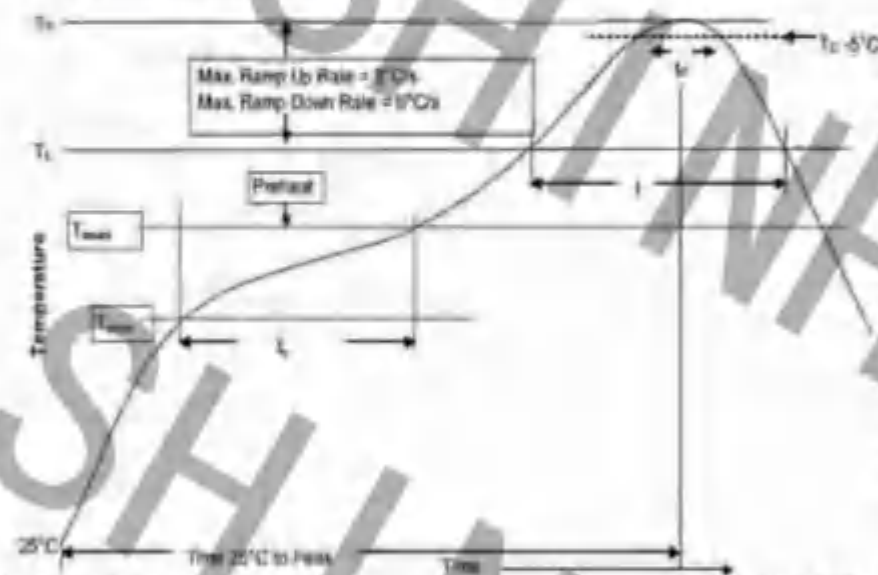
Tape Width	Peel-off Force	Peel Speed
12/16/24mm	0.1~1.3N	300±10mm/M



Packing Quantity

Part Number	Quantity (pcs/reel)
HCB040404R32 Type	1800

Recommended Reflow Profile:

Table 1 - Standard SnPb Solder (T_c)

Package Thickness	Voltage mm3 ≤350	Voltage mm3 ≥350
≤2.5mm	235°C	220°C
≥2.5mm	220°C	220°C

Table 2 - Lead (Pb) Free Solder (T_c)

Package Thickness	Volume mm ³ <350	Volume mm ³ 350 - 2000	Volume mm ³ >2000
<1.6mm	280°C	282°C	283°C
1.6 - 2.5mm	283°C	284°C	245°C
>2.5mm	284°C	245°C	245°C

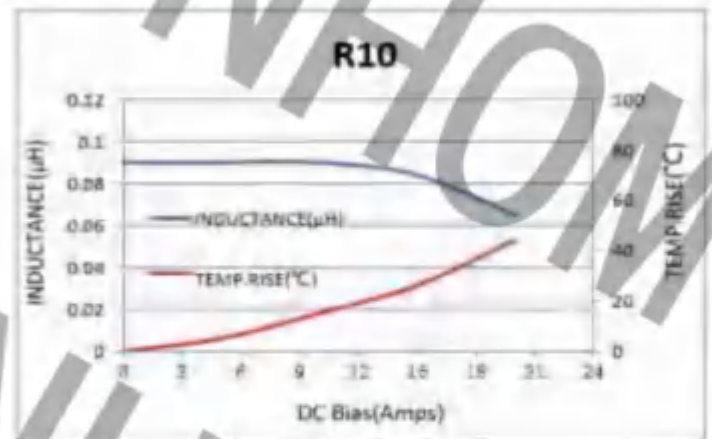
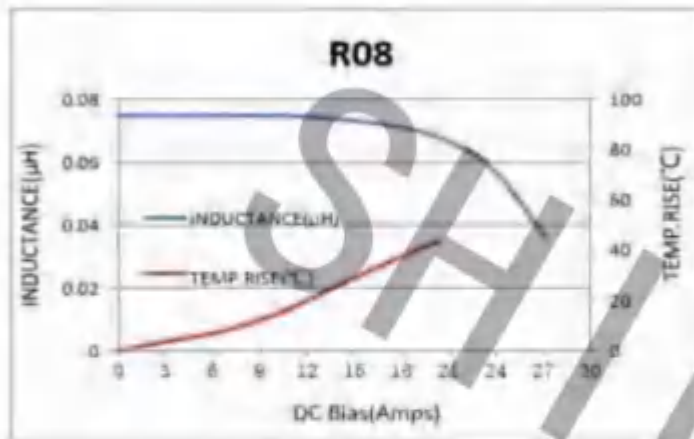
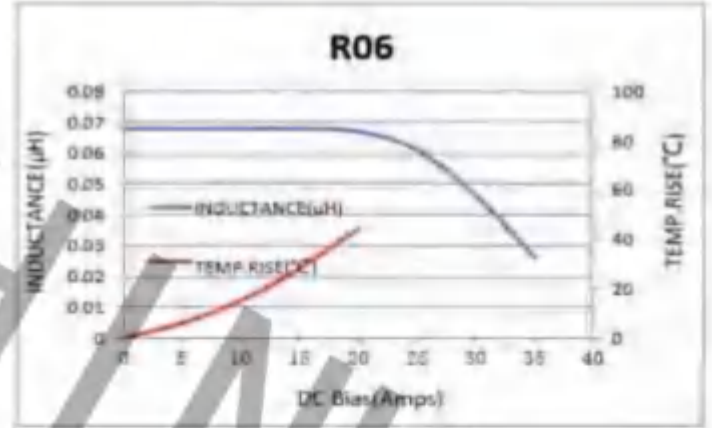
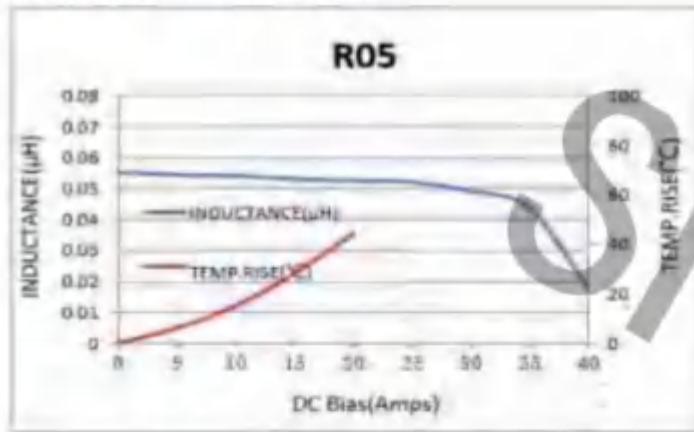
Profile Feature	Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak		
• Temperature (T _{soak})	100°C	150°C
• Temperature max (T _{soak})	150°C	200°C
• Time (T _{soak} to T _{max}) (t _s)	60-120 Seconds	60-120 Seconds
Average ramp up rate T _{soak} to T _p	3°C/Second Max	3°C/Second Max
Liquidus temperature (T _l)	183°C	217°C
Time at liquidus (t _l)	60-180 Seconds	60-180 Seconds
Peak package body temperature (T _p)*	Table 1	Table 2
Time t ₉₀ ** within 5 °C of the specified classification temperature (T _p)	30 Seconds**	30 Seconds**
Average ramp down rate (T _p to T _{soak})	6°C/Second Max	6°C/Second Max
Time 25°C to Peak Temperature	8 Minutes Max	8 Minutes Max

* Kinematic peak profile temperature (T_p) is defined as a capillary minimum wall layer position.

* There is theoretical difficulty because N_{eff} is defined as the number of relativistic degrees of freedom.



Inductance Characteristics:



Low Profile, High Current Power Inductors



Environmental Data

- Storage Conditions (In Original Packaging):
 $<40^{\circ}\text{C}$; $<75\%\text{RH}$
- Operating temperature range: -40°C to $+125^{\circ}\text{C}$
 (Ambient plus self temperature rise)
- Solder reflow temperature: J-STD-020D
 compliant

Features

- SMD inductors
- High current and lower DCR
- Ferrite core material
- Operating temperature range: -40 to $+125^{\circ}\text{C}$
 (including self-temperature rise)
- Shielded construction

Applications

- Servers
- Multi-phase and Vcore regulators
- Voltage Regulator Modules (VRMs)
 - Server and desktop
 - Central processing unit (CPU)
 - Graphics processing unit (GPU)
 - Specific integrated circuit (ASIC)
 - High power density
- Notebook regulators
- Battery power systems
- Graphics cards

Product Specifications

Part Number ⁵	OCL ¹ (nH) $\pm 15\%$	I _{rms} ² (Amps)	I _{sat} ³ (Amps)	Height (max.)	DCR(mΩ) typical @ +20 °C
HCB070705R32-R10	100	50	53	5.0	0.32
HCB070705R32-R12	120	50	40	5.0	0.32
HCB070705R32-R15	150	50	35	5.0	0.32
HCB070705R32-R18	180	50	28	5.0	0.32

Notes:

1. Open Circuit Inductance (OCL) Test Parameters:
 100 kHz, 0.1 Vrms, 0.0 A dc, $+25^{\circ}\text{C}$
2. I_{rms}: DC current for an approximate temperature rise of 40°C
 without core loss. Derating is necessary for AC currents. PCB
 layout, trace thickness and width, air-flow, and proximity of other
 heat generating components will affect the temperature rise. It is
 recommended that the temperature of the part not exceed
 $+125^{\circ}\text{C}$ under worst case operating conditions verified in the
 end application.
3. I_{sat}: Peak current for approximately 20% rolloff @ $+25^{\circ}\text{C}$
4. Measurement Equipment: WK3260B+WK3265B

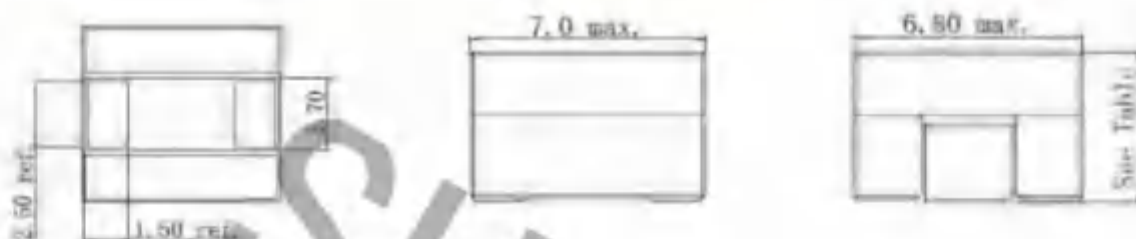
5. Part Number Definition:

HCB 070705 Rxxx - Ryy

Inductance value in μH , R =
decimal pointDCR value in mΩ,
R = decimal pointMax. product size
(L*W*H)=7.0*6.8*5.0(Max.)

Product code

Dimensions:[mm]



Product Marking:

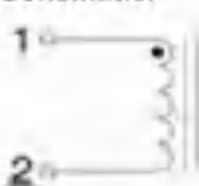
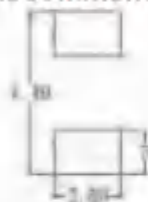
Part Code	Ryy
Date Code	YYWW

Table

Part Number	Max. Height
HCB070705R32 Type	5.0

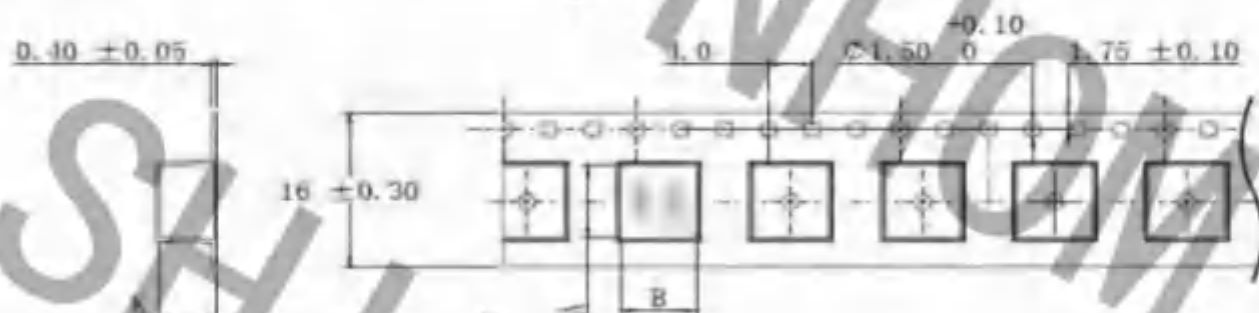
Recommended Pad Layout:[mm]

Schematic:

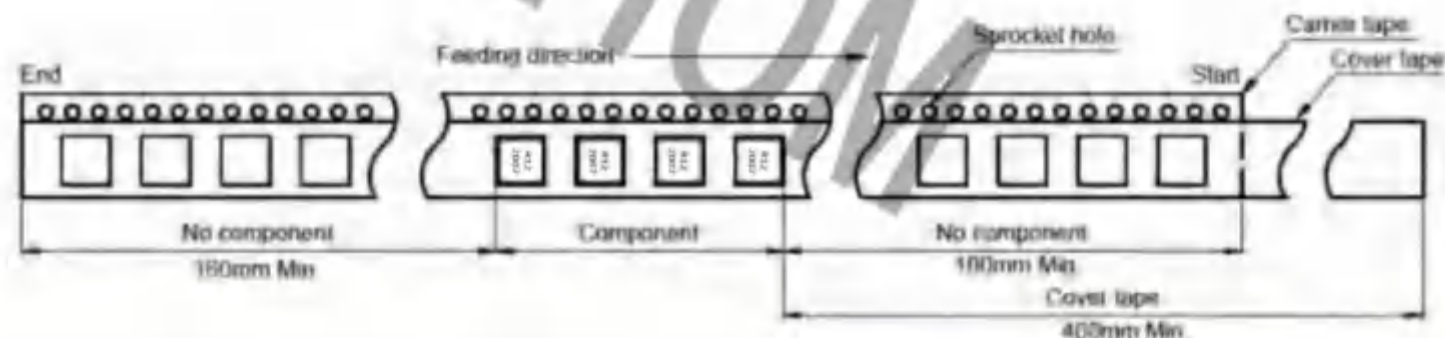


Packaging Information:[mm]

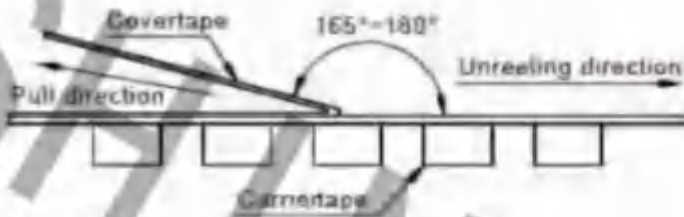
Tape Dimensions



Part Number	A	B	K
HCB070705R32 Type	7.5±0.1	6.9±0.1	5.2±0.1



Tape Width	Peel-off Force	Peel Speed
16/24mm	0.1~1.3N	300±10mm/M



Part Number	Quantity (pcs/reel)
HCB070705R32 Type	900

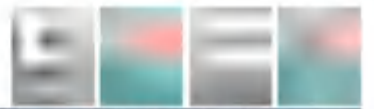
The graph illustrates the temperature profile over time for a heating process. The y-axis represents Temperature and the x-axis represents Time. The curve begins at 25°C, enters a preheat phase, and then rises to a peak temperature T_p before cooling down. Key parameters and labels include:

- Max. Ramp Up Rate = 20°C/s** and **Max. Ramp Down Rate = 5°C/s**: Indicated in a box at the top of the graph.
- Temperature Levels**: T_1 , T_2 , T_{max} , and T_{min} are marked on the y-axis.
- Time Intervals**: t_1 and t_2 are marked on the x-axis, corresponding to specific temperature ranges.
- Time 25°C to Peak**: A horizontal arrow indicating the duration from the start temperature to the peak.
- Preheat**: A label for the initial phase of the heating cycle.

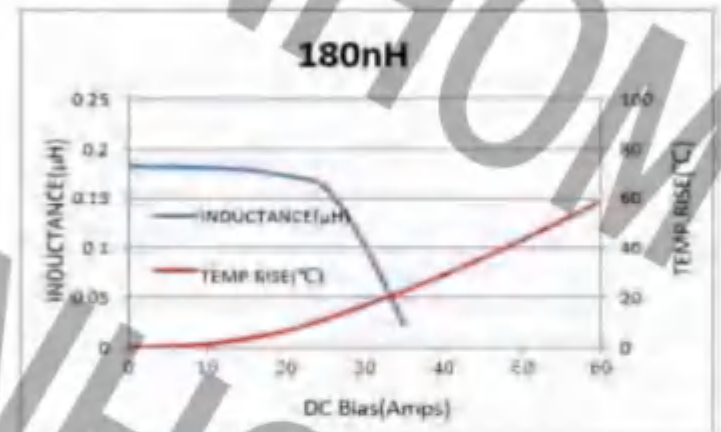
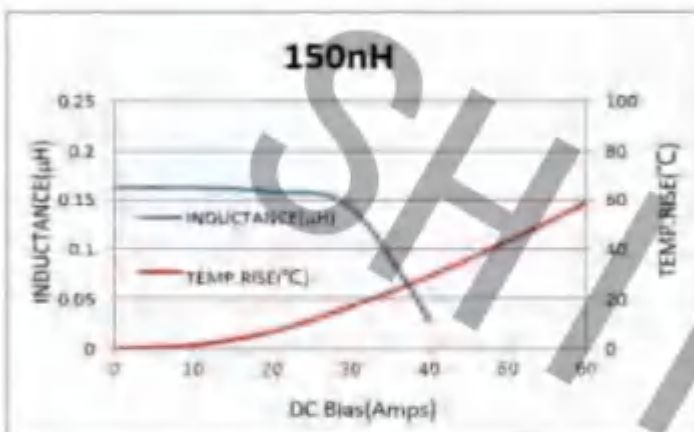
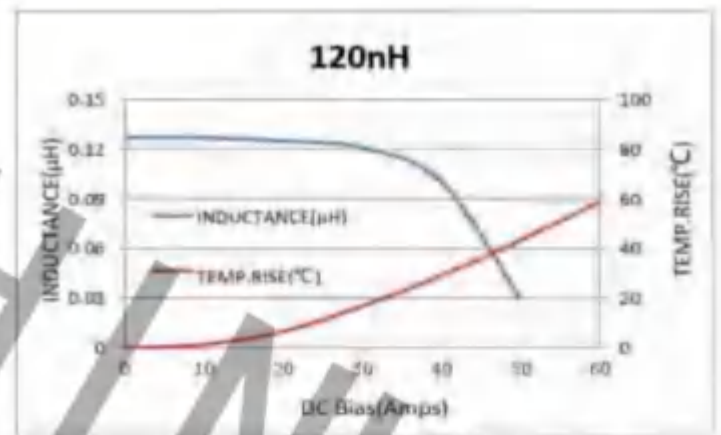
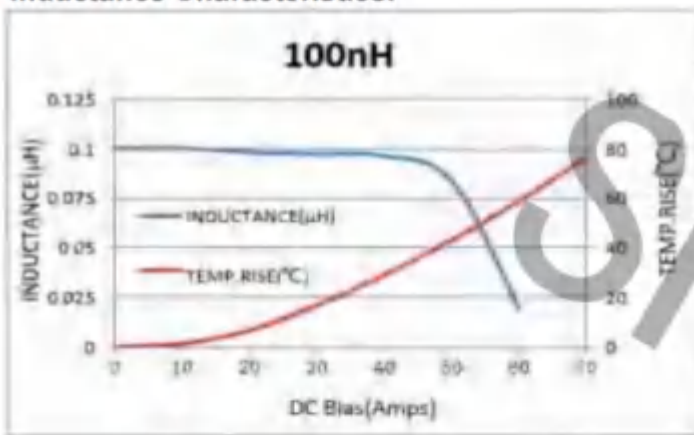
Package Thickness	Volume mm ³ <350	Volume mm ³ >350
<2.4mm	235°C	220°C
>2.5mm	220°C	220°C

Package Thickness	Volume mm ³ <350	Volume mm ³ 350 - 2000	Volume mm ³ >2000
<1.6mm	200°C	260°C	262°C
1.6 - 2.5mm	200°C	260°C	245°C
>2.5mm	250°C	240°C	249°C

²² Because the two groups with the largest number of deaths in a given year were the 18- to 24-year-olds and the 25- to 34-year-olds, we used these two age groups as the reference group in the multivariate model.



Inductance Characteristics:



Low Profile, High Current Power Inductors



Environmental Data

- Storage Conditions (In Original Packaging):
-40°C ; <75%RH
- Operating temperature range: -40°C to +125°C
(Ambient plus self temperature rise)
- Solder reflow temperature: J-STD-020D
compliant

Features

- SMD inductors
- High current and lower DCR
- Ferrite core material
- Operating temperature range: -40 to +125°C
(including self-temperature rise)
- Shielded construction

Applications

- Servers
- Multi-phase and Vcore regulators
- Voltage Regulator Modules (VRMs)
 - Server and desktop
 - Central processing unit (CPU)
 - Graphics processing unit (GPU)
 - Specific integrated circuit (ASIC)
 - High power density
- Notebook regulators
- Battery power systems
- Graphics cards

Product Specifications

Part Number ⁵	OCL ¹ (nH) ±15%	I _{rms} ² (Amps)	I _{sat} ³ (Amps)	Height (max.)	DCR(mΩ) typical @ +20 °C
HCB100612R125-R07	70	77	180	12.0	0.125
HCB100612R125-R10	100	77	125	12.0	0.125
HCB100612R125-R12	120	77	106	12.0	0.125
HCB100612R125-R15	150	77	83	12.0	0.125
HCB100612R125-R33	330	77	40	12.0	0.125

Notes:

1. Open Circuit Inductance (OCL) Test Parameters:
100 kHz, 1 Vrms, 0.0 A dc, +25 °C
2. I_{rms}: DC current for an approximate temperature rise of 40 °C
without core loss. Derating is necessary for AC currents. PCB
layout, trace thickness and width, air-flow, and proximity of other
heat generating components will affect the temperature rise. It is
recommended that the temperature of the part not exceed
+125 °C under worst case operating conditions verified in the end
application.
3. I_{sat}: Peak current for approximately 20% rolloff @+25 °C
4. Measurement Equipment: WK3260B+WK3265B

5. Part Number Definition:

HCB 100612 Rxxx Ryy

Inductance value in μH, R =
decimal pointDCR value in mΩ,
R = decimal pointMax. product size
(L*W*H)=10.0*6.0*12.0(Max.)

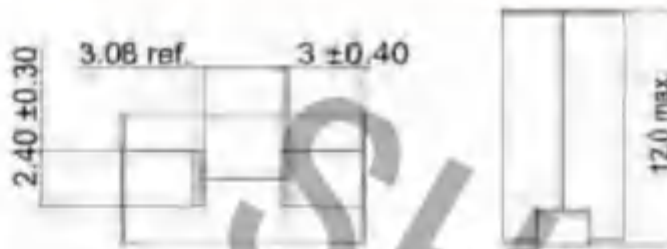
Product code



Technical Data

HCB100612R125 Series

Dimensions:[mm]

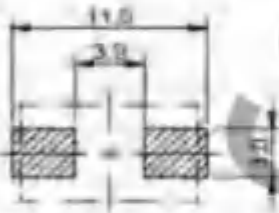


Product Marking:

Part Code	Ryy
Date Code	YYWW

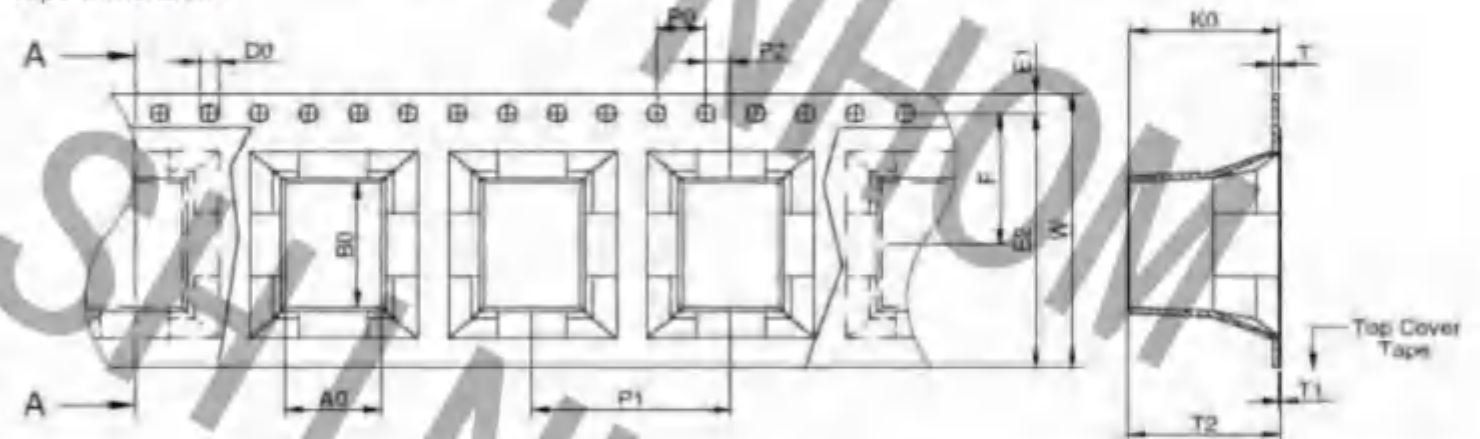
Recommended Pad Layout:[mm]

Schematic:

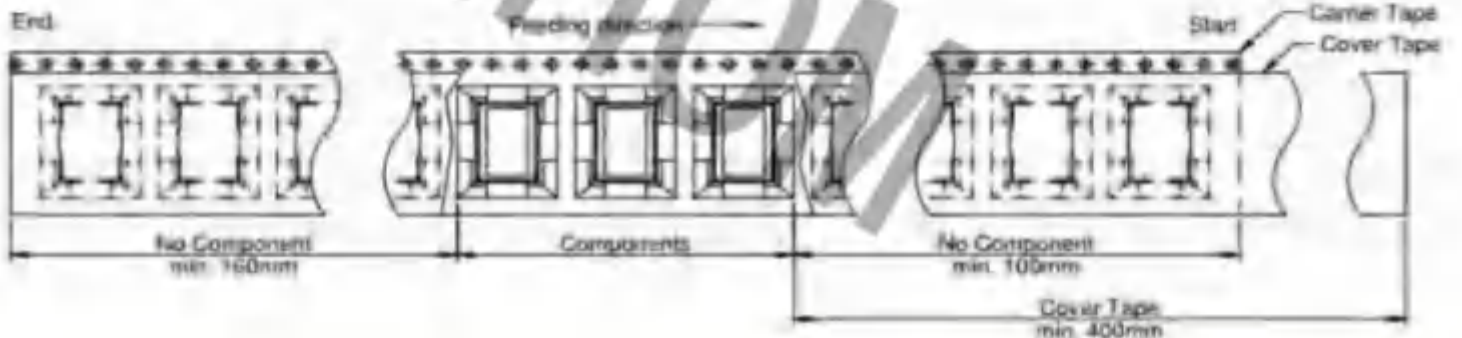


Packaging Information:[mm]

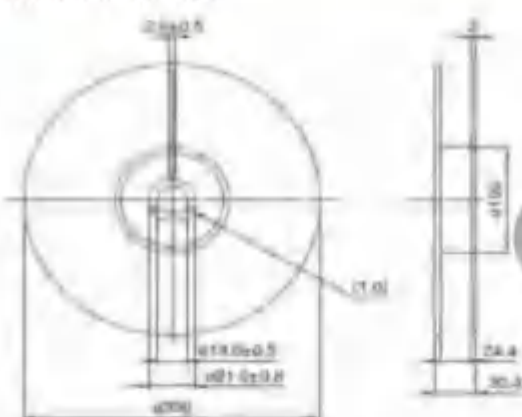
Tape Dimensions



Reel Size	Reel ID	Reel Dia.	Reel ID	T1 (max)	T2 (max)	T2 (typ)	P0 (B0)	P1 (B0)	P2 (B0)	D0 (B0)	E1 (B0)	E2 (B0)	F (B0)
1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

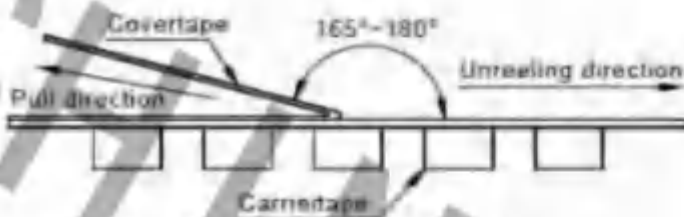


Reel Dimensions



Cover tape peel off condition

Tape Width	Peel-off Force	Peel Speed
16/24mm	0.1~1.3N	300±10mm/M



Packing Quantity

Part Number	Quantity (pcs/reel)
HCB100612R125 Type	300

Recommended Reflow Profile:

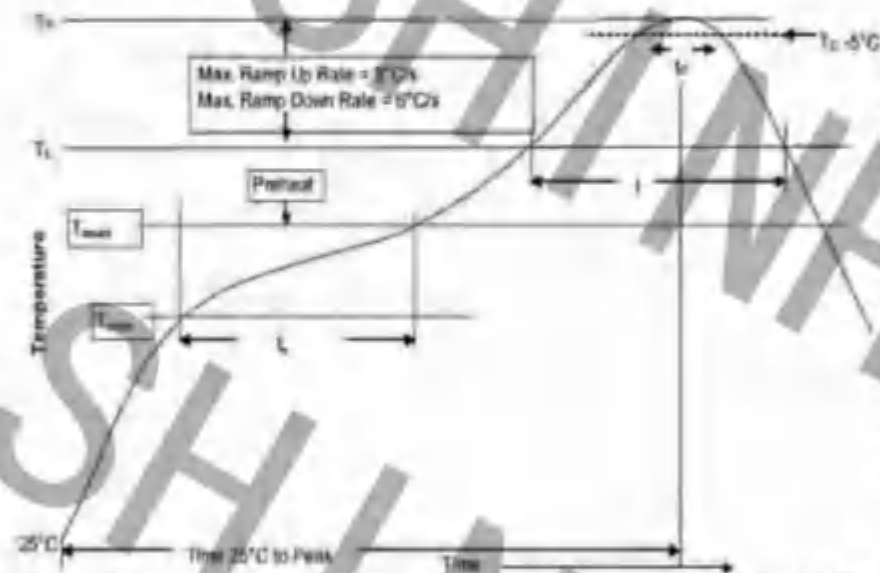


Table 1 - Standard SnPb Solder (T_c)

Package Thickness	Volume mm ³ <350	Volume mm ³ ≥350
<2.5mm	235°C	235°C
≥2.5mm	220°C	220°C

Table 2 - Lead (Pb) Free Solder (T_c)

Package Thickness	Volume mm ³ <350	Volume mm ³ 350 - 2000	Volume mm ³ >2000
<1.6mm	260°C	260°C	260°C
1.6 - 2.5mm	260°C	260°C	245°C
≥2.5mm	260°C	245°C	245°C

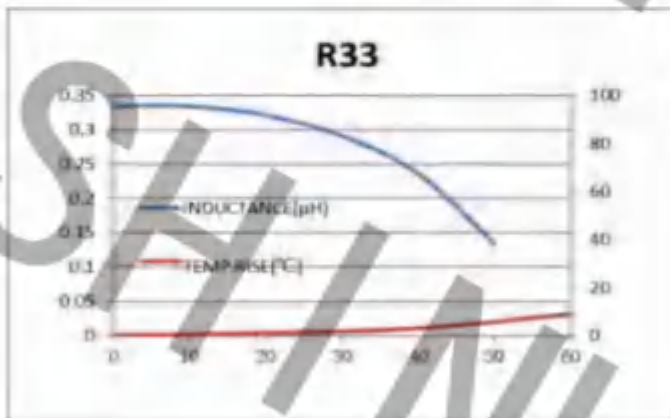
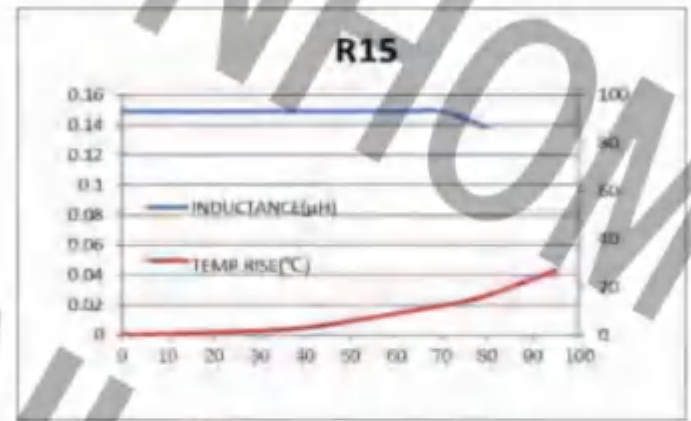
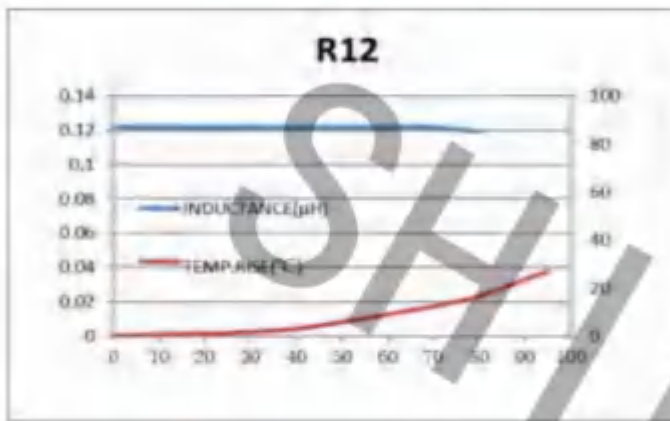
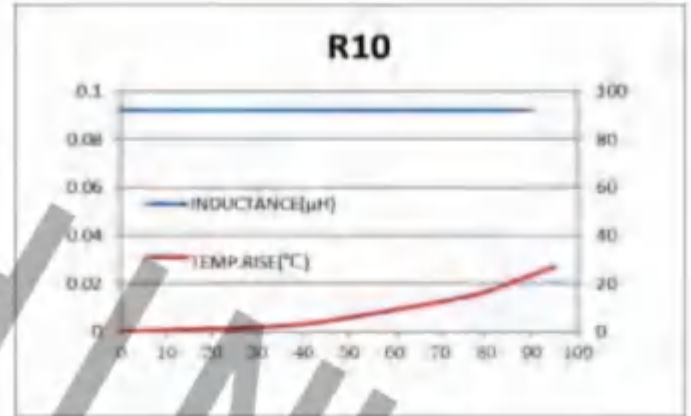
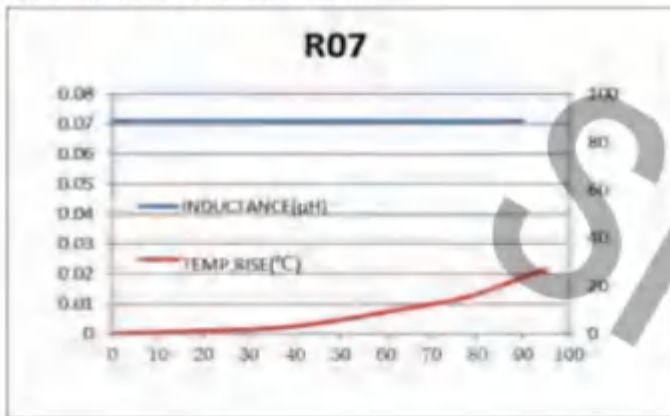
Profile Feature	Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak		
• Temperature min (T _{soak})	100°C	150°C
• Temperature max (T _{soak})	180°C	200°C
• Time (T _{soak} to T _{soak}) (t _s)	60-120 Seconds	60-120 Seconds
Average ramp up rate T _{soak} to T _c	3°C/Second Max	3°C/Second Max
Liquidus temperature (T _l)	183°C	217°C
Time at liquidus (t _l)	60-90 Seconds	60-90 Seconds
Peak package body temperature (T _p)	Table 1	Table 2
Time t _p ** within 5 °C of the specified classification temperature (T _c)	30 Seconds**	30 Seconds**
Average temp down rate (T _c to T _{soak})	6°C/Second Max	6°C/Second Max
Time 25°C to Peak Temperature	8 Minutes Max	8 Minutes Max

* Recommended peak profile temperature (T_p) is defined as a supplier recommended solder reflow.

** (Required for thermal shock profile temperature t_p) is defined as 80% of recommended peak temperature.

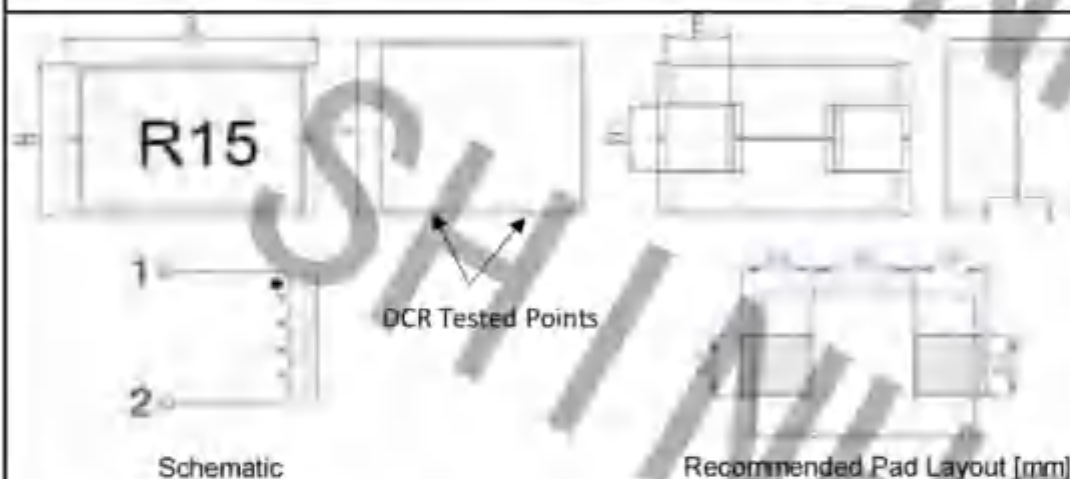


Inductance Characteristics:



LOW PROFILE, HIGH CURRENT POWER BEAD INDUCTORS

1. SHAPE AND DIMENSIONS



UNIT(mm)	
A	10.0 (Max.)
B	7.0 (Max.)
C	9.0 (Max.)
D	2.7±0.25
E	2.5±0.25

2. PRODUCT SPECIFICATIONS

Part Number	OCL ¹ (nH) ±15%	I _{rms} ² (Amps)	I _{sat} ³ (Amps)	Width ⁴ (max.)	DCR(mΩ) @ +20 °C
HCB100709R18-R10	100	70	120	7.0	0.18±10%
HCB100709R18-R12	120	70	110	7.0	0.18±10%
HCB100709R18-R15	150	70	90	7.0	0.18±10%
HCB100709R18-R18	180	70	73	7.0	0.18±10%
HCB100709R18-R22	220	70	57	7.0	0.18±10%
HCB100709R18-R33	330	70	39	7.0	0.18±10%
HCB100709R18-R40	400	70	30	7.0	0.18±10%

Notes:

1. Open Circuit Inductance (OCL) Test Parameters:
100 kHz, 1 Vrms, 0.0 Adc, +25 °C

2. I_{rms}: DC current for an approximate temperature rise of 40 °C without core loss.
Derating is necessary for AC currents. PCB layout, trace thickness and width, air-flow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed +125 °C under worst case operating conditions verified in the end application.

3. I_{sat}: Peak current for approximately 20% rolloff @+25 °C

4. Width: Product shape dimensions of width for different P/N
Remark: Measurement Equipment: WK3250B+WK3265B

3. TEMPERATURE RATING

Operating Temperature: -40°C to +125°C (Ambient plus self temperature rise)

Storage Temperature: In Original Packaging, <40°C ; <75%RH

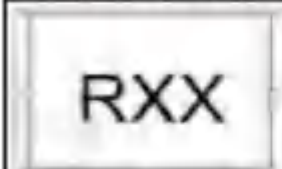
4. PRODUCT IDENTIFICATION

HC**B** **100709** **RXX** - **RXX**

1 2 3 4

- 1: Series Name
2: Product Dimensions
3: DCR Value (Ex. R18=0.18mΩ)
4: Inductance value (Ex. R15=150nH)

5. PRODUCT MARKING



RXX: Product Inductance Value (Ex. R15=150nH)
PI Label: Printed text

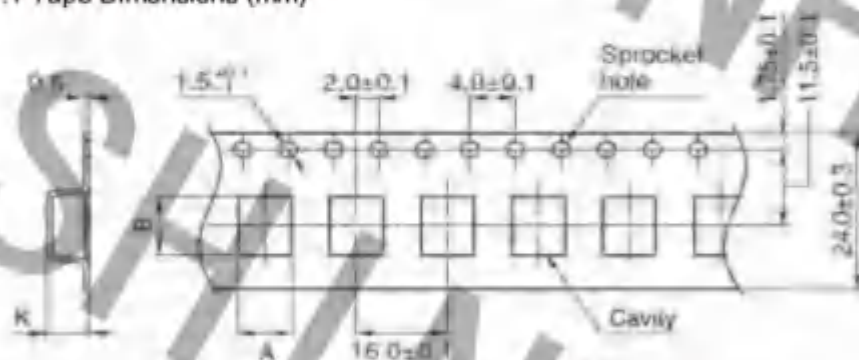
6. CONSTRUCTION AND MATERIAL LIST



No.	Part	Material
1	Clip	C1100
2	Core	Ferrite
3	Label	PI

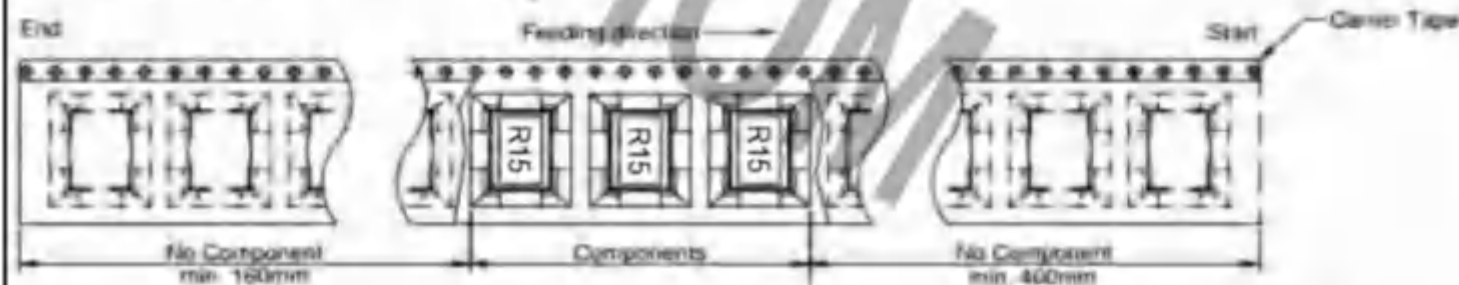
7. PACKAGING INFORMATION

7.1 Tape Dimensions (mm)



P/N	A(mm)	B(mm)	K(mm)
HCB100709R18 SERIES	7.1±0.1	10.2±0.1	9.2±0.1

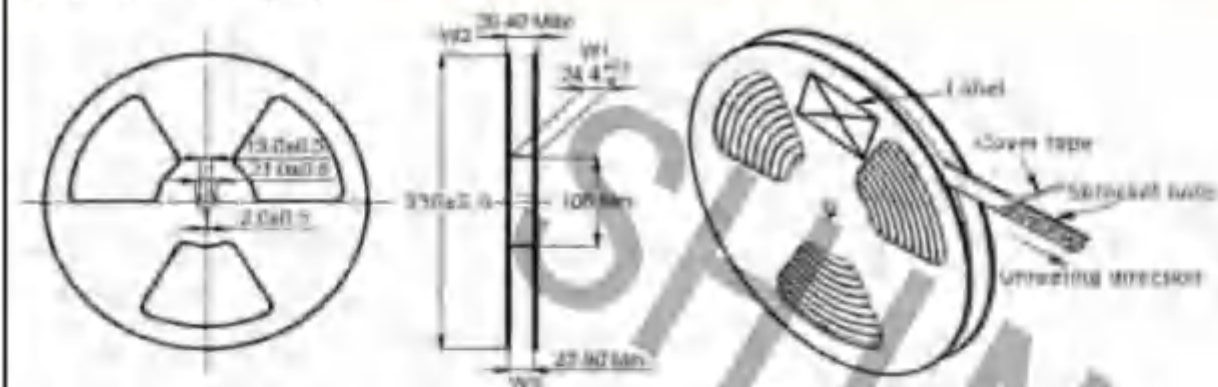
7.2 Product Packing in Tape



TECHNICAL DATA

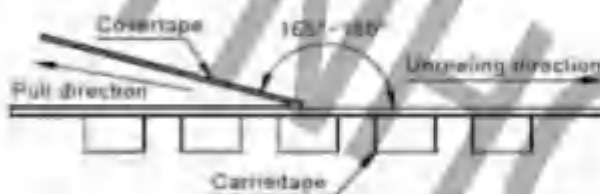
HCBI00709R18 SERIES

7.3 Reel Dimensions (mm)



7.4 Cover tape peel off condition

Tape Width	Tape Type	Peel-off Force	Peel Speed
24mm	Heat-sealing	0.1~1.3N	300±10mm/M

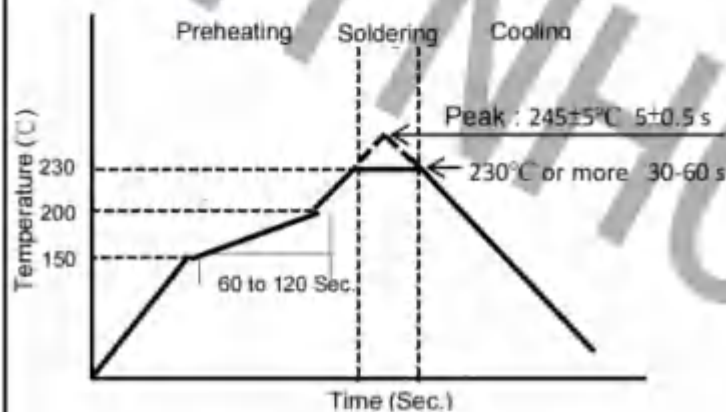


7.5 Packing Quantity

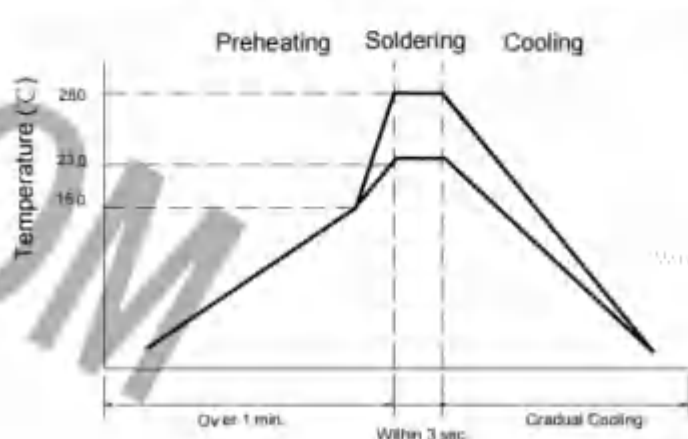
Part Number	Chips/Reel	Chips/Inner Box	Chips/Carton
HCBI00709R18 SERIES	400	800 (2 reels/ PE bag / inner box)	2400 (3 inner boxes/ Carton)



8. RECOMMENDED SOLDERING PROFILE



REFLOW SOLDERING



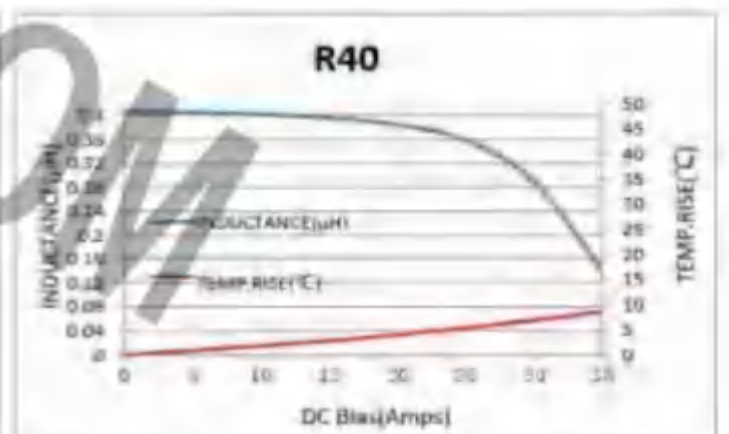
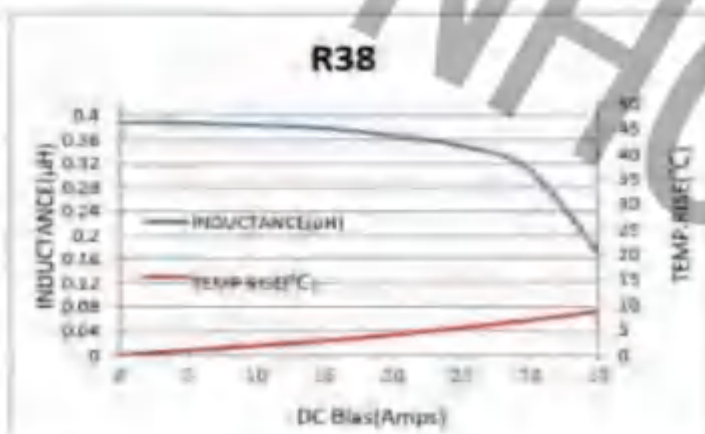
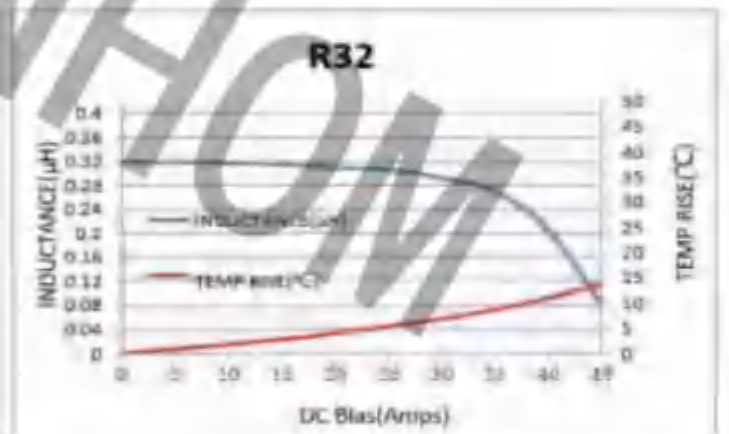
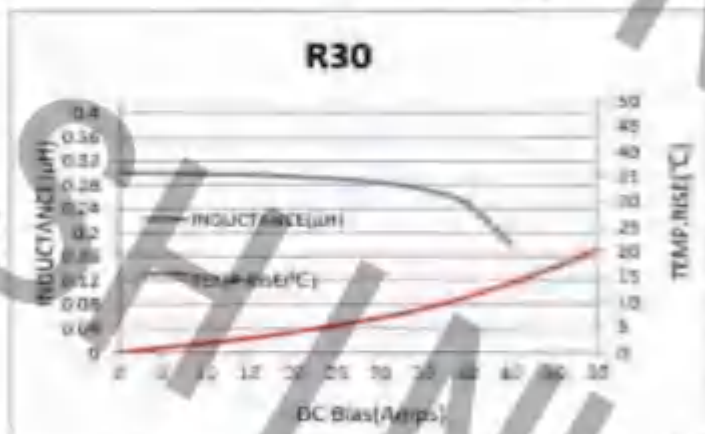
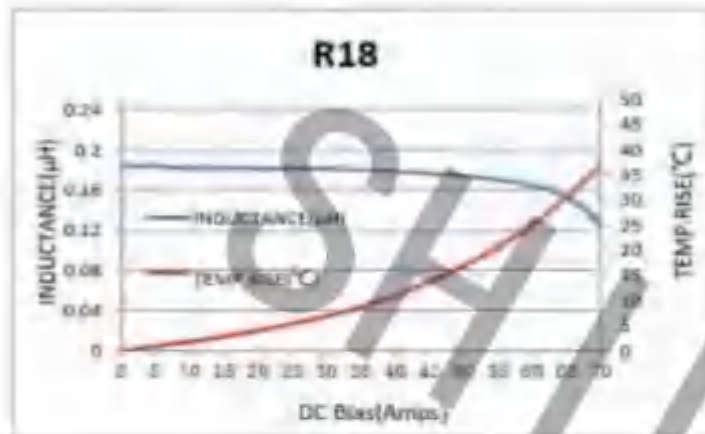
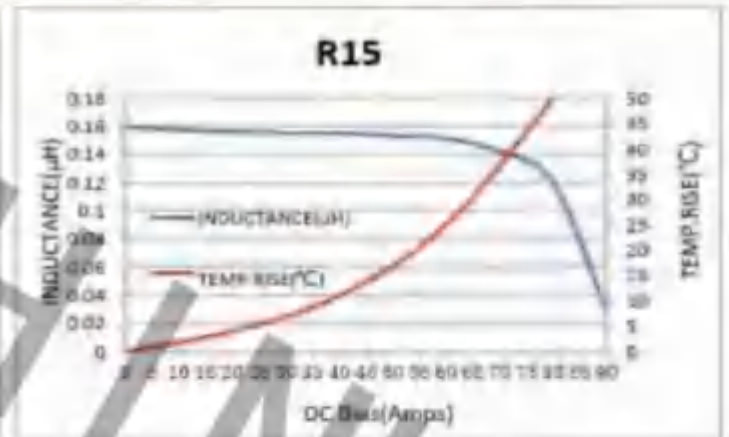
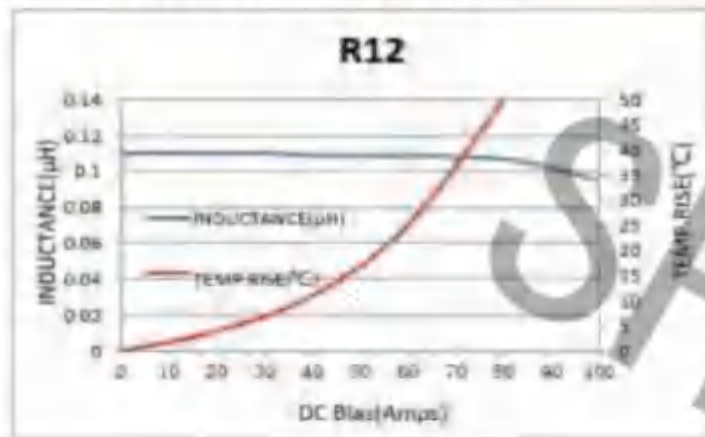
HAND SOLDERING



TECHNICAL DATA

HCB100709R18 SERIES

9. INDUCTANCE CHARACTERISTICS

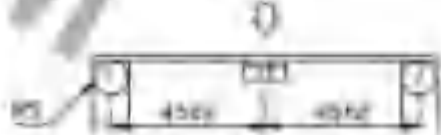




TECHNICAL DATA

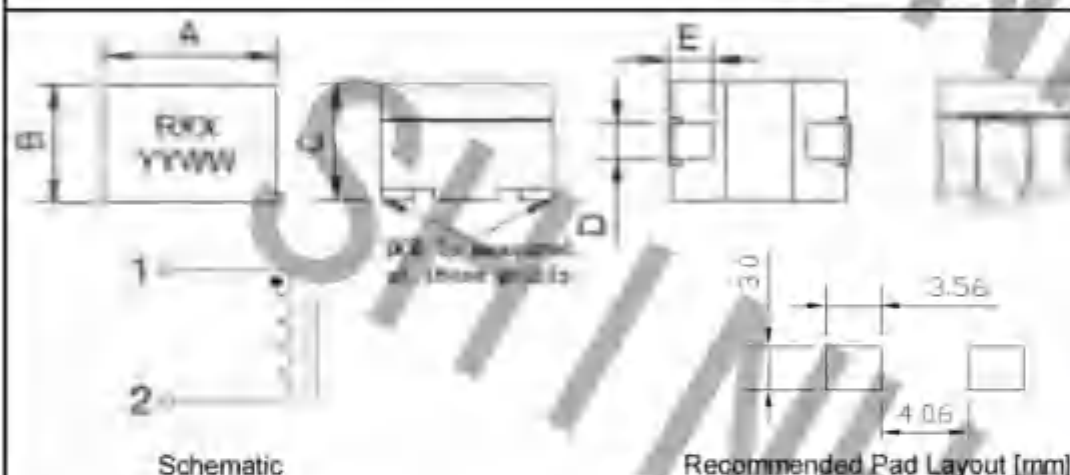
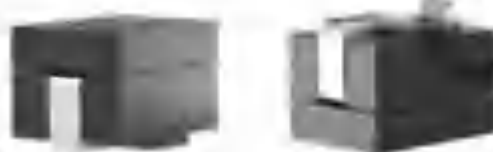
HCB100709R18 SERIES

10. RELIABILITY TEST SPECIFICATIONS FOR POWER BEAD INDUCTORS

Item	Specification	Test Conditions
Operating temperature range	-40°C ~ +125°C	
Storage temperature and humidity range	25±5°C ; 70% RH Max (In Original Packaging: <40°C ; <75%RH)	
Solderability	More than 90% of the terminal electrode should be covered with solder	Soldering Temperature for Pb Product: 230±5°C Soldering Temperature for Pb-free Product: 260±5 °C Dip Time: 2-3s
Solder Heat Resistance	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	Reflow Temperature: Dip Type: 265±5 °C SMD Type: 245±5 °C Solder Resistance Time: ≥ 10s
Heat resistance	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 500 hours in 125±5 °C and 2 hour drying under normal condition.
Cold resistance	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 500 hours in -40±5°C and 2 hour drying under normal condition.
Thermal shock	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	Firstly, test under -40°C±5°C and 30±2 minutes, then put 3±1 minutes under room temperature, and test under 125°C±5°C and 30±2 minutes, finally put 3±1 minutes under room temperature, take this as one cycle (each temperature switching must be finished with 3 minutes). after 100 cycles and cooling 1H to room temperature before measuring L
Humidity Resistance	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break	After 500 hours in 40±2°C and 90 to 95% humidity and 2 hour drying under normal condition.
Vibration Test	Inductance within ±5% of initial value and appearance shall not break.	After vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10Hz) with 1.52mm P-P Amplitudes.
Drop Test	Inductance within ±5% of initial value and appearance shall not break.	Drop the packaged products on the concrete floor from 100cm height, one corner and three edges and six faces need to do free dropping twice for each of them
Salt Spray Test	Inductance within ±5% of initial value and appearance shall not break.	Test Temperature is 35°C and Pressure Barrel Temperature is 47°C. After 24hrs to take it out and wash with clear water and cooling 1H~2H before visual cheking
Substrate Bending	The terminal electrode and the ferrite must not be damaged	The sample shall be soldered onto the printed circuit board as below figure and a 10N load applied until the figure in the arrow direction. There shall be direction is made approximately 3mm.(keep time 30 seconds) 

LOW PROFILE, HIGH CURRENT POWER BEAD INDUCTORS

1. SHAPE AND DIMENSIONS



Unit(mm)	
A	10.0 (Max.)
B	8.0 (Max.)
C	8.0 (Max.)
D	2.2±0.25
E	2.5±0.25

2. PRODUCT SPECIFICATIONS

Part Number	OCL ¹ (nH) ±15%	I _{rms} ² (Amps)	I _{sat} ³ (Amps)	Height ⁴ (max.)	DCR(mΩ) @ +20 °C
HCB100808AR18-R12	120	70	94	8.0	0.18±6%
HCB100808AR18-R15	150	70	79	8.0	0.18±6%
HCB100808AR18-R18	180	70	65	8.0	0.18±6%
HCB100808AR18-R20	200	70	59	8.0	0.18±6%
HCB100808AR18-R30	300	70	38	8.0	0.18±6%
HCB100808AR18-R32	320	70	35	8.0	0.18±6%
HCB100808AR18-R38	380	70	28	8.0	0.18±6%
HCB100808AR18-R40	400	70	26	8.0	0.18±6%

Notes:

1. Open Circuit Inductance (OCL) Test Parameters:
100 kHz, 1 Vrms, 0.0 Adc, +25 °C

2. I_{rms}: DC current for an approximate temperature rise of 40 °C without core loss.
Derating is necessary for AC currents. PCB layout, trace thickness and width, air-flow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed +125 °C under worst case operating conditions verified in the end application.

3. I_{sat}: Peak current for approximately 20% rolloff @ +25 °C

4. Height: Product shape dimensions of height for different P/N
Remark: Measurement Equipment: WK3260B+WK3265B

3. TEMPERATURE RATING

Operating Temperature: -40°C to +125°C (Ambient plus self temperature rise)

Storage Temperature: In Original Packaging, <40°C ; <75%RH

TECHNICAL DATA

HCB100808AR18 SERIES

4. PRODUCT IDENTIFICATION

HCB **100808** **A** **RXX** - **RXX**
 1 2 3 4 5

- 1: Series Name
- 2: Product Dimensions
- 3: Distinguish Code
- 4: DCR Value (Ex. R18=0.18mΩ)
- 5: Inductance value (Ex. R15=150nH)

5. PRODUCT MARKING

RXX: Product Inductance Value (Ex. R15=150nH)

YYWW: Manufactured Datecode (Ex. 2105=2021Year, 05 Week)

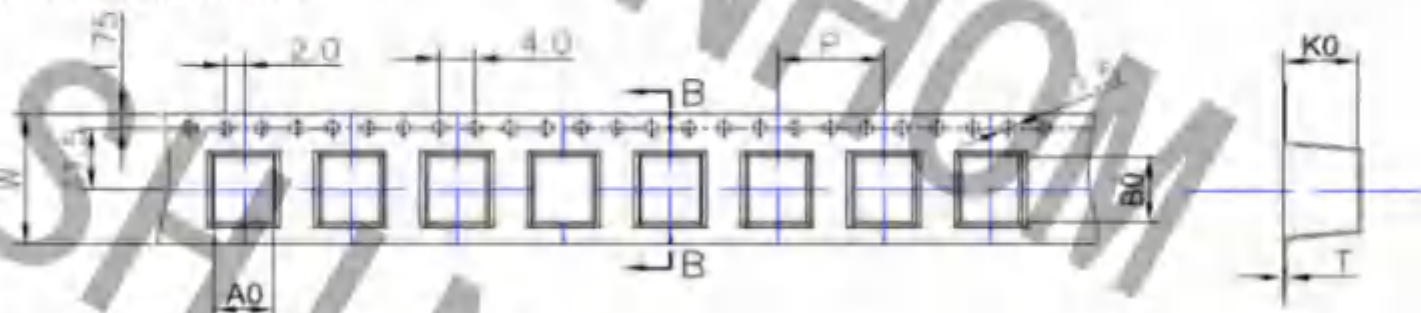
6. CONSTRUCTION AND MATERIAL LIST



No.	Part	Material
1	Clip	C1100
2	Core	Ferrite

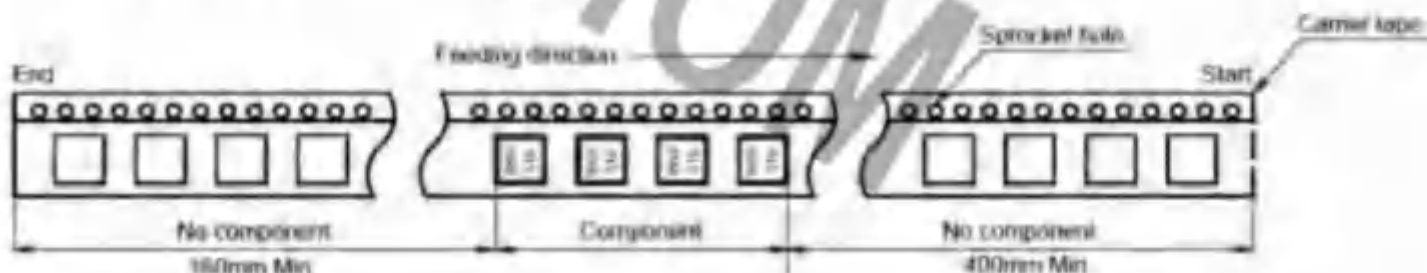
7. PACKAGING INFORMATION

7.1 Tape Dimensions (mm)



P/N	A0(mm)	B0(mm)	K0(mm)	P(mm)	T(mm)	W(mm)
HCB100808AR18 SERIES	8.2±0.1	10.2±0.1	8.2±0.1	12.0±0.1	0.4±0.05	24.0±0.3

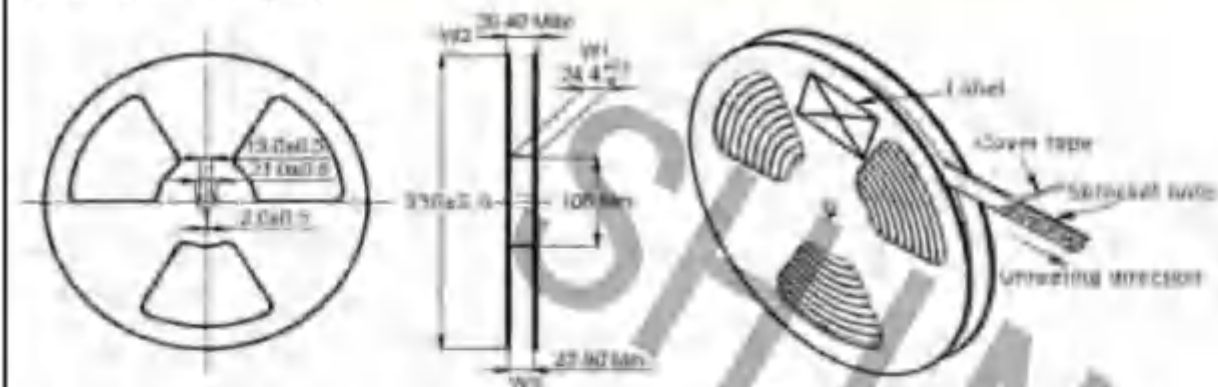
7.2 Product Packing in Tape



TECHNICAL DATA

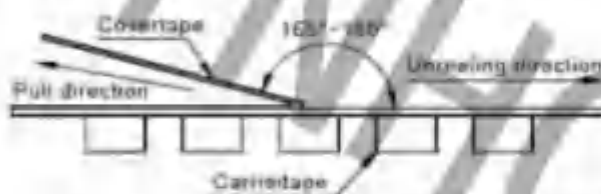
HCB100808AR18 SERIES

7.3 Reel Dimensions (mm)



7.4 Cover tape peel off condition

Tape Width	Tape Type	Peel-off Force	Peel Speed
24mm	Heat-sealing	0.1~1.3N	300±10mm/M

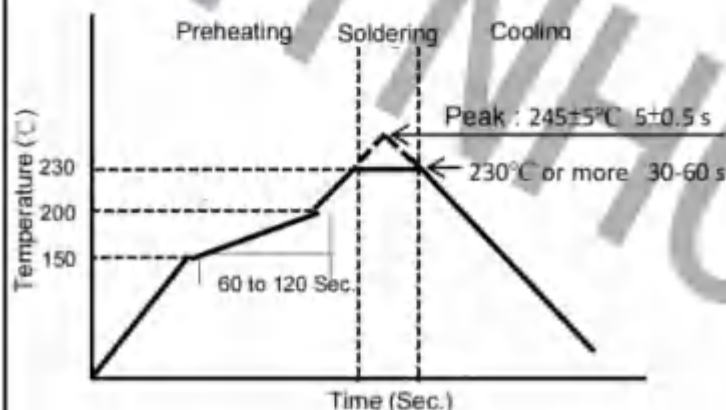


7.5 Packing Quantity

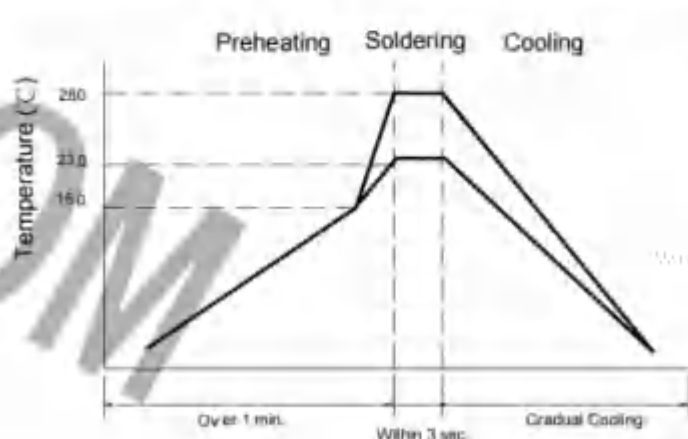
Part Number	Chips/Reel	Chips/Inner Box	Chips/Carton
HCB100808AR18 SERIES	600	1200 (2 reels/ PE bag / inner box)	3600 (3 inner boxes/ Carton)



8. RECOMMENDED SOLDERING PROFILE



REFLOW SOLDERING



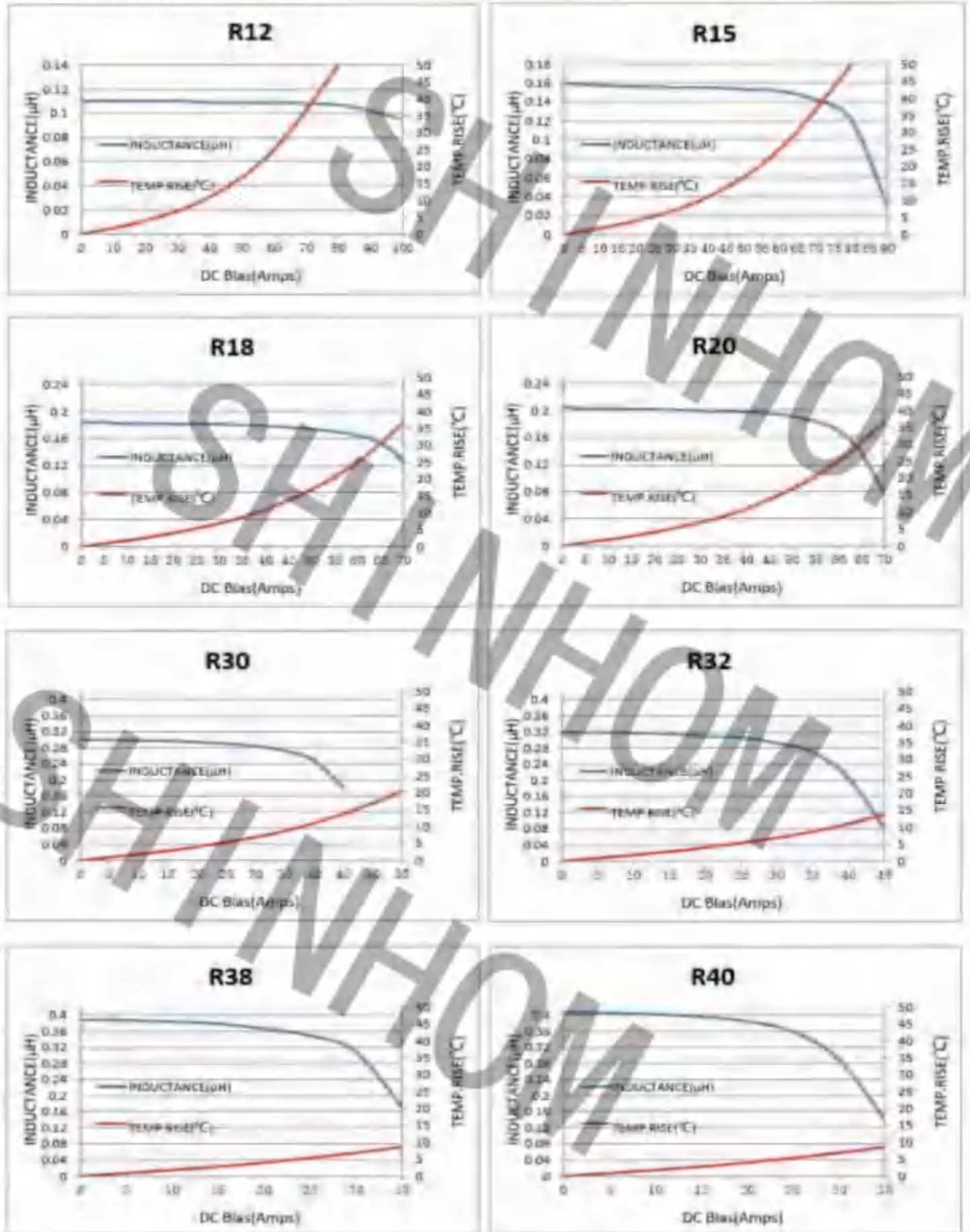
HAND SOLDERING



TECHNICAL DATA

HCB100808AR18 SERIES

9. INDUCTANCE CHARACTERISTICS

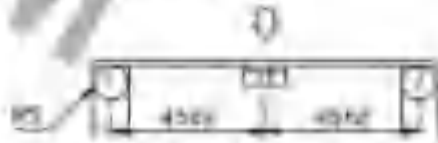




TECHNICAL DATA

HCB100808AR18 SERIES

10. RELIABILITY TEST SPECIFICATIONS FOR POWER BEAD INDUCTORS

Item	Specification	Test Conditions
Operating temperature range	-40°C ~ +125°C	
Storage temperature and humidity range	25±5°C ; 70% RH Max (In Original Packaging: <40°C ; <75%RH)	
Solderability	More than 90% of the terminal electrode should be covered with solder	Soldering Temperature for Pb Product: 230±5°C Soldering Temperature for Pb-free Product: 260±5°C Dip Time: 2-3s
Solder Heat Resistance	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	Reflow Temperature: Dip Type: 265±5°C SMD Type: 245±5°C Solder Resistance Time: ≥ 10s
Heat resistance	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 500 hours in 125±5°C and 2 hour drying under normal condition.
Cold resistance	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 500 hours in -40±5°C and 2 hour drying under normal condition.
Thermal shock	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	Firstly, test under -40°C±5°C and 30±2 minutes, then put 3±1 minutes under room temperature, and test under 125°C±5°C and 30±2 minutes, finally put 3±1 minutes under room temperature, take this as one cycle (each temperature switching must be finished with 3 minutes). after 100 cycles and cooling 1H to room temperature before measuring L
Humidity Resistance	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 500 hours in 40±2°C and 90 to 95% humidity and 2 hour drying under normal condition.
Vibration Test	Inductance within ±5% of initial value and appearance shall not break.	After vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10Hz) with 1.52mm P-P Amplitudes.
Drop Test	Inductance within ±5% of initial value and appearance shall not break.	Drop the packaged products on the concrete floor from 100cm height, one corner and three edges and six faces need to do free dropping twice for each of them
Salt Spray Test	Inductance within ±5% of initial value and appearance shall not break.	Test Temperature is 35°C and Pressure Barrel Temperature is 47°C. After 24hrs to take it out and wash with clear water and cooling 1H~2H before visual cheking
Substrate Bending	The terminal electrode and the ferrite must not be damaged	The sample shall be soldered onto the printed circuit board as below figure and a 10N load applied until the figure in the arrow direction. There shall be direction is made approximately 3mm.(keep time 30 seconds) 

Low Profile, High Current Power Inductors



Features

- SMD inductors
- High current and lower DCR
- Ferrite core material
- Operating temperature range: -40 to +125°C (including self-temperature rise)
- Shielded construction

Applications

- Servers
- Multi-phase and Vcore regulators
- Voltage Regulator Modules (VRMs)
 - Server and desktop
 - Central processing unit (CPU)
 - Graphics processing unit (GPU)
 - Specific integrated circuit (ASIC)
 - High power density
- Notebook regulators
- Battery power systems
- Graphics cards

Environmental Data

- Storage Conditions (In Original Packaging):
-40°C, <75%RH
- Operating temperature range: -40°C to +125°C
(Ambient plus self temperature rise)
- Solder reflow temperature: J-STD-020D
compliant.

Product Specifications

Part Number ⁵	OCL ¹ (nH) ±15%	I _{rms} ² (Amps)	I _{sat} ³ (Amps)	Height ⁴ (max.)	DCR(mΩ) typical @ +20 °C
HCB100808R18-R10	100	74	105	8.2	0.18
HCB100808R18-R12	120	74	105	8.1	0.18
HCB100808R18-R15	150	74	88	8.1	0.18
HCB100808R18-R17	170	74	80	8.1	0.18
HCB100808R18-R22	220	74	55	8.0	0.18
HCB100808R18-R26	260	74	49	8.0	0.18
HCB100808R18-R32	320	74	45	8.0	0.18

Notes:

1. Open Circuit Inductance (OCL) Test Parameters:
100 kHz, 0.1 Vrms, 0.0 Adc, +25 °C
 2. I_{rms}: DC current for an approximate temperature rise of 40 °C without core loss. Derating is necessary for AC currents. PCB layout, trace thickness and width, air-flow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed +125 °C under worst case operating conditions verified in the end application
 3. I_{sat}: Peak current for approximately 20% rolloff @ +25 °C
 4. Height: Product shape dimensions of height for different P/N
- Remark: Measurement Equipment: WK3260B+WK3265B

5. Part Number Definition:

HCB 100808 Rxxx - Ryy

Inductance value in μH, R = decimal point

DCR value in mΩ,
R = decimal pointMax. product size
(L*W*H)=10.6*8.0*8.2(Max.)

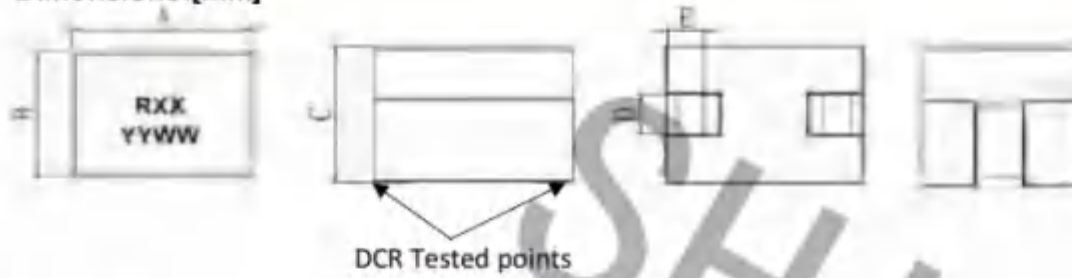
Product code



Technical Data

HC B100808R18 Series

Dimensions:[mm]



TYPE	SIZE
A	10.6 (Max.)
B	8.0 (Max.)
C	See Height column in table of Product Specifications
D	2.25 (Typ.)
E	2.2 (Typ.)

Product Marking:

RXX	Product Inductance Value(Ex. R15=150nH)
YYWW	Manufactured Datecode (Ex. 2105=2021Year ; 05 Week)

Recommended Pad Layout:[mm]

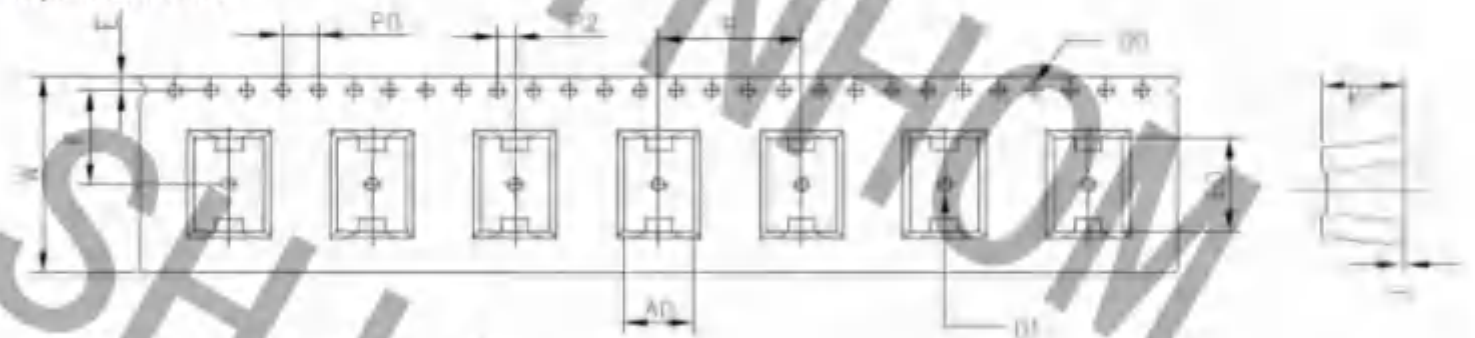


Schematic:

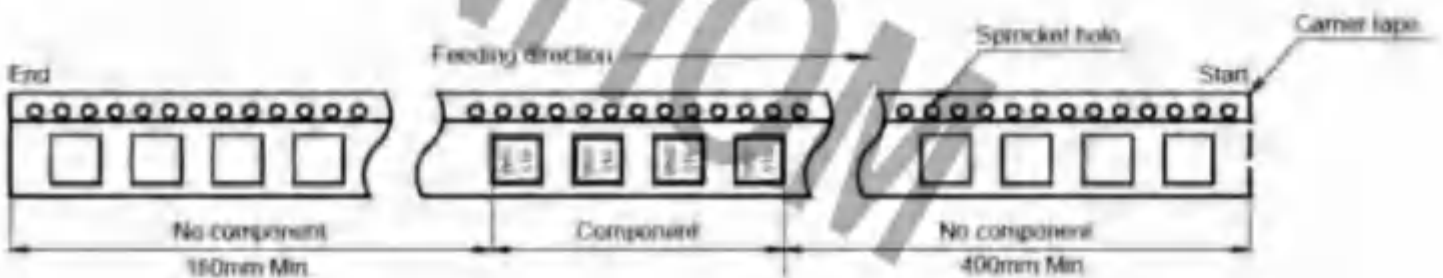


Packaging Information:[mm]

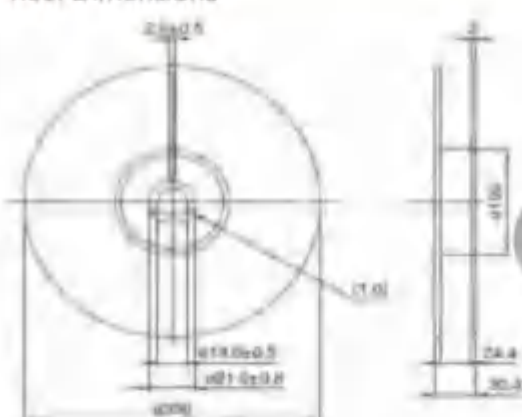
Tape Dimensions



Parameter	Unit	Value	Parameter	Unit	Value	Parameter	Unit	Value	Parameter	Unit	Value	Parameter	Unit	Value
Carrier width	mm	12.5	Carrier pitch	mm	4.0	Carrier hole diameter	mm	0.25	Carrier hole position	mm	15.00	Carrier hole diameter	mm	1.50
Carrier pitch	mm	4.0	Carrier hole diameter	mm	0.25	Carrier hole position	mm	15.00	Carrier hole diameter	mm	1.50	Carrier hole position	mm	15.00

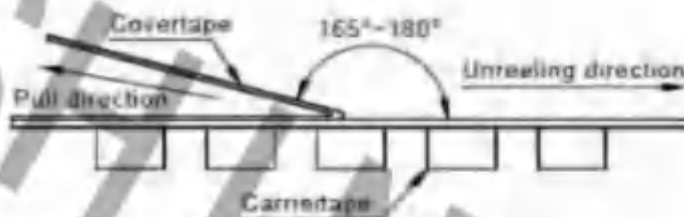


Reel Dimensions



Cover tape peel off condition

Tape Width	Peel-off Force	Peel Speed
24mm	0.1~1.3N	300±10mm/M



Packing Quantity

Part Number	Quantity (pcs/reel)
HCB100808R18 SERIES	400

Recommended Reflow Profile:

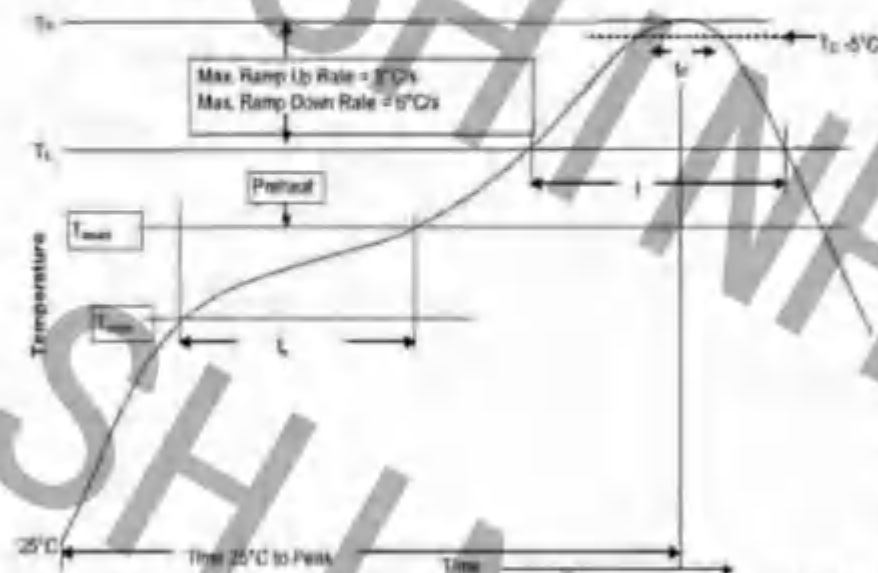


Table 1 - Standard SnPb Solder (T_c)

Package Thickness	Volume mm ³ <350	Volume mm ³ ≥350
≤2.5mm	235°C	220°C
≥2.5mm	220°C	220°C

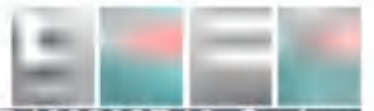
Table 2 - Lead (Pb) Free Solder (T_c)

Package Thickness	Volume mm ³ <350	Volume mm ³ 350 - 2000	Volume mm ³ >2000
≤1.6mm	260°C	260°C	260°C
1.6 - 2.5mm	260°C	260°C	245°C
≥2.5mm	260°C	245°C	245°C

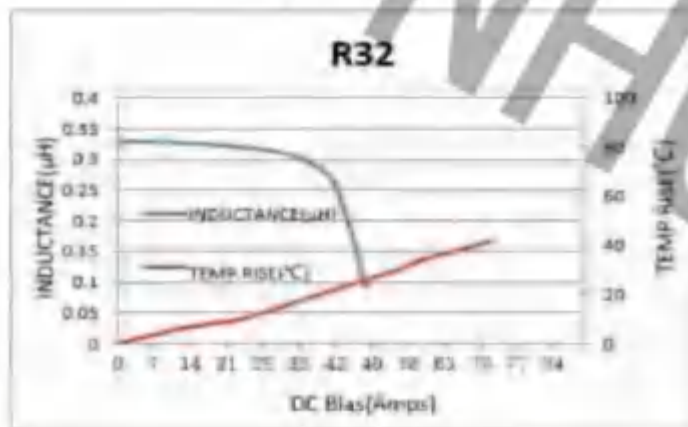
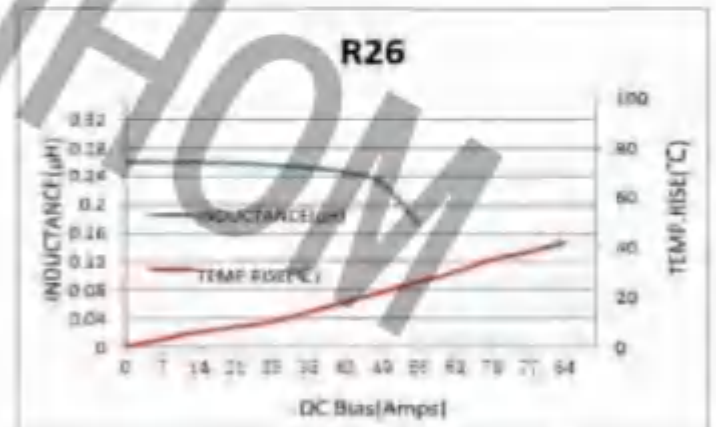
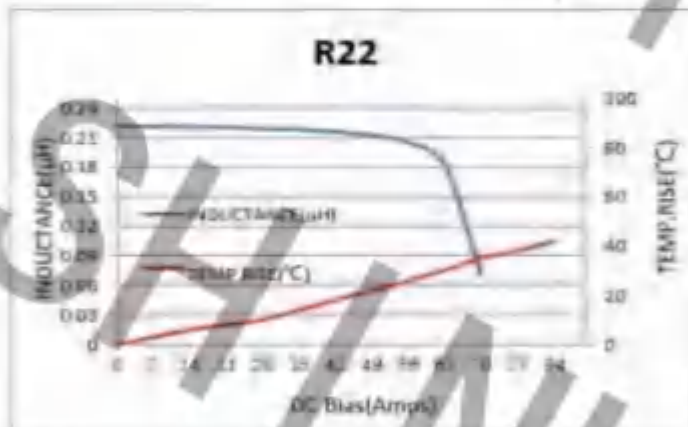
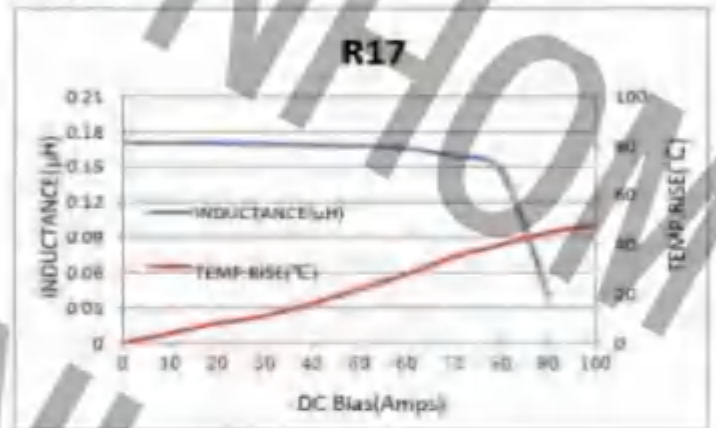
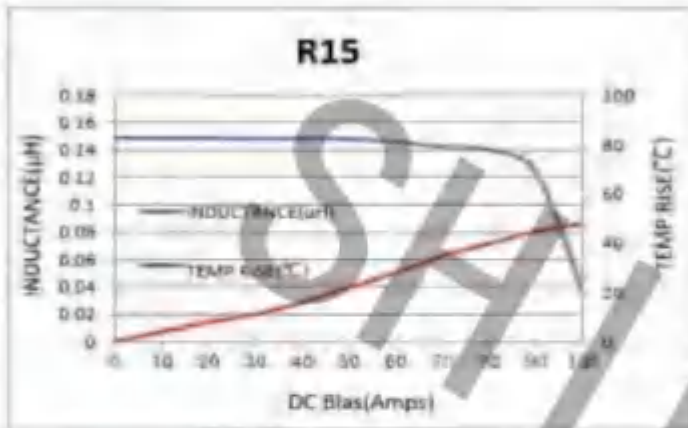
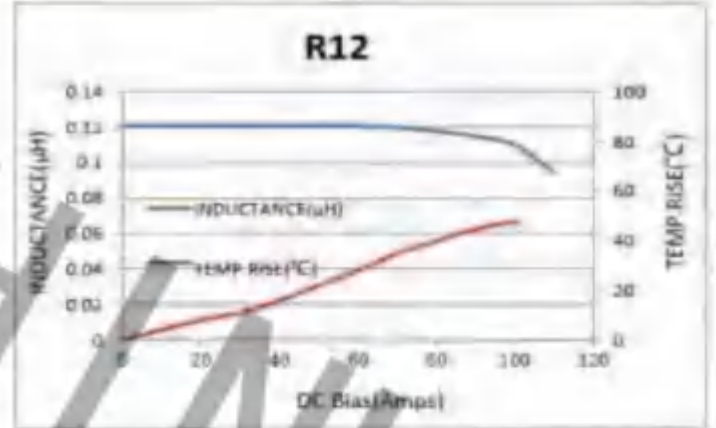
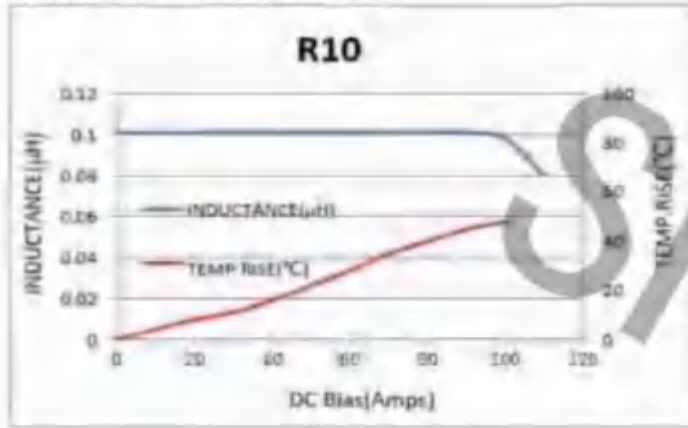
Profile Feature	Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak		
• Temperature min (T _{min})	100°C	150°C
• Temperature max (T _{max})	180°C	200°C
• Time (T _{min} to T _{max}) (t _p)	60-120 Seconds	60-120 Seconds
Average ramp up rate T _{max} to T _p	3°C/Second Max	3°C/Second Max
Liquidus temperature (T _l)	183°C	217°C
Time at liquidus (t _l)	60-180 Seconds	60-180 Seconds
Peak package body temperature (T _p)*	Table 1	Table 2
Time t _p ** within 5 °C of the specified solidification temperature (T _s)	30 Seconds**	30 Seconds**
Average temp down rate (T _p to T _{min})	6°C/Second Max	6°C/Second Max
Time 25°C to Peak Temperature	8 Minutes Max	8 Minutes Max

* Recommended peak profile temperature (T_p) is defined as a supplier recommended solder reflow.

** (Time at liquidus) (t_l) is defined as a supplier recommended solder reflow.



Inductance Characteristics:



Low Profile, High Current Power Inductors



Environmental Data

- Storage Conditions (In Original Packaging):
-40°C ~ +125°C, <75%RH
- Operating temperature range: -40°C to +125°C
(Ambient plus self temperature rise)
- Solder reflow temperature: J-STD-020D
compliant

Features

- SMD inductors
- High current and lower DCR
- Ferrite core material
- Operating temperature range: -40 to +125°C
(including self-temperature rise)
- Shielded construction

Applications

- Servers
- Multi-phase and Vcore regulators
- Voltage Regulator Modules (VRMs)
 - Server and desktop
 - Central processing unit (CPU)
 - Graphics processing unit (GPU)
 - Specific integrated circuit (ASIC)
 - High power density
- Notebook regulators
- Battery power systems
- Graphics cards

Product Specifications

Part Number ⁶	OCL ¹ (nH) ±15%	I _{rms} ² (Amps)	I _{sat} ³ (Amps)	Height (max.)	DCR(mΩ) typical @ +20 °C
HCB100875R29-R10	100	56	80	7.5	0.29
HCB100875R29-R12	120	56	80	7.5	0.29
HCB100875R29-R15	150	56	73	7.5	0.29
HCB100875R29-R18	180	56	65	7.5	0.29
HCB100875R29-R20	200	56	60	7.5	0.29
HCB100875R29-R24	240	56	50	7.5	0.29
HCB100875R29-R27	270	56	46	7.5	0.29
HCB100875R29-R32	320	56	35	7.5	0.29
HCB100875R29-R34	340	56	34	7.5	0.29
HCB100875R29-R37	370	56	30	7.5	0.29

Notes:

1. Open Circuit Inductance (OCL) Test Parameters:
100 kHz, 0.1 Vrms, 0.0 A dc, +25 °C
2. I_{rms}: DC current for an approximate temperature rise of 40 °C
without core loss. Derating is necessary for AC currents. PCB
layout, trace thickness and width, air-flow, and proximity of other
heat generating components will affect the temperature rise. It is
recommended that the temperature of the part not exceed
+125 °C under worst case operating conditions verified in the end
application.
3. I_{sat}: Peak current for approximately 20% rolloff @ +25 °C
4. Measurement Equipment: WK3260B+WK3266B

6. Part Number Definition:

HCB 100875 Rxx - Ryy

Inductance value in μH, R =
decimal pointDCR value in mΩ,
R = decimal pointMax. product size
(L*W*H)=10.0*8.0*7.5(Max.)

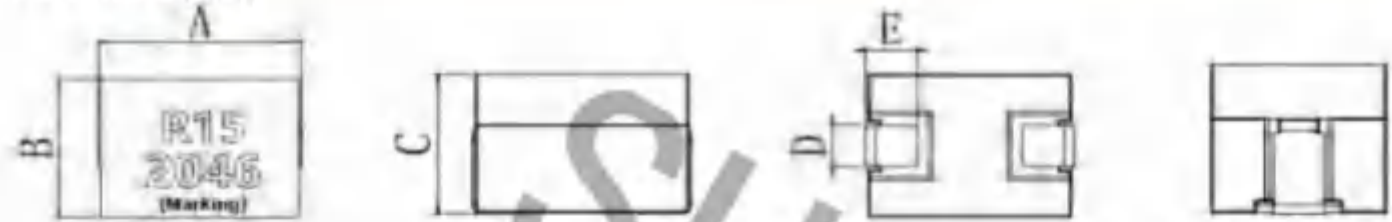
Product code



Technical Data

HCB100875R29 Series

Dimensions:[mm]



Product Marking:

Part Code	Ryy
Date Code	YYWW

Dimensions

Type	Size
A	10.2±0.2
B	8.0 max.
C	7.5 max.
D	2.2±0.2
E	2.54±0.5

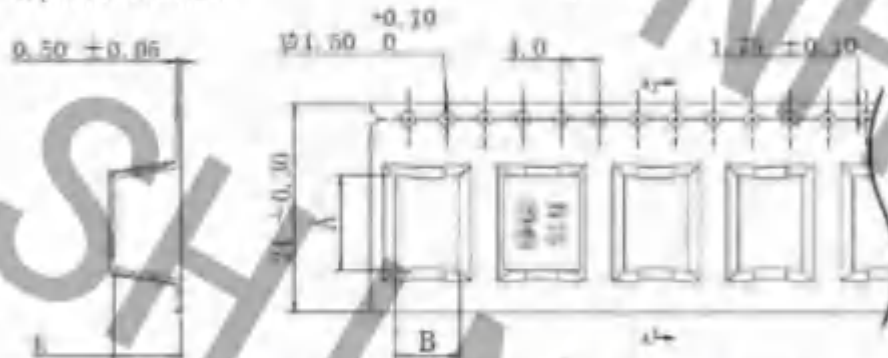
Recommended Pad Layout:[mm]



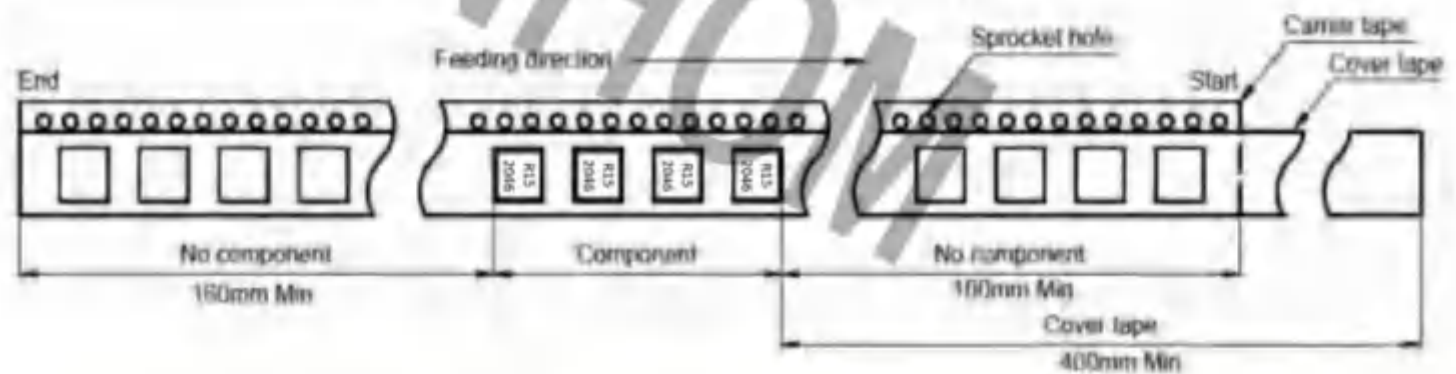
Schematic:

Packaging Information:[mm]

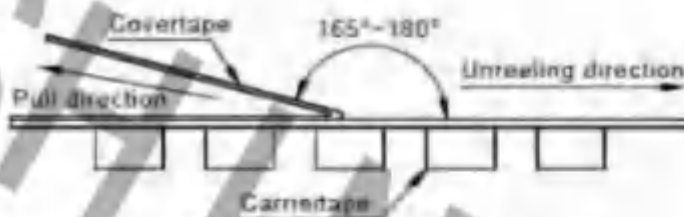
Tape Dimensions



Part Number	A	B	K
HCB100875R29 Type	10.8±0.1	8.0±0.1	7.7±0.1



Cover tape peel off condition



Part Number	Quantity (pcs/reel)
HCB100875R29 Type	700

Package Thickness	Vinfrms mm3 ≤350	Vefurms mm3 ≥350
≤25mm	235°C	220°C
≥25mm	220°C	220°C

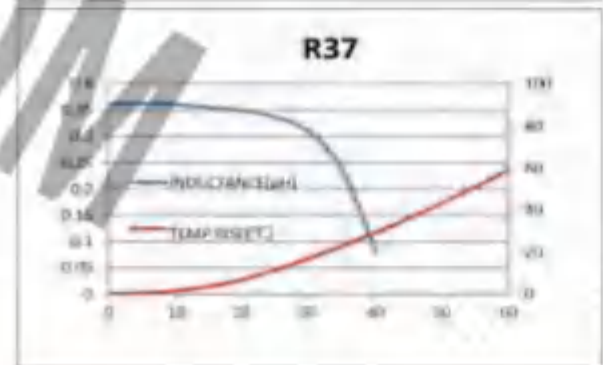
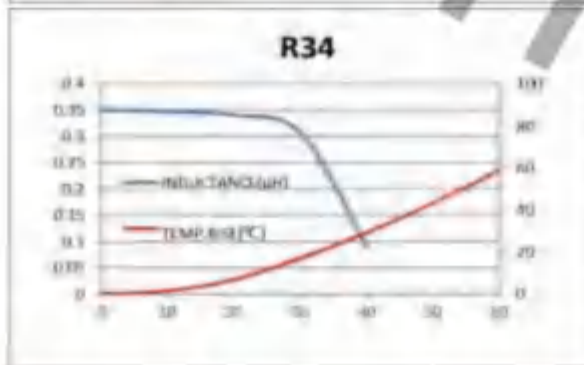
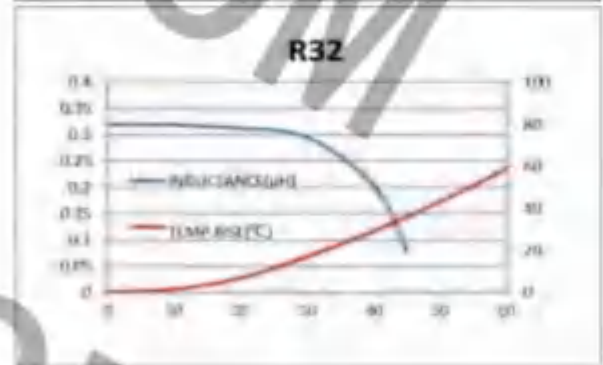
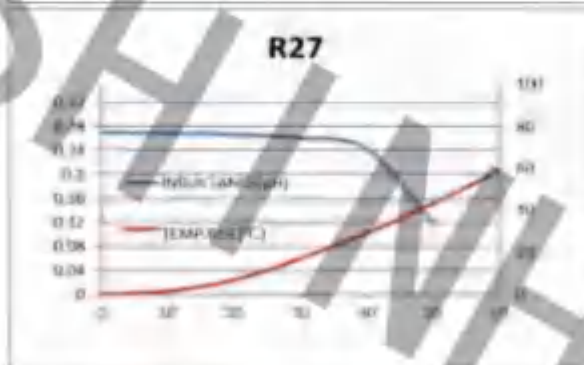
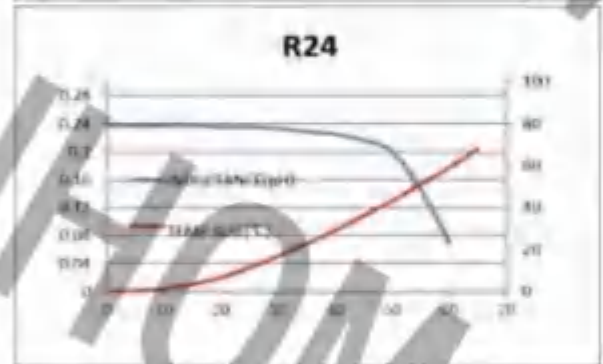
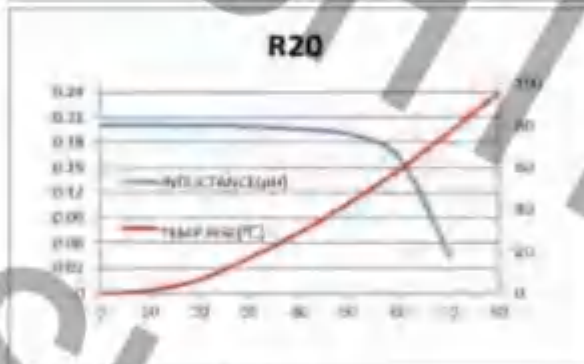
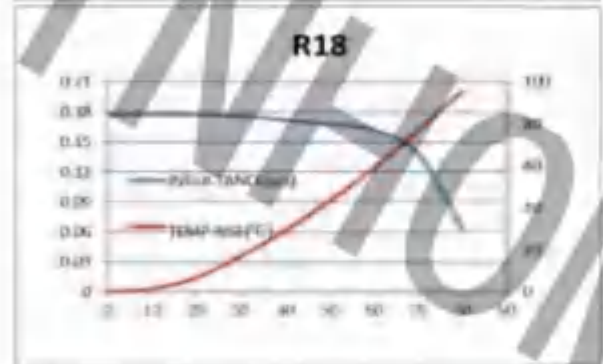
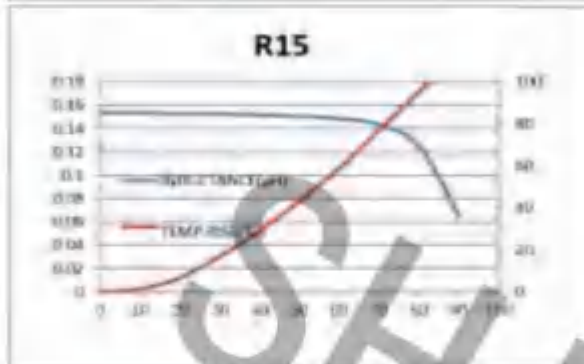
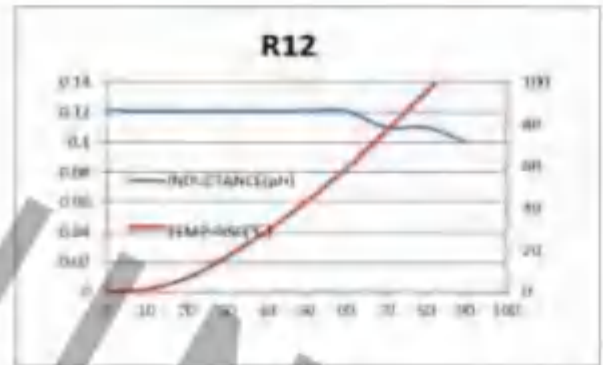
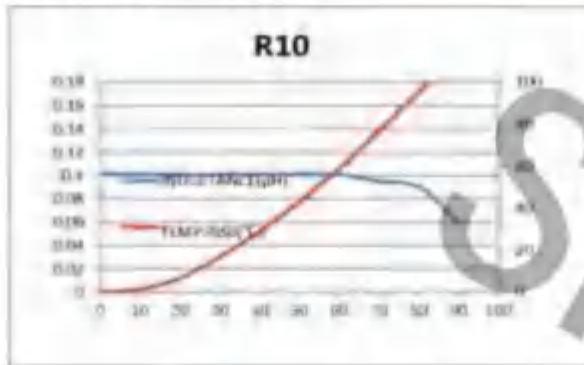
Package Thickness	Volume mm ³ <350	Volume mm ³ 350 - 2000	Volume mm ³ >2000
<1.6mm	20°C	28°C	28°C
1.6 - 2.5mm	20°C	26°C	24°C
>2.5mm	25°C	24°C	24°C

Profile Feature	Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak		
• Temperature min. ($T_{\min}$)	100°C	150°C
• Temperature max. ($T_{\max}$)	180°C	200°C
• Time ($T_{\min}$ to $T_{\max}$) (t_p)	60-120 Seconds	60-120 Seconds
Average ramp up rate $T_{\min}$ to T_p	3°C/ Second Max.	3°C/ Second Max.
Liquidus temperature (T_L)	183°C	217°C
Time at liquidus (t_L)	60-120 Seconds	60-150 Seconds
Peak package body temperature (T_{pb})*	Table 1	Table 2
Time (t_p)** within 5 °C of the specified reflow temperature (T_p)	30 Seconds**	30 Seconds**
Average ramp down rate (T_p to $T_{\min}$)	6°C/ Second Max.	6°C/ Second Max.
Time 25°C to Peak Temperature	8 Minutes Max.	8 Minutes Max.

²² *Stress* is the actual or the perceived H_2 is defined as a hypersecretion of a set of hormones.



Inductance Characteristics:



Low Profile, High Current Power Inductors



Environmental Data

- Storage Conditions (In Original Packaging):
 -40°C ~ $+75\%\text{RH}$
- Operating temperature range: -40°C to $+125^{\circ}\text{C}$
 (Ambient plus self temperature rise)
- Solder reflow temperature: J-STD-020D
 compliant

Features

- SMD inductors
- High current and lower DCR
- Ferrite core material
- Operating temperature range: -40 to $+125^{\circ}\text{C}$
 (including self-temperature rise)
- Shielded construction

Applications

- Servers
- Multi-phase and Vcore regulators
- Voltage Regulator Modules (VRMs)
 - Server and desktop
 - Central processing unit (CPU)
 - Graphics processing unit (GPU)
 - Specific integrated circuit (ASIC)
 - High power density
- Notebook regulators
- Battery power systems
- Graphics cards

Product Specifications

Part Number ⁵	OCL ¹ (nH) $\pm 15\%$	I _{rms} ² (Amps)	I _{sat} ³ (Amps)	Height (max.)	DCR(m Ω) typical @ $+20^{\circ}\text{C}$
HCB121109R30-R15	150	55	105	9.0	0.30
HCB121109R30-R18	180	55	90	9.0	0.30
HCB121109R30-R22	220	55	78	9.0	0.30
HCB121109R30-R25	250	55	68	9.0	0.30
HCB121109R30-R29	290	55	55	9.0	0.30
HCB121109R30-R33	330	55	54	9.0	0.30
HCB121109R30-R38	380	55	45	9.0	0.30
HCB121109R30-R47	470	55	38	9.0	0.30
HCB121109R30-R50	500	55	32	9.0	0.30

Notes:

1. Open Circuit Inductance (OCL) Test Parameters:
 100 kHz , 1 Vrms , 0.0 A dc , $+25^{\circ}\text{C}$
2. I_{rms}: DC current for an approximate temperature rise of 40°C
 without core loss. Derating is necessary for AC currents. PCB
 layout, trace thickness and width, air-flow, and proximity of other
 heat generating components will affect the temperature rise. It is
 recommended that the temperature of the part not exceed
 $+125^{\circ}\text{C}$ under worst case operating conditions verified in the end
 application.
3. I_{sat}: Peak current for approximately 20% rolloff @ $+25^{\circ}\text{C}$.
4. Measurement Equipment: WK3260B-WK3265B

5. Part Number Definition:

HCB 121109 Rxxx - Ryy

Inductance value in μH , R =
decimal pointDCR value in $\text{m}\Omega$,
R = decimal pointMax. product size
(L*W*H)= $11.5*11.0*9.0(\text{Max.})$

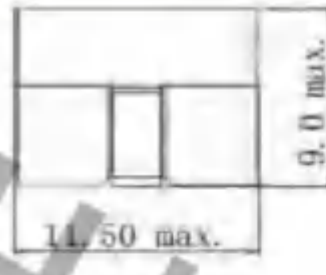
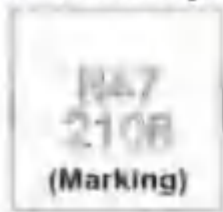
Product code



Technical Data

HCB121109R30 Series

Dimensions:[mm]



Product Marking:

Part Code	Ryy
Date Code	YYWW

Recommended Pad Layout:[mm]

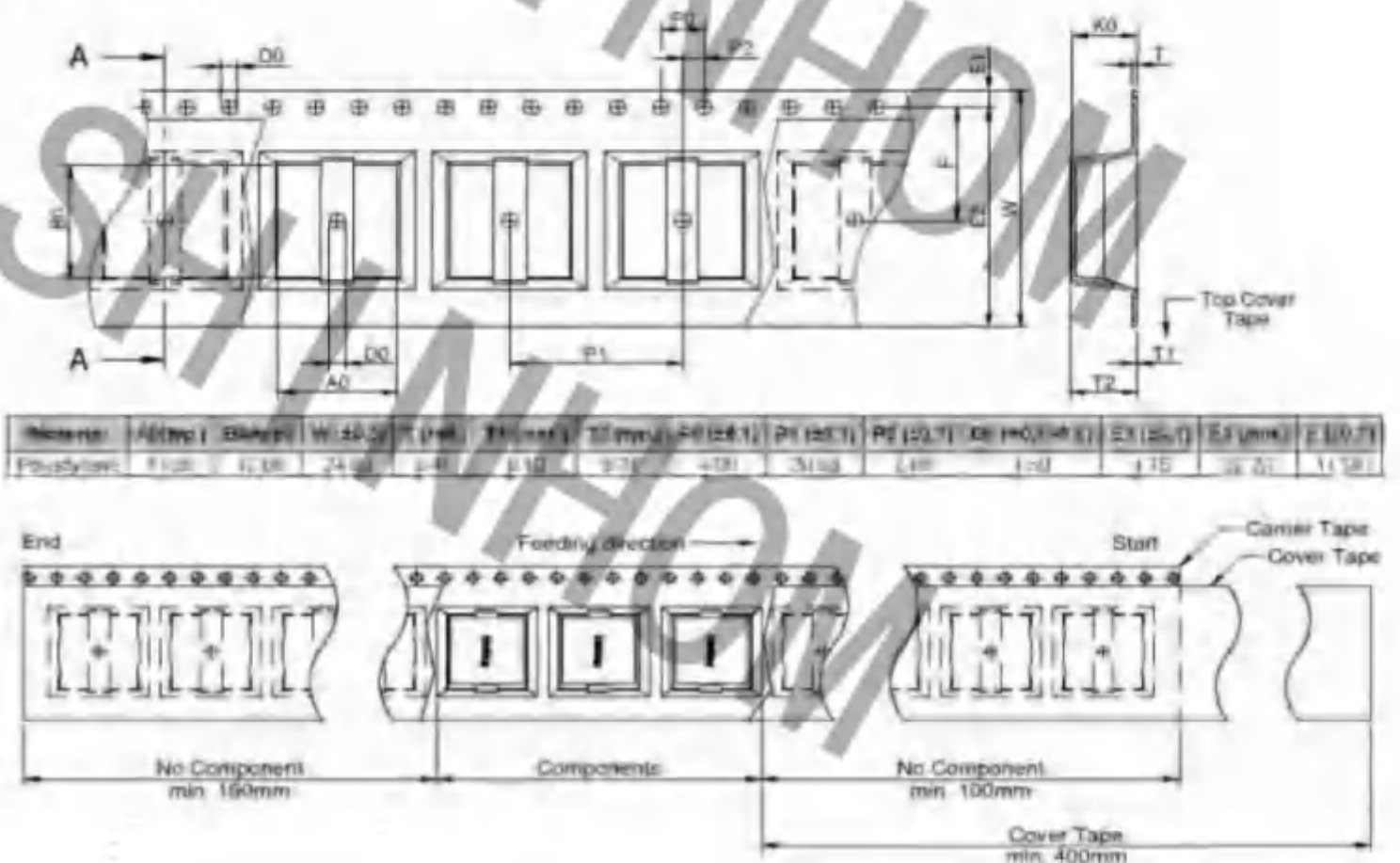


Schematic:

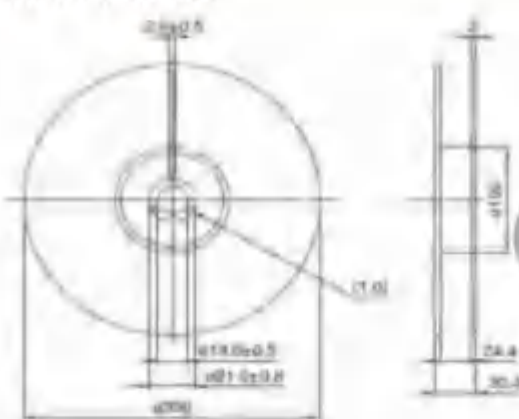


Packaging Information:[mm]

Tape Dimensions

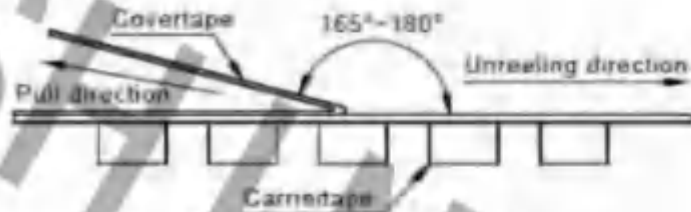


Reel Dimensions



Cover tape peel off condition

Tape Width	Peel-off Force	Peel Speed
12/16/24mm	0.1~1.3N	300±10mm/M



Packing Quantity

Part Number	Quantity (pcs/reel)
HCB121109R30 Type	300

Recommended Reflow Profile:

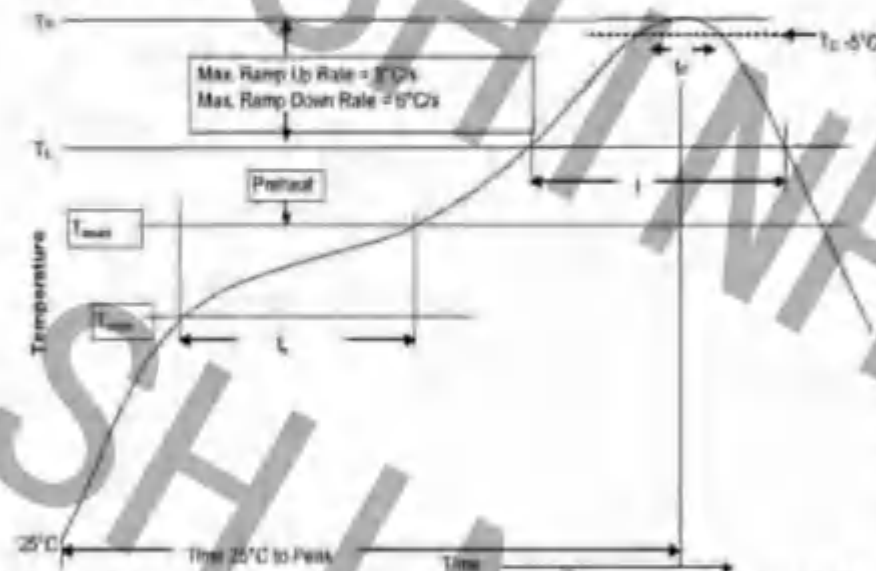


Table 1 - Standard SnPb Solder (T_c)

Package Thickness	Volume mm ³ <350	Volume mm ³ ≥350
<2.5mm	235°C	220°C
≥2.5mm	220°C	220°C

Table 2 - Lead (Pb) Free Solder (T_c)

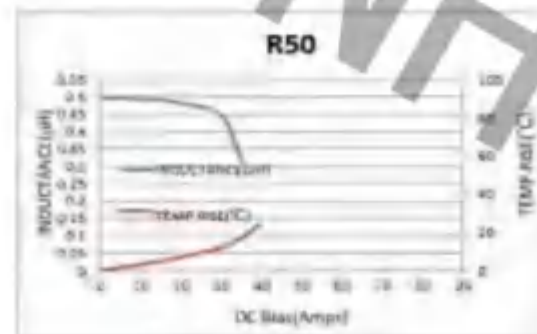
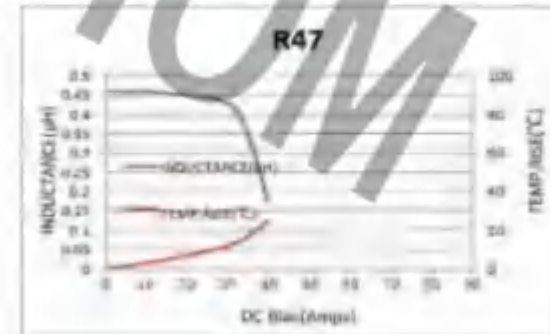
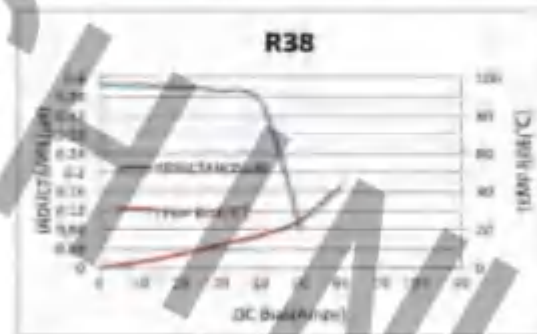
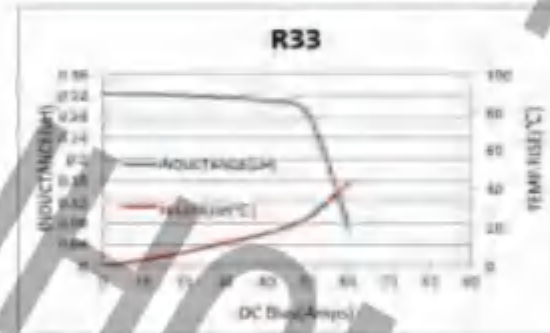
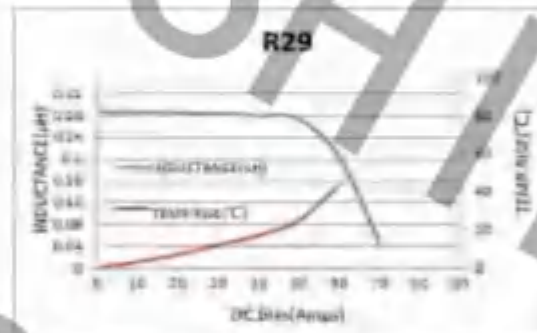
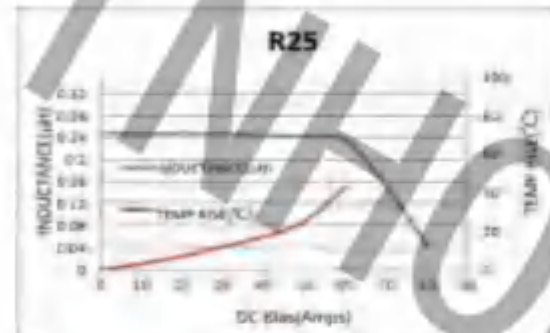
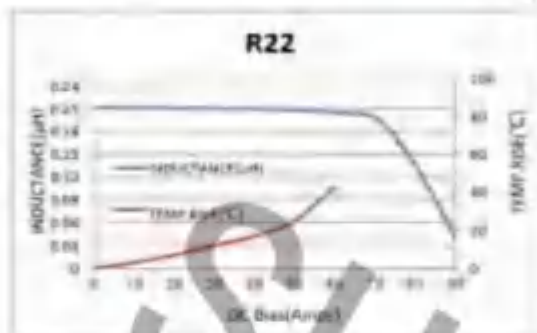
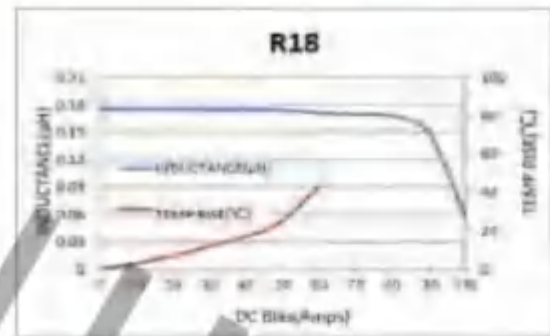
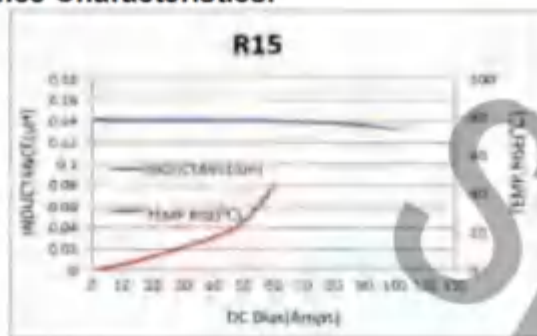
Package Thickness	Volume mm ³ <350	Volume mm ³ 350 - 2000	Volume mm ³ >2000
<1.6mm	260°C	260°C	260°C
1.6 - 2.5mm	260°C	260°C	245°C
≥2.5mm	260°C	245°C	245°C

Profile Feature	Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak		
• Temperature min (T _{min})	100°C	150°C
• Temperature max (T _{max})	180°C	200°C
• Time (T _{min} to T _{max}) (t _p)	60-120 Seconds	60-120 Seconds
Average ramp up rate T _{max} to T _p	3°C/Second Max	3°C/Second Max
Liquidus temperature (T _L)	183°C	217°C
Time at liquidus (t _L)	60-90 Seconds	60-90 Seconds
Peak package body temperature (T _p)*	Table 1	Table 2
Time t _p ** within 5 °C of the specified classification temperature (T _c)	30 Seconds**	30 Seconds**
Average temp down rate (T _p to T _{min})	6°C/Second Max	6°C/Second Max
Time 25°C to Peak Temperature	8 Minutes Max	8 Minutes Max

* Recommended peak profile temperature (T_p) is defined as a supplier maximum lead temperature.

** Time at liquidus (t_L) is defined as a supplier maximum lead temperature.

Inductance Characteristics:





HIGH CURRENT POWER INDUCTORS

HQ1009 SERIES

COMMON APPLICATIONS:

- PDA/notebook/desktop/server applications
- High current POL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for Field Programmable Gate Array (FPGA)

FEATURES:

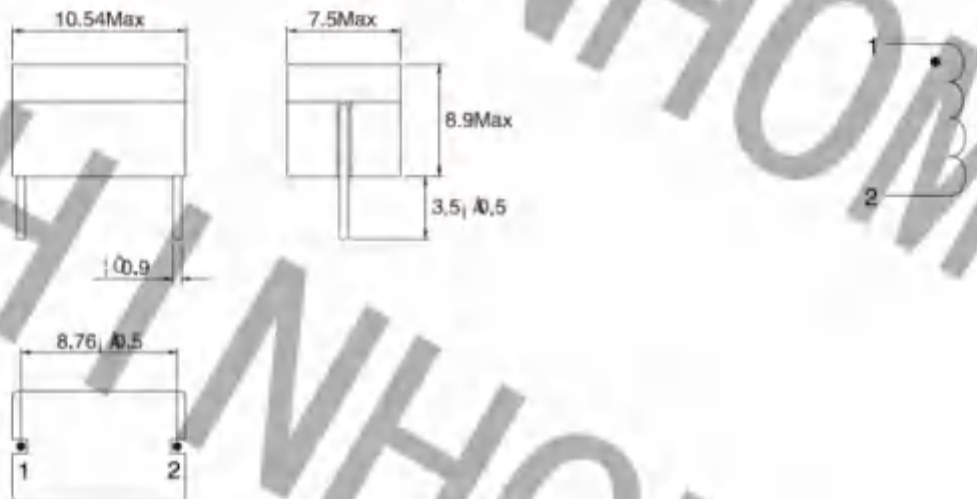
- Current Rating up to 80Apk
- Inductance Range: 0.14 μ H to 0.31 μ H
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- Compliant to RoHS directive 2002/95/EC

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance $L_0(\mu H) \pm 15\%$ @0Adc	Heat rating current DC (A)	Saturation current DC (A)	DCR Max. (m Ω)
HQ1009-R14Y	0.14	40	80	$0.49 \pm 5\%$
HQ1009-R16Y	0.16	40	70	$0.49 \pm 5\%$
HQ1009-R19Y	0.19	40	65	$0.49 \pm 5\%$
HQ1009-R22Y	0.22	40	55	$0.49 \pm 5\%$
HQ1009-R25Y	0.25	40	50	$0.49 \pm 5\%$
HQ1009-R31Y	0.31	40	35	$0.49 \pm 5\%$

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



NOTES:

- The rated current listed is the lower of the saturation current @25°C or the heating current.
- Test Frequency : 100KHz / 1Vdc
- 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 20%
- The part temperature (ambient + temp rise) should not exceed 125°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: $-40^\circ\text{C} \sim +125^\circ\text{C}$.



HIGH CURRENT POWER INDUCTORS

HQ1108 SERIES

COMMON APPLICATIONS:

- PDA/notebook/desktop/server applications
- High current PCL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for Field Programmable Gate Array (FPGA)

FEATURES:

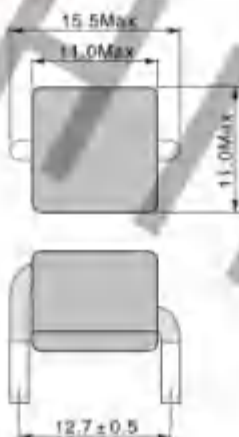
- Size: 15.5mm x 11mm x 8mm
- Current Rating: up to 50A_{pk}
- Inductance Range: 0.14 μ H to 2.25 μ H
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- Compliant to RoHS directive 2002/95/EC

ELECTRICAL CHARACTERISTICS:

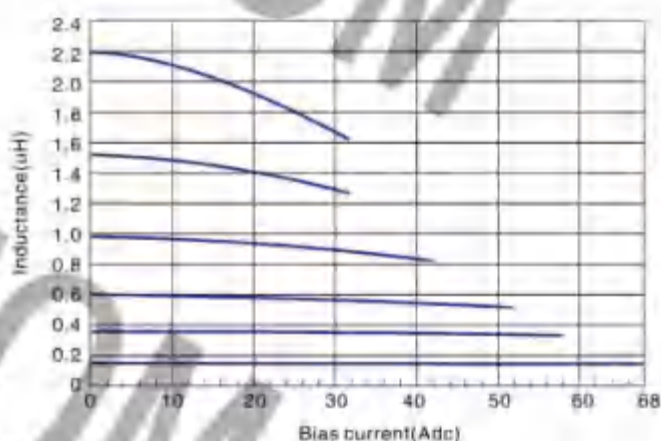
Part Number	Inductance L0(μ H) $\pm 15\%$ @0Adc	Inductance μ H typ. @rated current(μ H)	Heat rating current DC (A)	Saturation current DC (A)	DCR Max (m Ω)
HQ1108-R15	0.15	0.14	38.7	50	0.80
HQ1108-R25	0.25	0.25	38.7	45	0.80
HQ1108-R35	0.35	0.32	25.5	45	1.25
HQ1108-R45	0.45	0.41	25.5	35	1.25
HQ1108-R80	0.8	0.54	20.2	35	2.80
HQ1108-R80	0.8	0.72	20.2	25	2.80
HQ1108-1R0	1.0	0.9	16.5	20	4.10
HQ1108-1R3	1.3	1.17	16.5	20	4.10
HQ1108-1R5	1.5	1.35	15.3	18	4.60
HQ1108-1R8	1.8	1.62	15.3	18	4.60
HQ1108-2R2	2.2	1.98	14.0	16	5.50
HQ1108-2R5	2.5	2.25	14.0	16	5.50

PHYSICAL CHARACTERISTICS:

Dimensions (mm)



DC BIAS CURRENT CHARACTERISTICS:



NOTES:

- The rated current listed is the lower of the saturation current @ 25°C or the heating current.
- Test Frequency: 100KHz / 0.1Vdc
- Testing Instrument: L: HP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc: CH16502, Agilent33420A MICRO OHMMETER
- Heat Rated Current (I_{rms}) will cause the coil temperature rise approximately $\Delta T = 40^\circ\text{C}$ without core loss.
- Saturation Current (I_{sat}) will cause L0 to drop approximately 10%.
- The part temperature (ambient + temp rise) should not exceed 125°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: $-40^\circ\text{C} \sim +125^\circ\text{C}$

THROUGH-HOLE RADIAL UL TUBE POWER CHOKES

LCHB0406 SERIES

FEATURES:

- Wire-wound Construction
- Polyolefin Shrink Tubing
- Excellent heat resistance
- Excellent environmental characteristics
- High reliability

APPLICATIONS:

- Power Supplies
- SCR and TRIAC Controls
- RFI Suppression
- Filters
- Switching Regulators



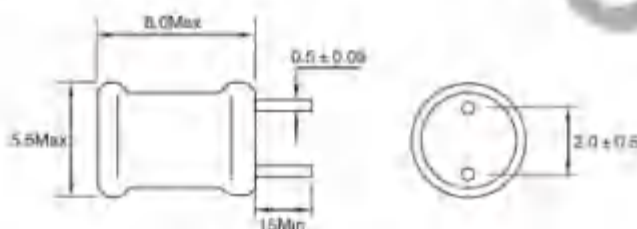
ELECTRICAL CHARACTERISTICS:

Part No.	Inductance (μ H)	Q Min.	Q Test Freq.	SFR (MHz) Min.	DCR (%) Max.	Rated DC Current (mA)Max.	Part No.	Inductance (μ H)	Q Min.	Q Test Freq.	SFR (MHz) Min.	DCR (%) Max.	Rated DC Current (mA)Max.
LCHB0406-1R0M	1.0	100	7.96MHz	120.00	0.035	3000	LCHB0406-151K	150.0	65	7.96MHz	4.20	1.300	350
LCHB0406-1R2M	1.2	100	7.96MHz	120.00	0.038	1950	LCHB0406-181K	180.0	65	7.96MHz	3.80	1.300	320
LCHB0406-1R5M	1.5	100	7.96MHz	120.00	0.075	1900	LCHB0406-221K	220.0	65	7.96MHz	2.80	1.800	300
LCHB0406-1R8M	1.8	100	7.96MHz	120.00	0.110	1400	LCHB0406-271K	270.0	60	7.96MHz	2.40	1.800	275
LCHB0406-2R2M	2.2	100	7.96MHz	100.00	0.120	1750	LCHB0406-331K	330.0	50	7.96MHz	2.20	2.200	280
LCHB0406-2R7M	2.7	100	7.96MHz	90.00	0.125	1650	LCHB0406-391K	390.0	50	7.96MHz	2.00	2.700	270
LCHB0406-3R0M	3.3	100	7.96MHz	75.00	0.130	1600	LCHB0406-471K	470.0	50	7.96MHz	1.70	2.800	260
LCHB0406-3R9M	3.9	100	7.96MHz	70.00	0.135	1450	LCHB0406-561K	560.0	50	7.96MHz	1.50	2.900	250
LCHB0406-4R7K	4.7	100	7.96MHz	90.00	0.140	1320	LCHB0406-681K	680.0	50	7.96MHz	1.30	4.600	170
LCHB0406-5R6K	5.6	100	7.96MHz	45.00	0.145	1200	LCHB0406-821K	820.0	50	7.96MHz	1.10	3.700	155
LCHB0406-6R8K	6.8	100	7.96MHz	30.00	0.150	1150	LCHB0406-102K	1000.0	40	25.00Hz	1.00	6.700	150
LCHB0406-8R2K	8.2	100	7.96MHz	22.00	0.160	1100	LCHB0406-110K	1200.0	50	25.00Hz	0.90	8.200	140
LCHB0406-100K	10.0	80	2.52MHz	20.00	0.230	1000	LCHB0406-152K	1500.0	80	25.00Hz	0.80	13.000	120
LCHB0406-120K	12.0	80	2.52MHz	17.00	0.240	770	LCHB0406-162K	1600.0	70	25.00Hz	0.80	15.000	110
LCHB0406-150K	15.0	80	2.52MHz	16.00	0.250	820	LCHB0406-222K	2200.0	60	25.00Hz	0.80	17.000	100
LCHB0406-180K	18.0	80	2.52MHz	12.00	0.330	860	LCHB0406-272K	2700.0	80	25.00Hz	0.80	19.000	90
LCHB0406-220K	22.0	80	2.52MHz	10.00	0.450	800	LCHB0406-332K	3300.0	70	25.00Hz	0.70	26.000	85
LCHB0406-270K	27.0	80	2.52MHz	9.50	0.500	710	LCHB0406-392K	3900.0	70	25.00Hz	0.60	30.000	70
LCHB0406-330K	33.0	80	2.52MHz	8.70	0.700	660	LCHB0406-472K	4700.0	85	25.00Hz		45.000	70
LCHB0406-390K	39.0	70	2.52MHz	8.20	0.740	600	LCHB0406-562K	5600.0	65	25.00Hz		46.000	60
LCHB0406-470K	47.0	70	2.52MHz	7.80	0.760	550	LCHB0406-682K	6800.0	65	25.00Hz		56.000	56
LCHB0406-560K	56.0	60	2.52MHz	7.60	0.800	500	LCHB0406-822K	8200.0	65	25.00Hz		67.000	50
LCHB0406-680K	68.0	60	2.52MHz	6.80	0.900	470	LCHB0406-103K	10000.0	45	79.6kHz		72.000	47
LCHB0406-820K	82.0	60	2.52MHz	6.30	0.930	430	LCHB0406-153K	15000.0	45	79.6kHz		130.000	35
LCHB0406-101K	100.0	45	7.96kHz	6.00	1.000	400	LCHB0406-223K	22000.0	45	79.6kHz		160.000	34
LCHB0406-121K	120.0	45	7.96kHz	5.80	1.000	370	LCHB0406-333K	33000.0	45	79.6kHz		180.000	30

Note1: Kr $\pm$ 10%, Mr $\pm$ 20%

PHYSICAL CHARACTERISTICS:

Dimension: mm



Testing: LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent inductance)

QOC: (SMDTech 188) Microohmmeter

QOC Max. Current inductance by 10%

Operating temperature: -55°C to +125°C

Shrink tube: Flame retardant UL type VW-1

Marking: Inductance and tolerance

Note: All specifications subject to change without notice.

THROUGH-HOLE RADIAL UL TUBE POWER CHOKES

LCHB0608 SERIES

FEATURES:

- Wire-wound Construction
- Polyolefin Shrink Tubing
- Excellent heat resistance
- Excellent environmental characteristics
- High reliability

APPLICATIONS:

- Power Supply
- SCR and TRIAC Controls
- RFI Suppression
- Filters
- Switching Regulators



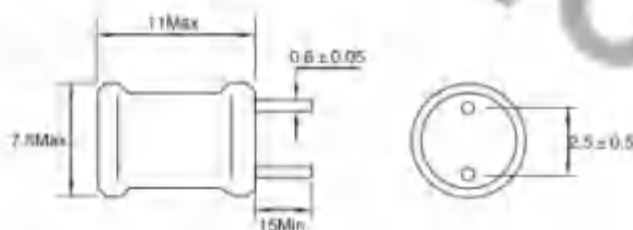
ELECTRICAL CHARACTERISTICS:

Part No.	L @ 1KHz (uH)	Q Min.	Q Test Freq.	DCR (Ω) Max.	Rated DC Current (mA) Max.	Part No.	L @ 1KHz (uH)	Q Min.	Q Test Freq.	DCR (Ω) Max.	Rated DC Current (mA) Max.
LCHB0608-3R3K	3.3	20	7.96MHz	0.016	3500	LCHB0608-392K	3900.0	70	252kHz	11.700	105
LCHB0608-4R7K	4.7	20	7.96MHz	0.020	3000	LCHB0608-472K	4700.0	70	252kHz	13.800	93
LCHB0608-6R8K	6.8	20	7.96MHz	0.022	2500	LCHB0608-562K	5600.0	70	252kHz	16.600	85
LCHB0608-100K	10.0	20	2.52MHz	0.039	2000	LCHB0608-682K	6800.0	70	252kHz	19.600	80
LCHB0608-150K	15.0	30	2.52MHz	0.045	1700	LCHB0608-822K	8200.0	70	252kHz	25.200	70
LCHB0608-220K	22.0	30	2.52MHz	0.062	1400	LCHB0608-102K	10000.0	70	79.6kHz	30.500	63
LCHB0608-330K	33.0	30	2.52MHz	0.100	1100	LCHB0608-122K	12000.0	50	79.6kHz	33.800	60
LCHB0608-470K	47.0	30	2.52MHz	0.150	950	LCHB0608-152K	15000.0	50	79.6kHz	45.400	55
LCHB0608-680K	68.0	30	2.52MHz	0.220	800	LCHB0608-183K	18000.0	50	79.6kHz	50.400	50
LCHB0608-101K	100.0	20	796kHz	0.350	650	LCHB0608-223K	22000.0	50	79.6kHz	60.000	45
LCHB0608-151K	150.0	20	796kHz	0.430	540	LCHB0608-300K	30000.0	50	79.6kHz	91.300	40
LCHB0608-221K	220.0	20	796kHz	0.800	450	LCHB0608-332K	33000.0	50	79.6kHz	99.500	38
LCHB0608-331K	330.0	20	796kHz	1.500	360	LCHB0608-383K	38000.0	50	79.6kHz	140.000	32
LCHB0608-471K	470.0	20	796kHz	1.800	300	LCHB0608-475K	47000.0	50	79.6kHz	160.000	30
LCHB0608-681K	680.0	20	796kHz	2.500	250	LCHB0608-502K	50000.0	50	79.6kHz	175.000	29
LCHB0608-102K	1000.0	100	252kHz	3.200	200	LCHB0608-563K	56000.0	50	79.6kHz	230.000	28
LCHB0608-122K	1200.0	70	252kHz	3.500	180	LCHB0608-683K	68000.0	50	79.6kHz	262.000	25
LCHB0608-152K	1500.0	70	252kHz	4.500	170	LCHB0608-822K	82000.0	50	79.6kHz	312.000	23
LCHB0608-182K	1800.0	70	252kHz	5.000	155	LCHB0608-104K	100000.0	30	25.2kHz	380.000	20
LCHB0608-222K	2200.0	70	252kHz	6.600	140	LCHB0608-124K	120000.0	30	25.2kHz	450.000	18
LCHB0608-272K	2700.0	70	252kHz	7.200	125	LCHB0608-154K	150000.0	30	25.2kHz	520.000	16
LCHB0608-332K	3300.0	70	252kHz	10.500	115						

Note: L, K= ± 10%, M= ± 20%

PHYSICAL CHARACTERISTICS:

Dimension: mm



Testing: IPR (probe measured @ 1KHz @ 0.1V HP 4284A)
 (Equivalent acceptable)
 DCR: Qualified 1880 Milliohmeter
 DCR Max. allows inductance by 10%
 Operating temperature: -55°C to +125°C
 Shrinktube: Flame retardant UL type VW-1
 Marking: Inductance and tolerance
 Note: All specifications subject to change without notice.

THROUGH-HOLE RADIAL UL TUBE POWER CHOKES

LCHB0707 SERIES

FEATURES:

- Wire-wound Construction
- Polyolefin Shrink Tubing
- Excellent heat resistance
- Excellent environmental characteristics
- High reliability

APPLICATIONS:

- Power Supplies
- SCR and TRIAC Controls
- RFI Suppression
- Filters
- Switching Regulators



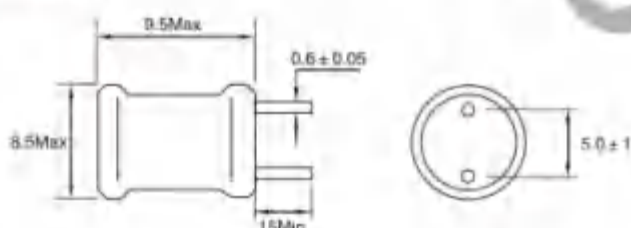
ELECTRICAL CHARACTERISTICS:

Part No.	L @ 1KHz (uH)	Q Min	Q Test Freq.	SRF (MHz) typ	DCR(D) Max.	Rated Current (A)Max.	
						I sat	I rms
LCHB0707-1R0M	1.0	10	7.96MHz	70.0	0.006	6.60	5.00
LCHB0707-1R5M	1.5	10	7.96MHz	56.0	0.008	6.40	4.30
LCHB0707-2R2M	2.2	10	7.96MHz	45.0	0.011	4.00	3.70
LCHB0707-3R3M	3.3	10	7.96MHz	36.0	0.018	3.60	2.90
LCHB0707-4R7M	4.7	10	7.96MHz	29.0	0.022	3.10	2.60
LCHB0707-6R8M	6.8	10	7.96MHz	24.0	0.028	2.50	2.30
LCHB0707-100K	10.0	20	2.52MHz	19.0	0.043	2.10	1.90
LCHB0707-150K	15.0	20	2.52MHz	15.0	0.056	1.70	1.60
LCHB0707-220K	22.0	20	2.52MHz	12.0	0.086	1.40	1.30
LCHB0707-330K	33.0	20	2.52MHz	9.4	0.140	1.10	1.00
LCHB0707-470K	47.0	20	2.52MHz	7.6	0.170	0.96	0.94
LCHB0707-680K	68.0	20	2.52MHz	6.2	0.280	0.78	0.73
LCHB0707-101K	100.0	20	796kHz	5.0	0.330	0.66	0.67
LCHB0707-151K	150.0	20	796kHz	4.0	0.560	0.53	0.52
LCHB0707-221K	220.0	20	796kHz	3.2	0.720	0.44	0.46
LCHB0707-331K	330.0	20	796kHz	2.5	1.100	0.36	0.37
LCHB0707-471K	470.0	20	796kHz	2.0	1.700	0.30	0.30
LCHB0707-681K	680.0	20	796kHz	1.7	2.300	0.25	0.26
LCHB0707-102K	1000.0	70	252kHz	1.3	4.300	0.20	0.19
LCHB0707-152K	1500.0	50	252kHz	1.3	5.000	0.17	0.16

Note: 1. K=± 10%, M=± 20%.

PHYSICAL CHARACTERISTICS:

Dimension: mm



Testing: LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent acceptable)

ROC: QuadTech 1680 Milliohmmeter

DC Max: Lowers inductance by 10%

Operating temperature: -55°C to +125°C

Shrink tube: Flame retardant UL type VW-1

Marking: Inductance and tolerance

Note: All specifications subject to change without notice.

THROUGH-HOLE RADIAL UL TUBE POWER CHOKES

LCHB0806 SERIES

FEATURES:

- Wire-wound Construction
- Polyolefin Shrink Tubing
- Excellent heat resistance
- Excellent environmental characteristics
- High reliability

APPLICATIONS:

- Power Supplies
- SCR and TRIAC Controls
- RFI Suppression
- Filters
- Switching Regulators



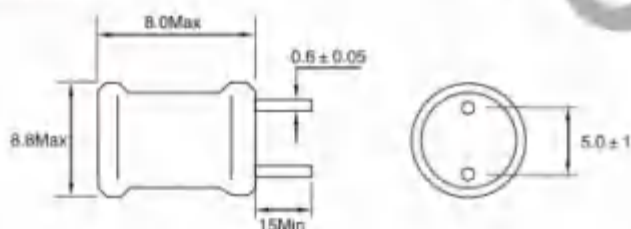
ELECTRICAL CHARACTERISTICS:

Part Number LCHB0806--	Marking	Inductance L(μH) @1.0KHz,0.1V	DCR(Ω)	IDC(A)
220K	220	22	0.11	1.27
270K	270	27	0.14	1.14
330K	330	33	0.17	1.03
390K	390	39	0.19	0.95
470K	470	47	0.23	0.87
560K	560	56	0.26	0.80
680K	680	68	0.28	0.72
820K	820	82	0.39	0.66
101K	101	100	0.43	0.59
121K	121	120	0.54	0.54
151K	151	150	0.64	0.48
181K	181	180	0.74	0.44
221K	221	220	0.96	0.40
271K	271	270	1.12	0.36
331K	331	330	1.48	0.33
391K	391	390	1.66	0.30
471K	471	470	1.91	0.27
561K	561	560	2.31	0.25
681K	681	680	2.67	0.23
821K	821	820	3.10	0.21
102K	102	1000	4.45	0.19

Note:1. K= ± 10%, M= ± 20%

PHYSICAL CHARACTERISTICS:

Dimension: mm



Testing: LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent Acceptable)

DCR: QuedTech 1680 Milliohmeter

IDC Max: Lowers inductance by 10%

Operating temperature: -55°C to +125°C

Shrink tube: Flame retardant UL type VW-1

Marking: Inductance and tolerance

Note: All specifications subject to change without notice.

THROUGH-HOLE RADIAL UL TUBE POWER CHOKES

LCHB0807 SERIES

FEATURES:

- Wire-wound Construction
- Polyolefin Shrink Tubing
- Excellent heat resistance
- Excellent environmental characteristics
- High reliability

APPLICATIONS:

- Power Supplies
- SCR and TRIAC Controls
- RFI Suppression
- Filters
- Switching Regulators



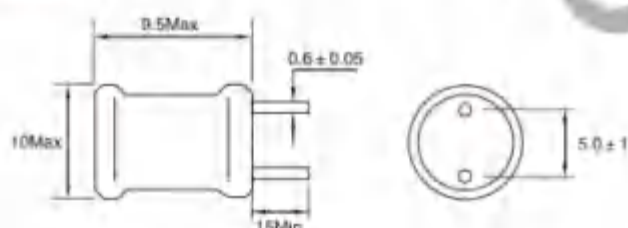
ELECTRICAL CHARACTERISTICS:

Part No.	L @ 1KHz (uH)	Q Min.	Q Test Freq.	SRF (MHz) Typ.	DCR(Ω) Max.	Rated Current (A)Max.	
						I _{sat}	I _{rms}
LCHB0807-2R2M	2.2	10	7.96MHz	60.0	0.011	5.50	4.00
LCHB0807-3R3M	3.3	10	7.96MHz	38.0	0.013	3.80	3.40
LCHB0807-4R7M	4.7	10	7.96MHz	30.0	0.017	3.70	3.00
LCHB0807-6R8M	6.8	10	7.96MHz	24.0	0.023	2.60	2.60
LCHB0807-100K	10.0	20	2.52MHz	19.0	0.031	2.50	2.20
LCHB0807-150K	15.0	20	2.52MHz	15.0	0.042	2.00	1.90
LCHB0807-220K	22.0	20	2.52MHz	12.0	0.070	1.60	1.50
LCHB0807-330K	33.0	20	2.52MHz	10.0	0.092	1.30	1.20
LCHB0807-470K	47.0	20	2.52MHz	8.2	0.130	1.10	1.00
LCHB0807-680K	68.0	20	2.52MHz	6.6	0.160	0.91	0.91
LCHB0807-101K	100.0	15	796kHz	5.4	0.230	0.75	0.61
LCHB0807-151K	150.0	15	796kHz	4.3	0.400	0.61	0.61
LCHB0807-221K	220.0	15	796kHz	3.5	0.530	0.50	0.53
LCHB0807-331K	330.0	15	796kHz	2.8	0.780	0.41	0.44
LCHB0807-471K	470.0	10	796kHz	2.3	1.000	0.34	0.39
LCHB0807-681K	680.0	10	796kHz	1.9	1.500	0.28	0.32
LCHB0807-102K	1000.0	20	252kHz	1.5	2.200	0.23	0.26
LCHB0807-152K	1500.0	30	252kHz	1.2	3.500	0.18	0.21

Note: 1. K is ± 10%, M is ± 20%

PHYSICAL CHARACTERISTICS:

Dimension: mm



Testing: LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent acceptable)

ROC: QuadTech 1680 Milliohmmeter

IDC Max: Lowers inductance by 10%

Operating temperature: -55°C to +125°C

Shrink tube: Flame retardant UL type VW-1

Marking: Inductance and tolerance

Note: All specifications subject to change without notice.

THROUGH-HOLE RADIAL UL TUBE POWER CHOKES

LCHB0810 SERIES

FEATURES:

- Wire-wound Construction
- Polyolefin Shrink Tubing
- Excellent heat resistance
- Excellent environmental characteristics
- High reliability

APPLICATIONS:

- Power Supplies
- SCR and TRIAC Controls
- RFI Suppression
- Filters
- Switching Regulators



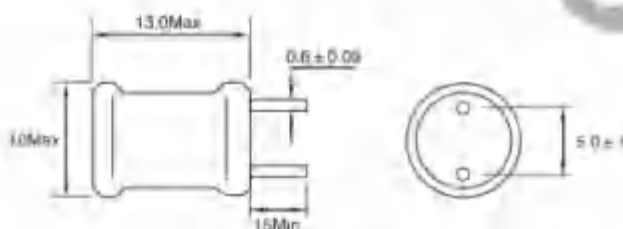
ELECTRICAL CHARACTERISTICS:

Part No.	Inductance (uH)	Q Min	Q Test Freq.	SRF (MHz) Typ.	DCR (Ω) Max.	Rated DC Current (mA)Max.
LCHB0810-3R3M	3.3	30	7.96kHz	65.00	0.012	5000
LCHB0810-3R9K	3.9	30	7.96kHz	65.00	0.014	4500
LCHB0810-4R7K	4.7	30	7.96kHz	45.00	0.016	4300
LCHB0810-5R6K	5.6	30	7.96kHz	38.00	0.020	3900
LCHB0810-6R8K	6.8	30	7.96kHz	27.00	0.022	3700
LCHB0810-8R2K	8.2	30	7.96kHz	21.00	0.024	3500
LCHB0810-100K	10.0	50	2.52MHz	17.00	0.025	3200
LCHB0810-150K	15.0	50	2.52MHz	14.00	0.027	3000
LCHB0810-220K	22.0	50	2.52MHz	13.00	0.033	2800
LCHB0810-330K	33.0	50	2.52MHz	10.00	0.039	2600
LCHB0810-470K	47.0	50	2.52MHz	11.00	0.047	2400
LCHB0810-680K	68.0	50	2.52MHz	10.00	0.052	2100
LCHB0810-100K	100.0	50	2.52MHz	8.50	0.075	1900
LCHB0810-150K	150.0	40	2.52MHz	7.70	0.082	1700
LCHB0810-220K	220.0	40	2.52MHz	6.70	0.100	1500
LCHB0810-330K	330.0	40	2.52MHz	6.40	0.150	1300
LCHB0810-470K	470.0	30	2.52MHz	5.80	0.180	1200
LCHB0810-680K	680.0	30	2.52MHz	5.20	0.200	1100
LCHB0810-101K	100.0	30	796kHz	4.40	0.200	900
LCHB0810-151K	150.0	30	796kHz	4.20	0.220	850
LCHB0810-221K	220.0	30	796kHz	3.70	0.240	720
LCHB0810-331K	330.0	20	796kHz	3.30	0.300	650
LCHB0810-471K	470.0	20	796kHz	3.30	0.350	600
LCHB0810-271K	270.0	20	796kHz	2.90	0.400	550
LCHB0810-331K	330.0	20	796kHz	2.50	0.470	520
LCHB0810-391K	390.0	20	796kHz	2.40	0.550	480
LCHB0810-471K	470.0	20	796kHz	2.20	0.600	450
LCHB0810-561K	560.0	20	796kHz	2.00	1.000	390
LCHB0810-681K	680.0	20	796kHz	1.80	1.200	340
LCHB0810-821K	820.0	20	796kHz	1.70	1.500	310
LCHB0810-102K	1000.0	40	252kHz	1.50	1.800	280
LCHB0810-122K	1200.0	40	252kHz	1.40	2.000	250
LCHB0810-152K	1500.0	40	252kHz	1.30	2.400	230
LCHB0810-182K	1800.0	40	252kHz	1.10	2.800	210
LCHB0810-222K	2200.0	40	252kHz	1.00	3.300	180
LCHB0810-272K	2700.0	40	252kHz	0.88	5.000	170
LCHB0810-332K	3300.0	40	252kHz	0.78	5.600	150
LCHB0810-392K	3900.0	40	252kHz	0.72	6.200	140
LCHB0810-472K	4700.0	40	252kHz	0.65	7.000	130
LCHB0810-562K	5600.0	40	252kHz	0.58	9.100	120
LCHB0810-682K	6800.0	40	252kHz	0.55	10.000	110
LCHB0810-822K	8200.0	20	252kHz	0.50	15.000	100
LCHB0810-102K	10000.0	20	79.6kHz	0.42	24.000	90
LCHB0810-473K	47000.0	60	79.6kHz	0.20	80.000	40
LCHB0810-104K	100000.0	30	79.6kHz	0.14	180.000	20

Note1: Kv ± 10%, Mv ± 20%

PHYSICAL CHARACTERISTICS:

Dimension Unit: mm



Testing: LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent Impedance)

QOC: (Sartech 188) Microohmmeter

DC Max. Current inductance by 10%

Operating temperature: -55°C to +125°C

Shrink tube: Flame retardant UL type VW-1

Marking: Inductance and tolerance

Note: All specifications subject to change without notice.

THROUGH-HOLE RADIAL UL TUBE POWER CHOKES

LCHB0912 SERIES

FEATURES:

- Wire-wound Construction
- Polyolefin Shrink Tubing
- Excellent heat resistance
- Excellent environmental characteristics
- High reliability

APPLICATIONS:

- Power Supplies
- SCR and TRIAC Controls
- RFI Suppression
- Filters
- Switching Regulators



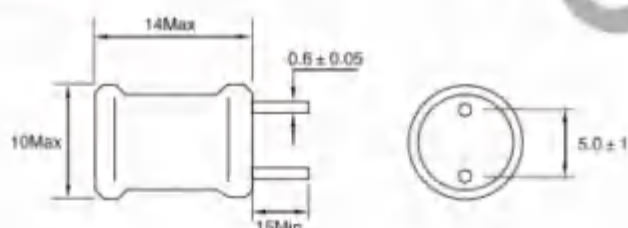
ELECTRICAL CHARACTERISTICS:

Part Number LCHB0912-	Marking	Inductance L(μH) @1.0KHz,0.1V	DCR(Ω)	IDC(A)
100K	100	10	0.027	4.5
120K	120	12	0.031	4.1
150K	150	15	0.036	3.7
180K	180	18	0.049	3.4
220K	220	22	0.055	3.1
270K	270	27	0.062	2.8
330K	330	33	0.079	2.5
390K	390	39	0.087	2.3
470K	470	47	0.099	2.1
560K	560	56	0.13	1.9
680K	680	68	0.14	1.7
820K	820	82	0.16	1.6
101K	101	100	0.21	1.4
121K	121	120	0.24	1.3
151K	151	150	0.32	1.2
181K	181	180	0.35	1.1
221K	221	220	0.45	0.96
271K	271	270	0.61	0.87
331K	331	330	0.69	0.79
391K	391	390	0.78	0.72
471K	471	470	1.0	0.66
561K	561	560	1.2	0.60
681K	681	680	1.4	0.55
821K	821	820	1.8	0.50
102K	102	1000	2.1	0.45

Note:1. K= ± 10%, M= ± 20%

PHYSICAL CHARACTERISTICS:

Dimension: mm



Testing: LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent Acceptable)

RDC: QuedTech 1680 Milliohmmeter

IDC Max: Lowers inductance by 10%

Operating temperature: -55°C to +125°C

Shrink tube: Flame retardant UL type VW-1

Marking: Inductance and tolerance

Note: All specifications subject to change without notice.

THROUGH-HOLE RADIAL UL TUBE POWER CHOKES

LCHB1010 SERIES

FEATURES:

- Wire-wound Construction
- Polyolefin Shrink Tubing
- Excellent heat resistance
- Excellent environmental characteristics
- High reliability

APPLICATIONS:

- Power Supplies
- SCR and TRIAC Controls
- RFI Suppression
- Filters
- Switching Regulators



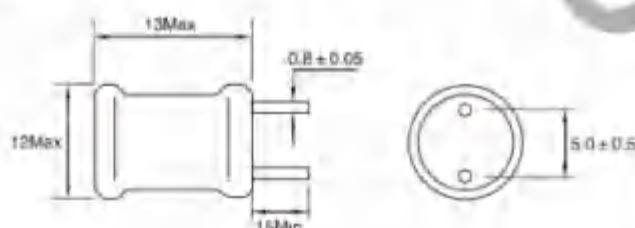
ELECTRICAL CHARACTERISTICS:

Part No.	L @ 1KHz (uH)	Q Min.	Q Test Freq.	SRF (MHz) Typ.	DCR (Ω) Max.	Rated Current (A)Max.	
						I sat	I rms
LCHB1010-3R3M	3.3	10	7.96MHz	36	0.010	8.8	5.9
LCHB1010-4R7M	4.7	10	7.96MHz	28	0.015	7.2	4.8
LCHB1010-6R8M	6.8	10	7.96MHz	18	0.016	6.1	4.8
LCHB1010-100M	10	20	2.52MHz	16	0.025	5.0	3.7
LCHB1010-150M	15	20	2.52MHz	12	0.029	4.2	3.4
LCHB1010-220K	22	20	2.52MHz	9.5	0.040	3.4	2.9
LCHB1010-330K	33	30	2.52MHz	7.0	0.062	2.8	2.3
LCHB1010-470K	47	30	2.52MHz	5.6	0.075	2.3	2.1
LCHB1010-680K	68	20	2.52MHz	4.7	0.130	1.9	1.6
LCHB1010-101K	100	20	796kHz	3.8	0.160	1.6	1.4
LCHB1010-151K	150	20	796kHz	3.1	0.260	1.3	1.1
LCHB1010-221K	220	20	796kHz	2.5	0.330	1.1	1.0
LCHB1010-331K	330	20	796kHz	2.0	0.520	0.88	0.82
LCHB1010-471K	470	10	796kHz	1.6	0.660	0.75	0.72
LCHB1010-681K	680	10	796kHz	1.3	1.100	0.61	0.56
LCHB1010-102K	1000	20	252kHz	1.1	1.400	0.51	0.50
LCHB1010-152K	1500	30	252kHz	0.82	2.400	0.43	0.38
LCHB1010-222K	2200	20	252kHz	0.76	3.200	0.35	0.33
LCHB1010-332K	3300	20	252kHz	0.64	4.900	0.28	0.26
LCHB1010-472K	4700	20	252kHz	0.54	7.600	0.24	0.21
LCHB1010-682K	6800	20	252kHz	0.45	9.800	0.20	0.18
LCHB1010-103K	10000	20	79.6kHz	0.38	18.000	0.17	0.14
LCHB1010-153K	15000	50	79.6kHz	0.29	24.000	0.13	0.12

Note: 1. K = ±10%, M = ±20%

PHYSICAL CHARACTERISTICS:

Dimension: mm



Testing: LCR Bridge measured @ 1KHz 0.1V HP 4204A
(Equivalent acceptable)

RDC: QuadTech 1680 Milliohmmeter

IDC Max: Lowers inductance by 10%

Operating temperature: -55°C to +125°C

Shrink tube: Flame retardant UL type VW-1

Marking: Inductance and tolerance

Note: All specifications subject to change without notice.

THROUGH-HOLE RADIAL UL TUBE POWER CHOKES

LCHB1012 SERIES

FEATURES:

- Wire-wound Construction
- Polyolefin Shrink Tubing
- Excellent heat resistance
- Excellent environmental characteristics
- High reliability

APPLICATIONS:

- Power Supplies
- SCR and TRIAC Controls
- RFI Suppression
- Filters
- Switching Regulators



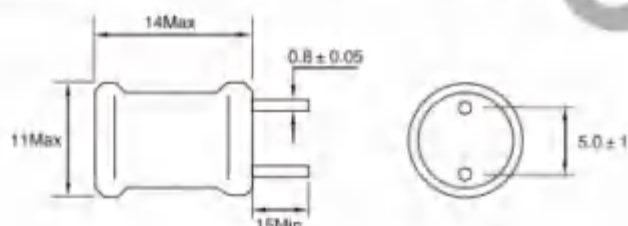
ELECTRICAL CHARACTERISTICS:

Part Number LCHB1012-	Marking	Inductance L(μH) @1.0KHz,0.1V	DCR(Ω)	IDC(A)
100K	100	10	0.022	5.3
120K	120	12	0.023	4.9
150K	150	15	0.026	4.4
180K	180	18	0.033	4.0
220K	220	22	0.037	3.6
270K	270	27	0.048	3.3
330K	330	33	0.055	2.9
390K	390	39	0.073	2.7
470K	470	47	0.083	2.5
560K	560	56	0.092	2.3
680K	680	68	0.12	2.1
820K	820	82	0.14	1.9
101K	101	100	0.16	1.7
121K	121	120	0.20	1.5
151K	151	150	0.23	1.4
181K	181	180	0.31	1.3
221K	221	220	0.34	1.1
271K	271	270	0.40	1.0
331K	331	330	0.52	0.93
391K	391	390	0.65	0.86
471K	471	470	0.71	0.78
561K	561	560	1.0	0.71
681K	681	680	1.0	0.65
821K	821	820	1.3	0.59
102K	102	1000	1.7	0.53

Note:1. K= ± 10%, M= ± 20%

PHYSICAL CHARACTERISTICS:

Dimension: mm



Testing: LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent Acceptable)

RDC: QuedTech 1680 Milliohmmeter

IDC Max: Lowers inductance by 10%

Operating temperature: -55°C to +125°C

Shrink tube: Flame retardant UL type VW-1

Marking: Inductance and tolerance

Note: All specifications subject to change without notice.

THROUGH-HOLE RADIAL UL TUBE POWER CHOKES

LCHB1016 SERIES

FEATURES:

- Wire-wound Construction
- Polyolefin Shrink Tubing
- Excellent heat resistance
- Excellent environmental characteristics
- High reliability

APPLICATIONS:

- Power Supplies
- SCR and TRIAC Controls
- RFI Suppression
- Filters
- Switching Regulators



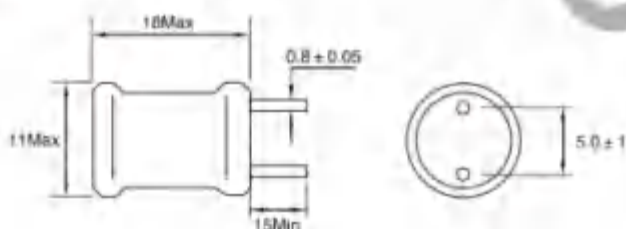
ELECTRICAL CHARACTERISTICS:

Part Number LCHB1016-	Inductance L(μH) @1.0KHz,0.1V	DCR(Ω)	IDC(A)	Part Number LCHB1016-	Inductance L(μH) @1.0KHz,0.1V	DCR(Ω)	IDC(A)
100K	10	0.031	5.0	122K	1200	1.50	0.49
120K	12	0.036	5.0	152K	1500	1.70	0.49
150K	15	0.040	5.0	182K	1800	1.80	0.385
180K	18	0.041	5.0	222K	2200	2.40	0.385
220K	22	0.043	5.0	272K	2700	2.80	0.385
270K	27	0.046	5.0	332K	3300	3.70	0.300
330K	33	0.051	3.6	392K	3900	5.00	0.250
390K	39	0.054	3.6	472K	4700	5.60	0.250
470K	47	0.063	3.6	562K	5600	6.30	0.250
560K	56	0.075	3.0	682K	6800	8.40	0.190
680K	68	0.078	3.0	822K	8200	9.60	0.190
820K	82	0.088	2.6	103K	10000	10.50	0.190
101K	100	0.108	2.0	123K	12000	14.05	0.150
121K	120	0.127	2.0	153K	15000	20.5	0.120
151K	150	0.162	1.6	183K	18000	27.5	0.095
181K	180	0.128	1.3	223K	22000	31.0	0.095
221K	220	0.252	1.3	273K	27000	35.5	0.095
271K	270	0.290	1.3	333K	33000	40.0	0.095
331K	330	0.394	1.0	393K	39000	51.0	0.095
391K	390	0.416	1.0	473K	47000	56.0	0.095
471K	470	0.568	0.8				
561K	560	0.650	0.8				
681K	680	0.740	0.8				
821K	820	1.00	0.62				
102K	1000	1.20	0.55				

Note: 1. K±10%, M±20%

PHYSICAL CHARACTERISTICS:

Dimension: mm



Testing: LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent impedance)

DOC: QuadTech 1680 Millihenmeter

IDC Max: Lowers inductance by 10%

Operating temperature: -55°C to +125°C

Shrink tube: Flame retardant UL type VW-1

Marking: Inductance and tolerance

Note: All specifications subject to change without notice.

THROUGH-HOLE RADIAL UL TUBE POWER CHOKES

LCHB1018 SERIES

FEATURES:

- Wire-wound Construction
- Polyolefin Shrink Tubing
- Excellent heat resistance
- Excellent environmental characteristics
- High reliability

APPLICATIONS:

- Power Supplies
- SCR and TRIAC Controls
- RFI Suppression
- Filters
- Switching Regulators



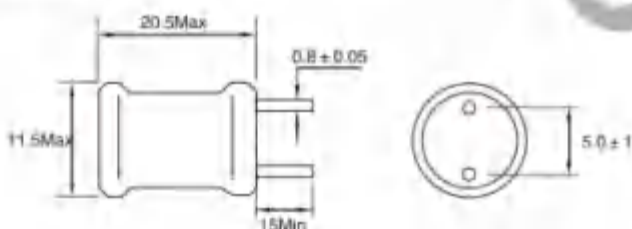
ELECTRICAL CHARACTERISTICS:

Part No.	L @ 1KHz (uH)	DCR(Ω) Max.	Rated Current (A)Max.	
			I sat	I rms
LCHB1018-4R7K	4.7	0.008	10.00	6.00
LCHB1018-6R8K	6.8	0.011	8.00	5.50
LCHB1018-100K	10.0	0.017	7.00	4.50
LCHB1018-150K	15.0	0.022	5.50	4.00
LCHB1018-220K	22.0	0.026	4.50	3.70
LCHB1018-330K	33.0	0.032	3.80	3.30
LCHB1018-470K	47.0	0.035	3.20	3.00
LCHB1018-680K	68.0	0.047	2.60	2.60
LCHB1018-101K	100.0	0.090	2.20	2.00
LCHB1018-151K	150.0	0.129	1.80	1.60
LCHB1018-221K	220.0	0.162	1.50	1.50
LCHB1018-331K	330.0	0.212	1.20	1.20
LCHB1018-471K	470.0	0.380	1.00	1.00
LCHB1018-681K	680.0	0.548	0.84	0.84
LCHB1018-102K	1000.0	0.844	0.66	0.66
LCHB1018-152K	1500.0	1.180	0.55	0.55
LCHB1018-222K	2200	2.000	0.46	0.44
LCHB1018-332K	3300	2.530	0.38	0.38
LCHB1018-472K	4700	3.190	0.32	0.32
LCHB1018-682K	6800	5.690	0.26	0.25
LCHB1018-103K	10000	7.300	0.22	0.22
LCHB1018-153K	15000	10.500	0.18	0.18
LCHB1018-223K	22000	21.800	0.14	0.13
LCHB1018-333K	33000	25.700	0.12	0.12
LCHB1018-473K	47000	36.100	0.10	0.10
LCHB1018-683K	68000	57.300	0.08	0.08
LCHB1018-104K	100000	89.700	0.06	0.06

Note: 1. K=±10%, M=±20%

PHYSICAL CHARACTERISTICS:

Dimension: mm



Testing: LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent acceptable)

DOC: QuadTech 1680 Milliohmmeter

DC Max: Lowers inductance by 10%

Operating temperature: -55°C to +125°C

Shrink tube: Flame retardant UL type VW-1

Marking: Inductance and tolerance

Note: All specifications subject to change without notice.

THROUGH-HOLE RADIAL UL TUBE POWER CHOKES LCHB1213 SERIES

FEATURES:

- Wire-wound Construction
- Polyolefin Shrink Tubing
- Excellent heat resistance
- Excellent environmental characteristics
- High reliability

APPLICATIONS:

- Power Supplies
- SCR and TRIAC Controls
- RFI Suppression
- Filters
- Switching Regulators



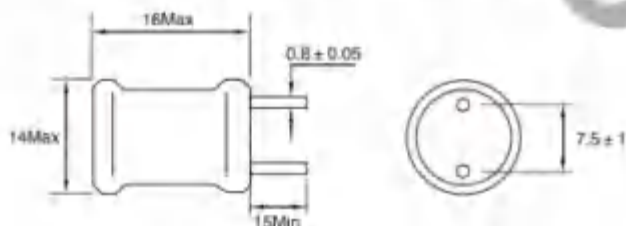
ELECTRICAL CHARACTERISTICS:

Part No.	L @ 1KHz (uH)	DCR(Ω) Max.	Rated Current (A)Max.	
			I _{sat}	I _{rms}
LCHB1213-100M	10	0.023	8.00	5.10
LCHB1213-150K	15	0.028	6.50	4.50
LCHB1213-220K	22	0.035	5.50	4.20
LCHB1213-330K	33	0.043	4.50	3.70
LCHB1213-470K	47	0.052	3.60	3.40
LCHB1213-680K	68	0.068	3.10	3.00
LCHB1213-101K	100	0.097	2.60	2.50
LCHB1213-151K	150	0.140	2.10	2.10
LCHB1213-221K	220	0.200	1.70	1.70
LCHB1213-331K	330	0.300	1.40	1.40
LCHB1213-471K	470	0.430	1.10	1.10
LCHB1213-681K	680	0.610	0.95	0.99
LCHB1213-102K	1000	1.000	0.78	0.79
LCHB1213-152K	1500	0.300	0.64	0.68
LCHB1213-222K	2200	2.000	0.53	0.55
LCHB1213-332K	3300	3.100	0.43	0.44
LCHB1213-472K	4700	4.400	0.36	0.37
LCHB1213-682K	6800	6.500	0.30	0.30
LCHB1213-103K	10000	10.000	0.24	0.24

Note: L: K=±10%, M=±20%

PHYSICAL CHARACTERISTICS:

Dimension: mm



Testing: LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent acceptable)

RDC: QuadTech 1680 Milliohmmeter

IDC Max: Lowers inductance by 10%

Operating temperature: -55°C to +125°C

Shrink tube: Flame retardant UL type VW-1

Marking: Inductance and tolerance

Note: All specifications subject to change without notice.

THROUGH-HOLE RADIAL UL TUBE POWER CHOKES

LCHB1415 SERIES

FEATURES:

- Wire-wound Construction
- Polyolefin Shrink Tubing
- Excellent heat resistance
- Excellent environmental characteristics
- High reliability

APPLICATIONS:

- Power Supplies
- SCR and TRIAC Controls
- RFI Suppression
- Filters
- Switching Regulators



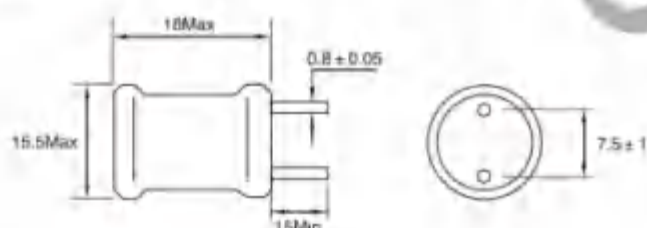
ELECTRICAL CHARACTERISTICS:

Part Number LCHB1415-	Inductance L(μH) @1.0KHz,0.1V	DCR(Ω)	IDC(A)	Part Number LCHB1415-	Inductance L(μH) @1.0KHz,0.1V	DCR(Ω)	IDC(A)
100K	10	0.015	5.0	122K	1200	0.660	1.30
120K	12	0.016	5.0	152K	1500	0.790	1.0
150K	15	0.017	5.0	182K	1800	0.990	1.0
180K	18	0.019	5.0	222K	2200	1.20	0.80
220K	22	0.021	5.0	272K	2700	1.32	0.80
270K	27	0.023	5.0	332K	3300	1.80	0.62
330K	33	0.027	4.0	392K	3900	2.10	0.62
390K	39	0.029	4.0	472K	4700	2.70	0.49
470K	47	0.031	4.0	562K	5600	3.15	0.49
560K	56	0.035	4.0	682K	6800	3.60	0.49
680K	68	0.041	4.0	822K	8200	4.30	0.385
820K	82	0.052	4.0	103K	10000	5.15	0.385
101K	100	0.056	4.0	123K	12000	2.85	0.385
121K	120	0.060	3.3	153K	15000	8.30	0.30
151K	150	0.078	3.3	183K	18000	10.20	0.25
181K	180	0.096	3.3	223K	22000	11.70	0.25
221K	220	0.147	2.6	273K	27000	13.00	0.25
271K	270	0.175	2.6	333K	33000	18.40	0.19
331K	330	0.192	2.0	393K	39000	21.00	0.19
391K	390	0.210	2.0	473K	47000	27.00	0.15
471K	470	0.240	2.0				
561K	560	0.315	1.60				
681K	680	0.360	1.60				
821K	820	0.460	1.30				
102K	1000	0.540	1.30				

Note 1: K=±10%, M=±20%

PHYSICAL CHARACTERISTICS:

Dimension: mm



Testing: LCR Bridge measured @ 1KHz 0.1V HP 4284A
(Equivalent impedance)

DOC: QuadTech 1680 Millihenmeter

IDC Max: Lowers inductance by 10%

Operating temperature: -55°C to +125°C

Shrink tube: Flame retardant UL type VW-1

Marking: Inductance and tolerance

Note: All specifications subject to change without notice.



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

COMMON APPLICATIONS:

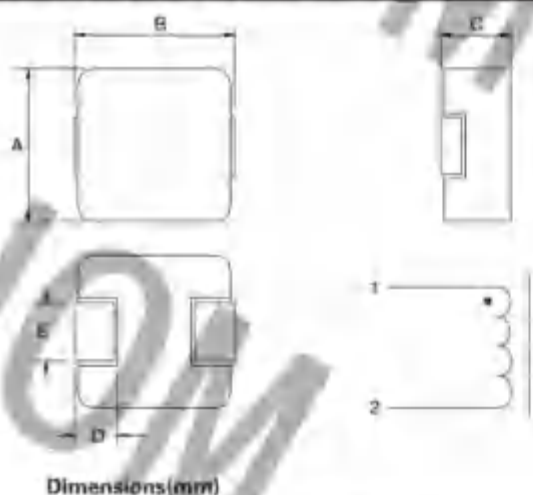
- Excellent for power line DC-DC conversion
- Applications used in power switching
- Personal computers and other handheld electronic equipment.

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L ₀ (uH) ± 20% @0Ade	Heat rating current DC Amps (I _{DC} /A)	Saturation current DC Amps (I _{sat} /A)	DCR Typ. (mΩ)	DCR Max. (mΩ)	Part Number	Inductance L ₀ (uH) ± 20% @0Ade	Heat rating current DC Amps (I _{DC} /A)	Saturation current DC Amps (I _{sat} /A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM0420-R047M	0.047	13	15	2.5	3	LPM0630-R82M	0.82	18	24	4.8	7.8
LPM0420-R15M	0.1	15	12	4.5	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	8.6	14
LPM0420-R47M	0.47	8	8	17.5	19	LPM0630-2R2M	2.2	8	15	12.8	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	56.5	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	58	72
LPM0630-R47M	0.47	17.5	26	4.0	5.3	LPM0630-150M	15	3.0	5	84	105
LPM0630-R68M	0.68	16.0	25	4.8	6.4	LPM0630-220M	22	2.5	4.5	112	165

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 (I_{rms}) will cause the coil temperature rise approximately, ΔT=40°C without core loss.
- Saturation Current (I_{sat}) will cause L₀ to drop approximately 20%
- The part temperature (ambient + temp rise) should not exceed 125°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°C ~ +105°C.



Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)		
LPM 0420	4.05 ± 0.254	4.45 ± 0.254	2.0 max.	0.76 ± 0.3	2.3 ± 0.2		
LPM 0630	6.6 ± 0.2	7.2 ± 0.2	3.0 max.	1.6 ± 0.5	3.0 ± 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% is Standard. Tighter Tolerances Available

COMMON APPLICATIONS:

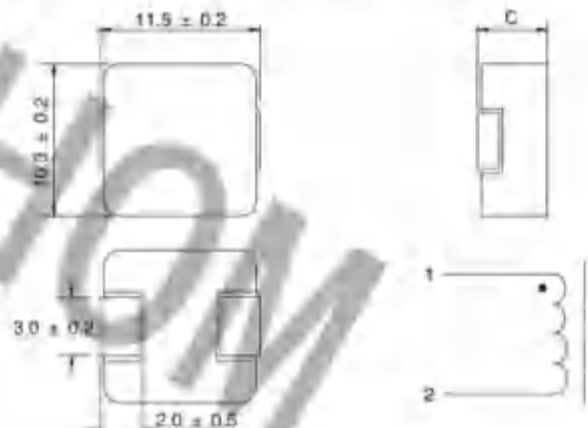
- Excellent for power line DC-DC conversion
- Applications used in power switching
- Personal computers and other handheld electronic equipment.

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ± 20% @0dc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ)	DCR Max. (mΩ)	Part Number	Inductance L0(μH) ± 20% @0dc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM1040-R20M	0.2	36	66	1.8	3.5	LPM1040-5R5M	5.6	8.5	15	18.9	25
LPM1040-R33M	0.33	31	60	2.0	3.8	LPM1040-8R8M	8.8	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-R92M	0.92	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: LHP4264A, CH11005, CH3302, CH1320, CH1320S LCR METER/Rdc; CH1650Z, 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°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: $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$.



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% is
Standard.Tighter Tolerances Available

COMMON APPLICATIONS:

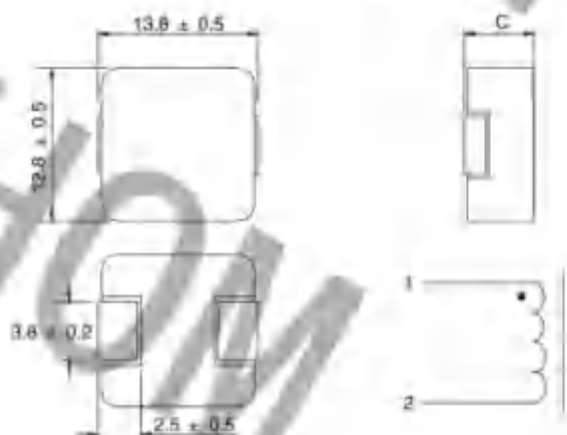
- Excellent for power line DC-DC conversion
- Applications used in power switching
- Personal computers and other
handheld electronic equipment.

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L(μH) ± 20% @0Adc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ)	DCR Max. (mΩ)	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)
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	86.5	1.8	3.5	LPM1260-6R8M	6.8	11.0	18.5	13	17
LPM1240-R47M	0.47	38	65	2.0	4.0	LPM1260-8R2M	8.2	10	17	18	23
LPM1240-R56M	0.56	36	55	2.3	5.0	LPM1260-100M	10	9.5	16	25	30
LPM1240-R68M	0.68	34	54	2.7	6.5	LPM1265-150M	15	9.0	14.5	36	45
LPM1250-R82M	0.82	31	53	3.0	8.5	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	85
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	LPM1275-820M	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 : LHP4264A, CH11005,
CH3302, CH1320, CH1320S LCR
METER/Rdc;CH1650Z, Agilent33420A
MICRO OHMMETER.
- Heat Rated Current (I_{ms}) will cause the coil
temperature rise approximately,
ΔT=40°C without core loss.
- Saturation Current (I_{sat}) will cause L₀ to drop
approximately 20%.
- The part temperature (ambient + temp rise)
should not exceed 125°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°C ~ +105°C.



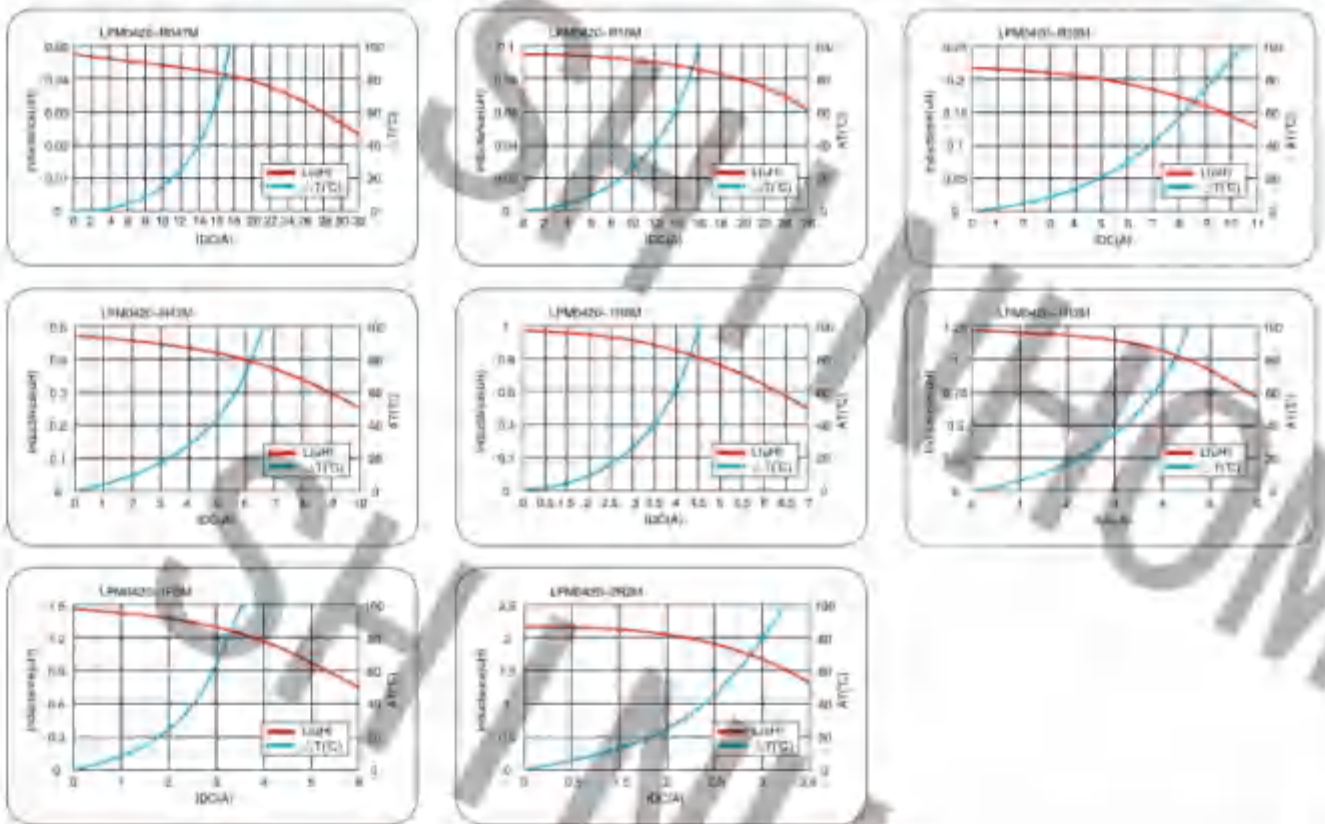
Dimensions(mm)

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

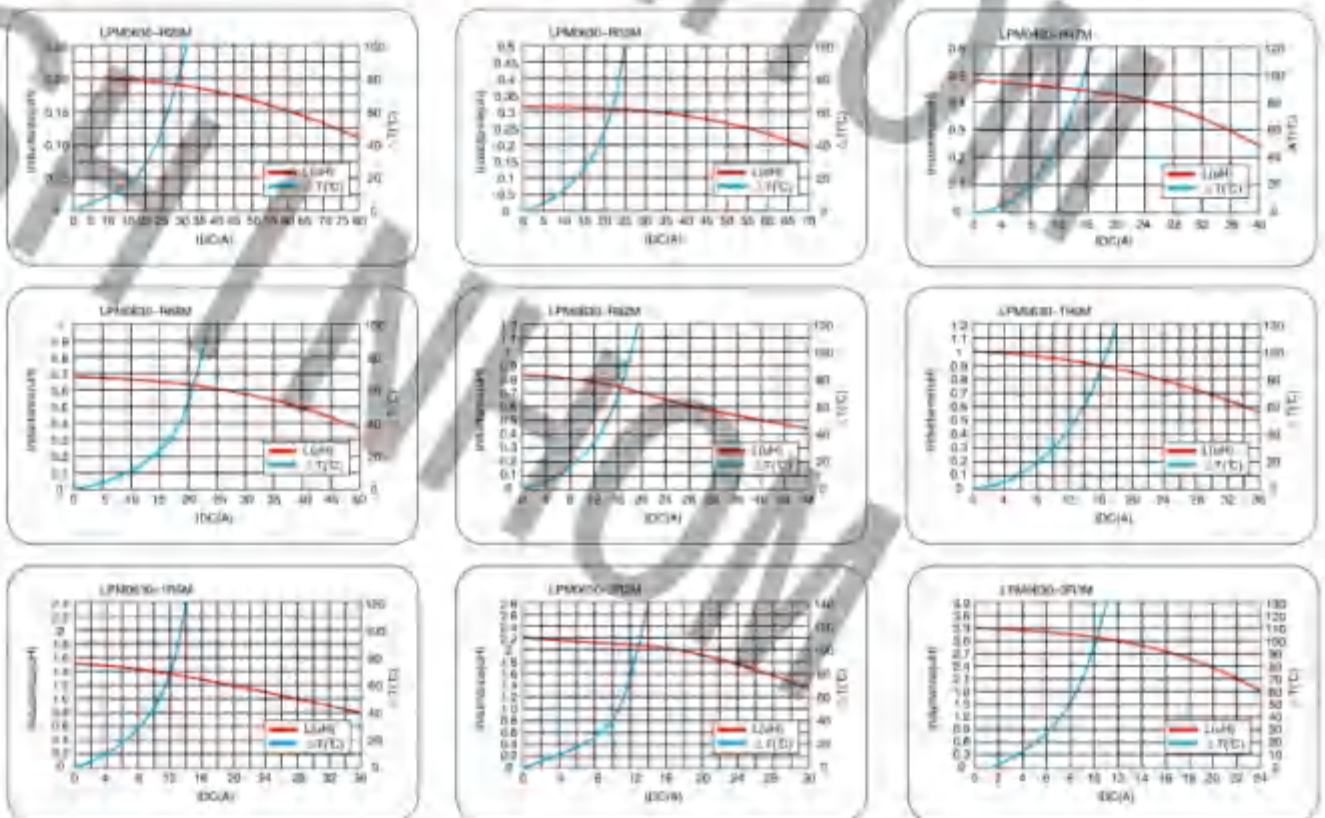
Note:All specifications subject to change without notice.

PERFORMANCE CURVE

LPM0420 Series

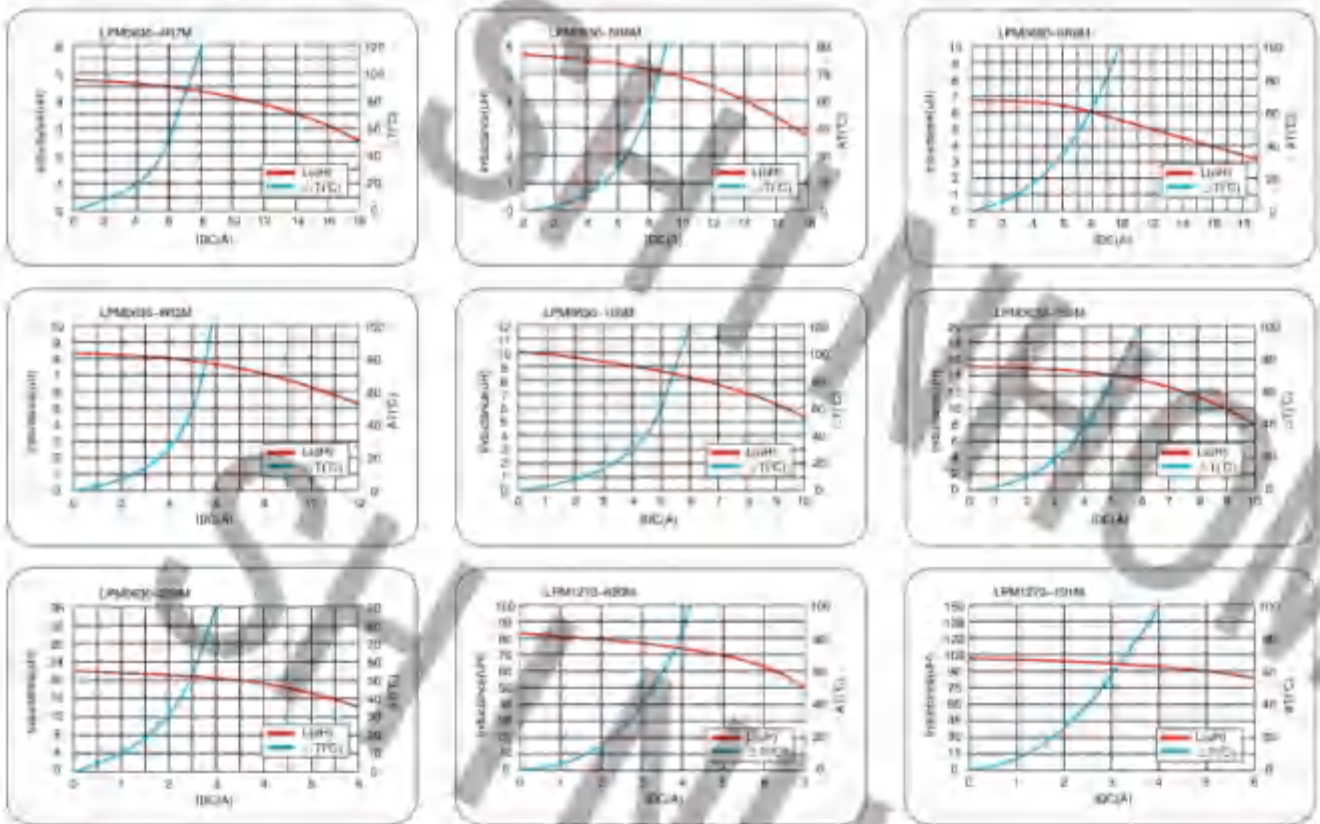


LPM0630 Series

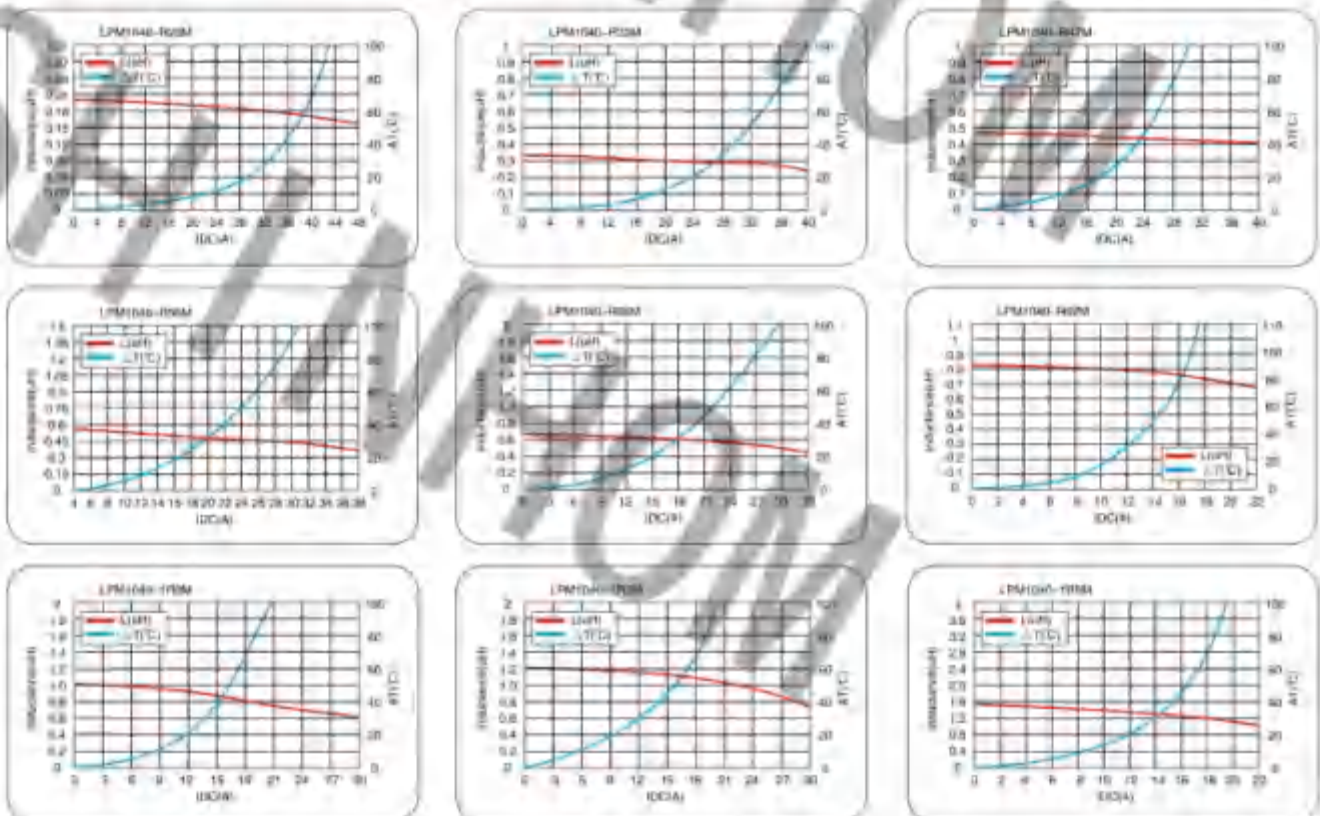


PERFORMANCE CURVE

LPM0630,1270 Series

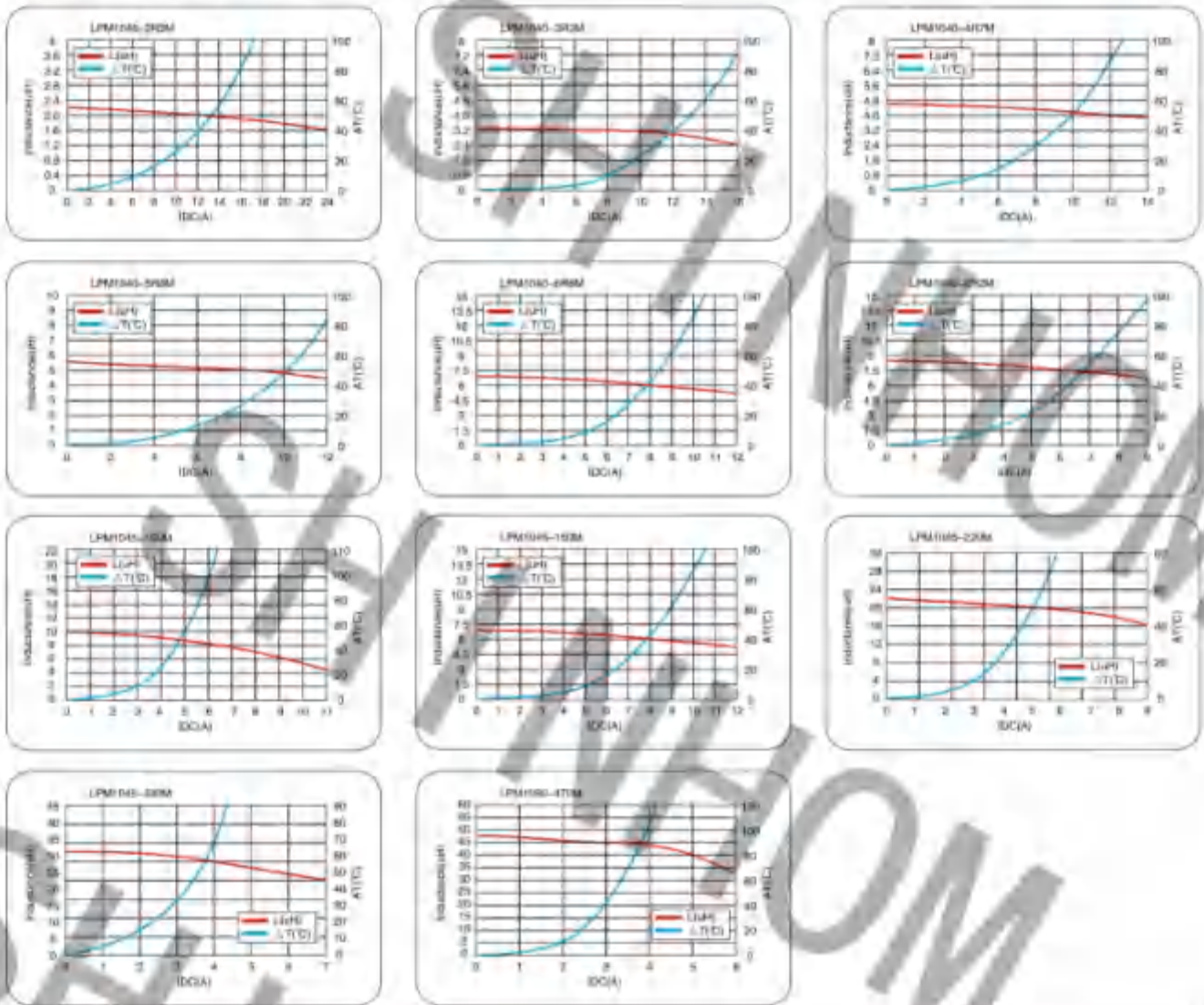


LPM1040 Series

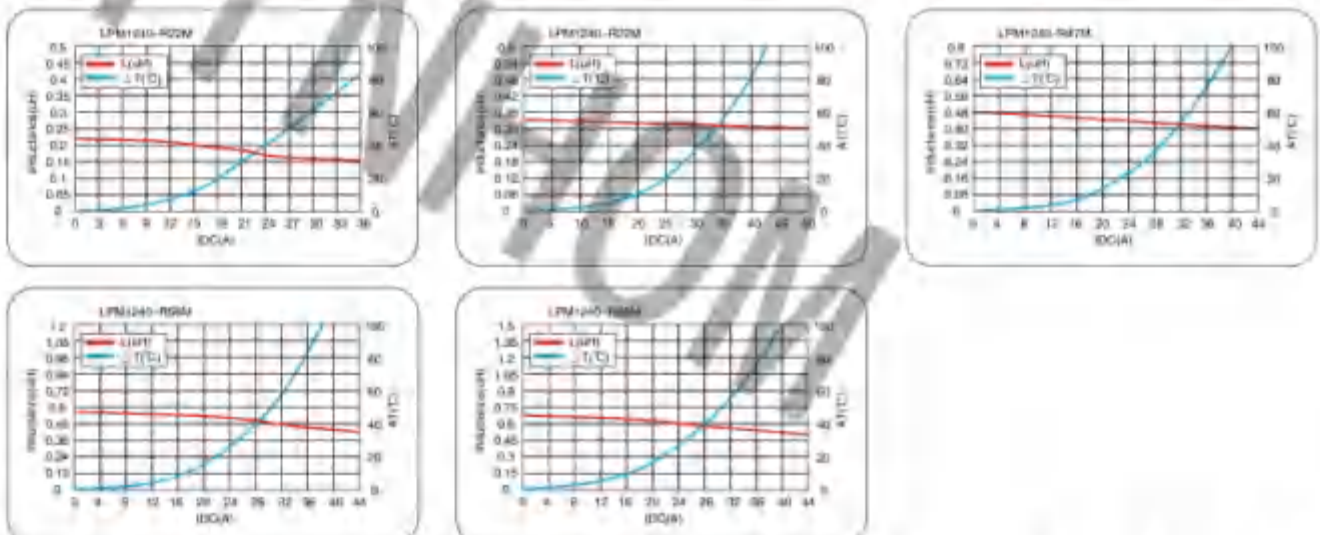


PERFORMANCE CURVE

LPM1040,1045 Series

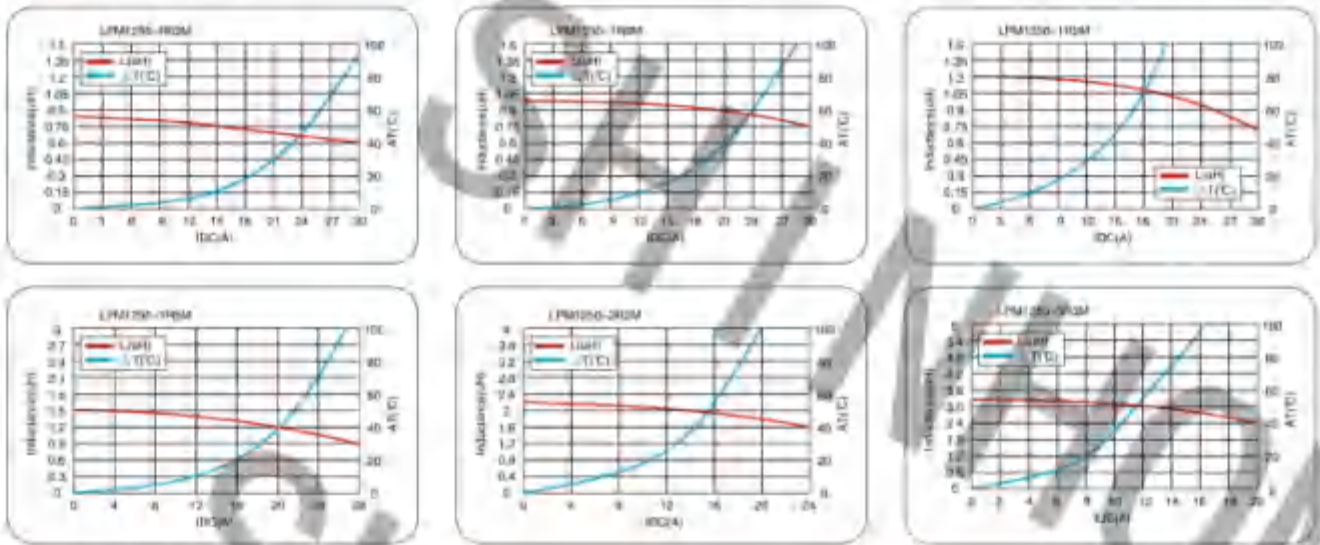


LPM1240 Series

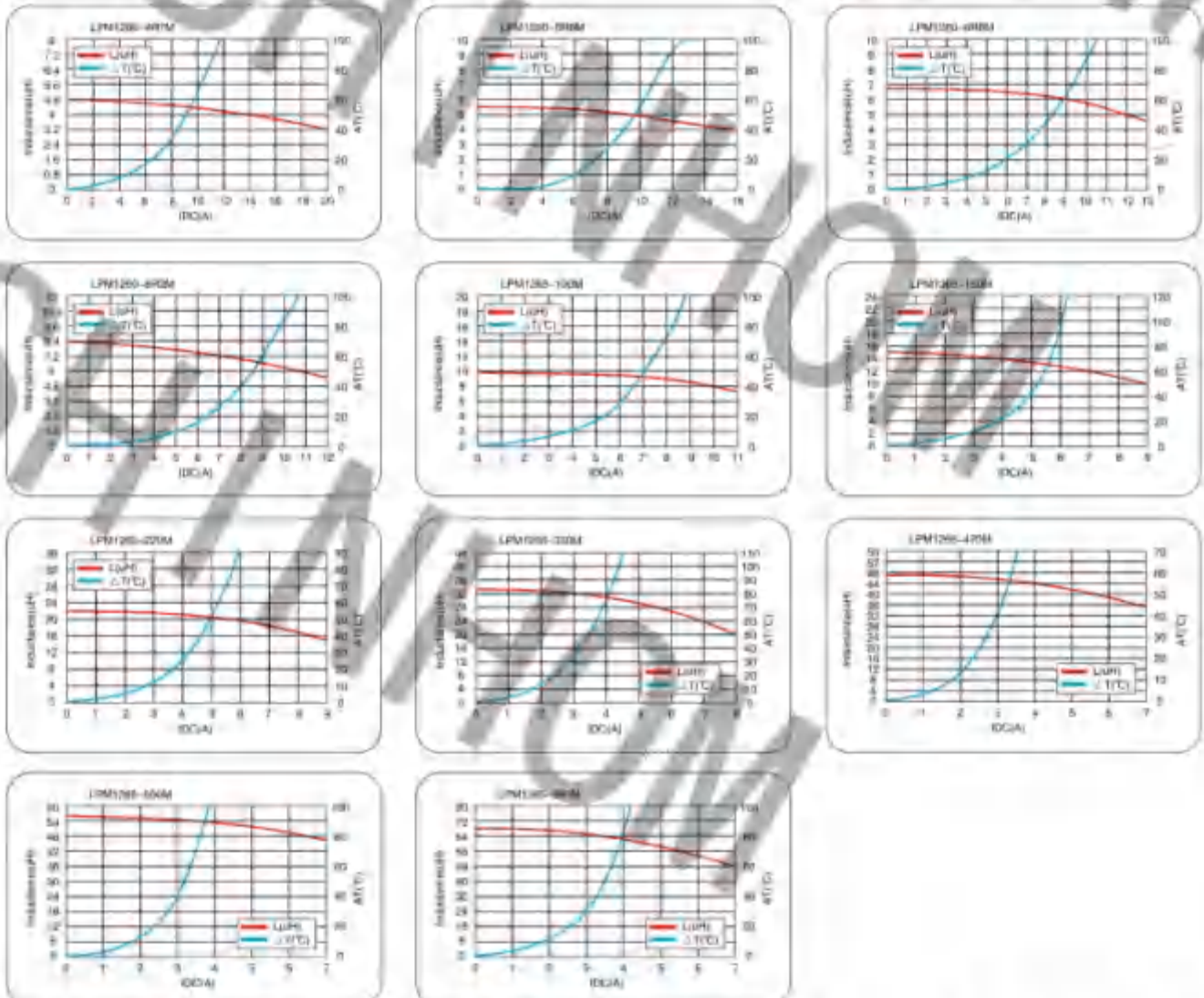


PERFORMANCE CURVE

LPM1250 Series

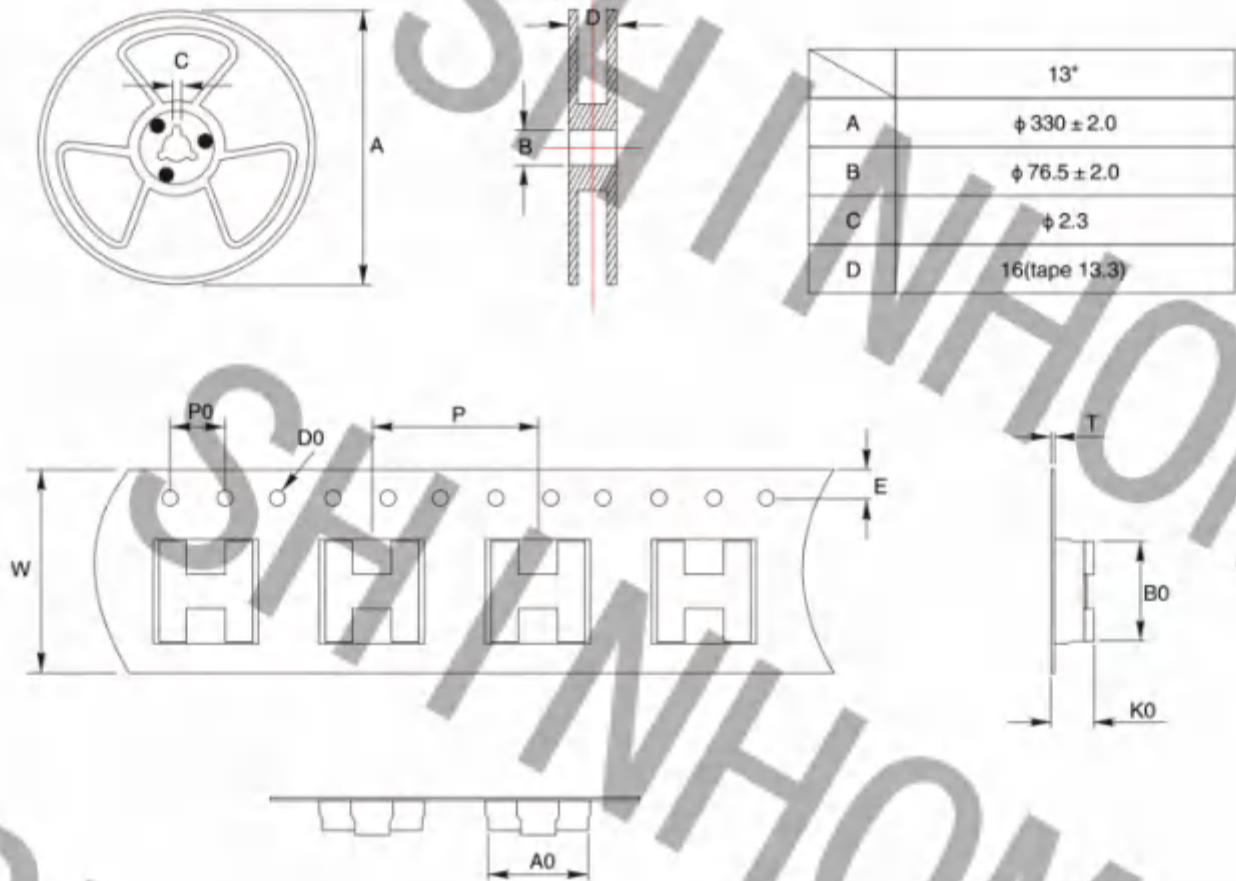


LPM1260,1265 Series

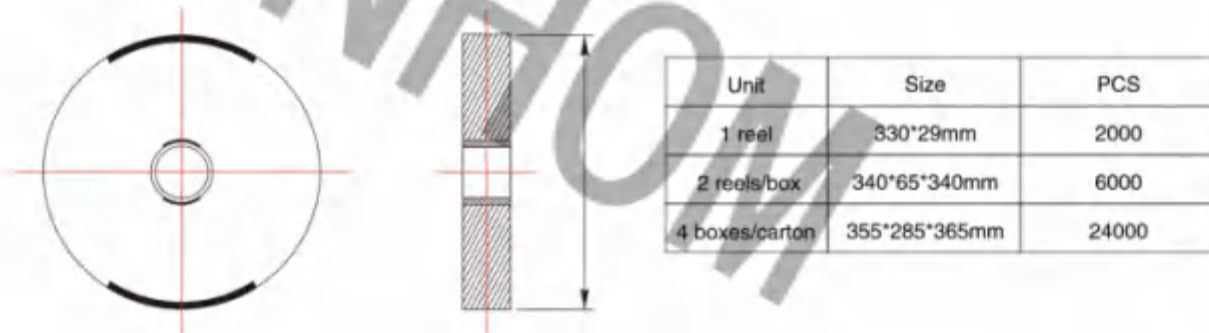


PRODUCT PACKAGING

LPM0630 Series

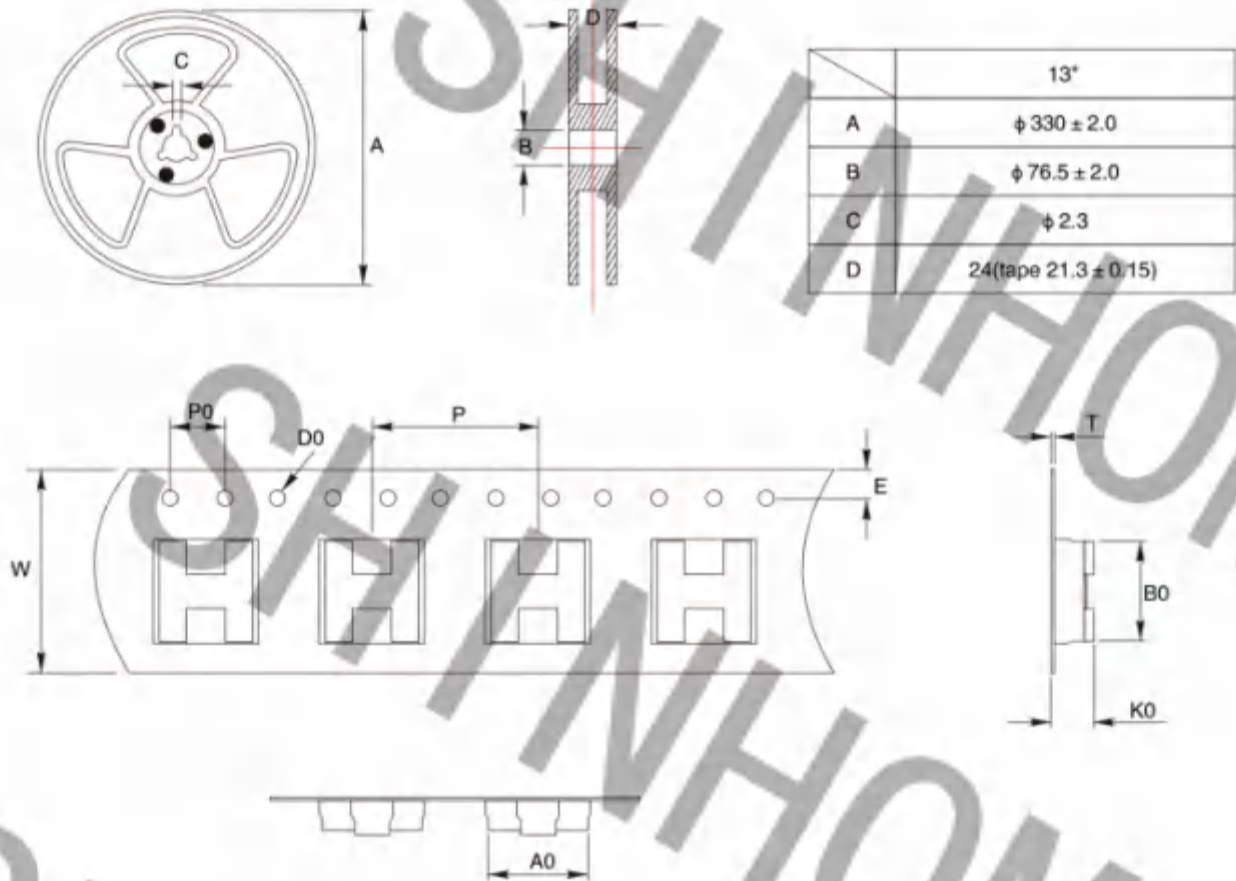


Size	W	A0	B0	D0	E	K0	P0	P	T
0630	16.0 ± 0.3	6.8 ± 0.1	6.8 ± 0.1	1.5 ± 0.1	1.75 ± 0.1	2.8 ± 0.1	4.0 ± 0.1	12.0 ± 0.1	0.4 ± 0.05

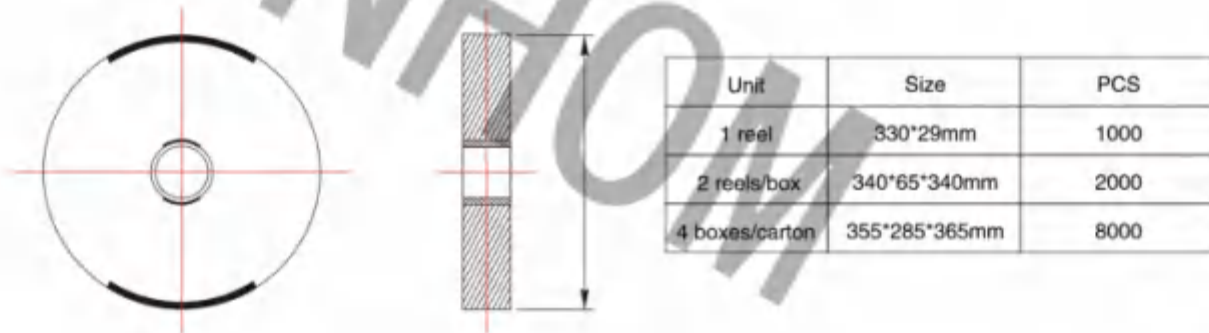


PRODUCT PACKAGING

LPM1040 Series

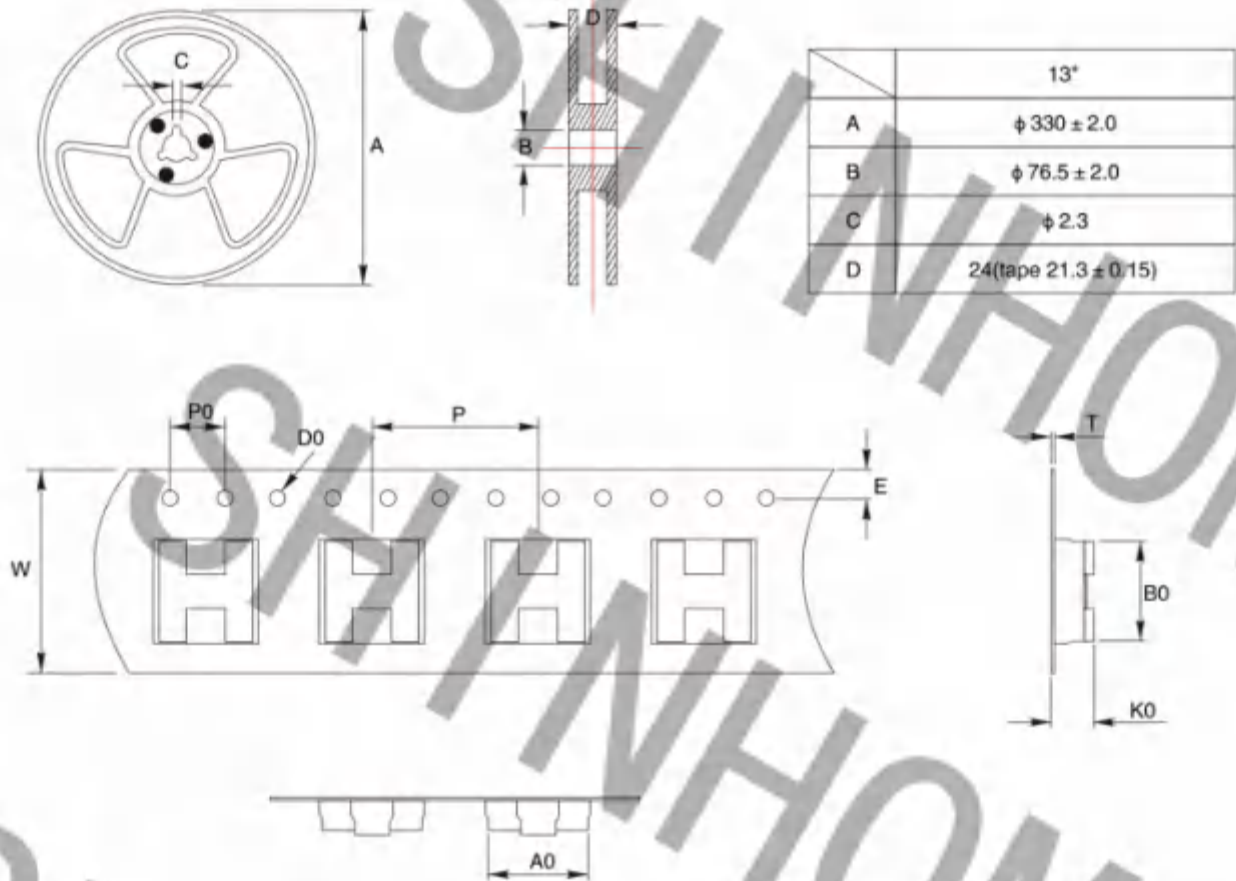


Size	W	A0	B0	D0	E	K0	P0	P	T
1040	24.0 ± 0.3	10.6 ± 0.1	11.6 ± 0.1	1.5 ± 0.1	1.75 ± 0.1	4.2 ± 0.1	4.0 ± 0.1	16.0 ± 0.1	0.4 ± 0.05

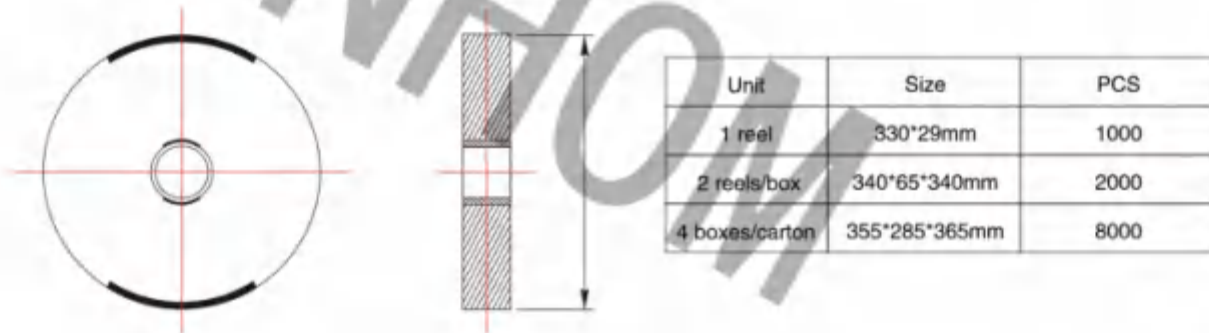


PRODUCT PACKAGING

LPM1260 Series



Size	W	A0	B0	D0	E	K0	P0	P	T
1260	24.0 ± 0.3	13.1 ± 0.1	14.1 ± 0.1	1.5 ± 0.1	1.75 ± 0.1	6.0 ± 0.1	20.0 ± 0.1	16.0 ± 0.1	0.4 ± 0.05





SMD MOLDED POWER INDUCTORS

LPM 1340 SERIES

FEATURES:

- Lowest height in this package footprint.
- Shielded construction.
- Lowest DCR/ μ 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.

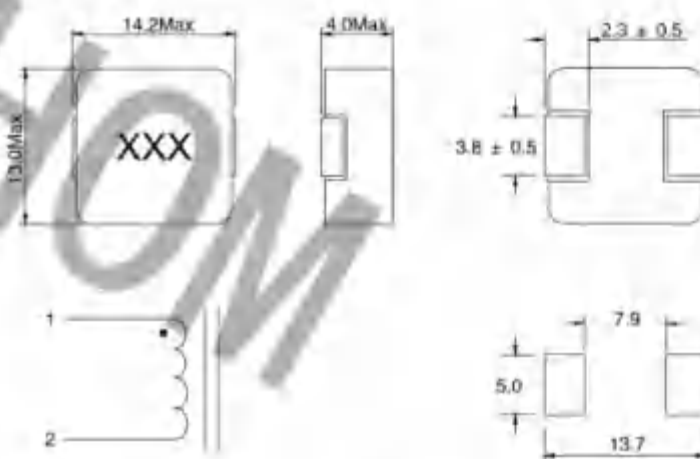
ELECTRICAL CHARACTERISTICS:

Part Number	Codes	Inductance $L_0(\mu\text{H}) \pm 20\%$ @0Adc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Max. (m Ω).
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	55.0	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	12.8	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 (I_{rms}) will cause the coil temperature rise approximately, $\Delta T=40^\circ\text{C}$ without core loss.
- Saturation Current (I_{sat}) will cause L₀ to drop approximately 25%.
- The part temperature (ambient + temp rise) should not exceed 125°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°C ~ +125°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.

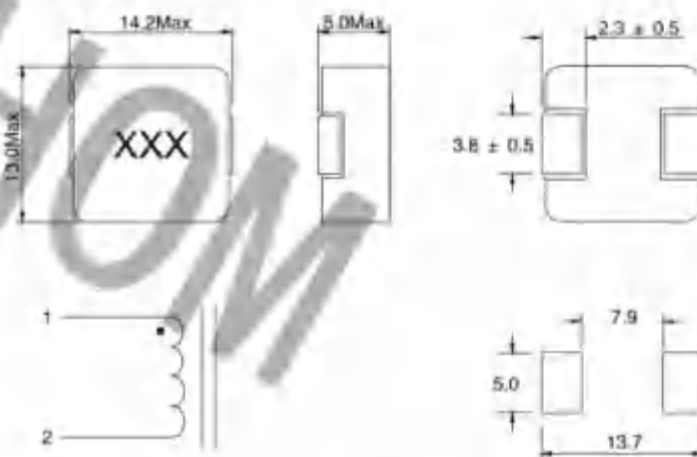
ELECTRICAL CHARACTERISTICS:

Part Number	Codes	Inductance L0(μH) ± 20% @0Adc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Max. (mΩ)
LPM1350-R10M	R10	0.1	45.0	98	0.6
LPM1350-R22M	R22	0.22	41.0	90	0.6
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	18.0	35	3.5
LPM1350-1R5M	1R5	1.5	18.0	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 (I_{rms}) will cause the coil temperature rise approximately, ΔT=40°C without core loss.
- Saturation Current (I_{sat}) will cause L0 to drop approximately 25%.
- The part temperature (ambient + temp rise) should not exceed 125°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°C ~ +125°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.

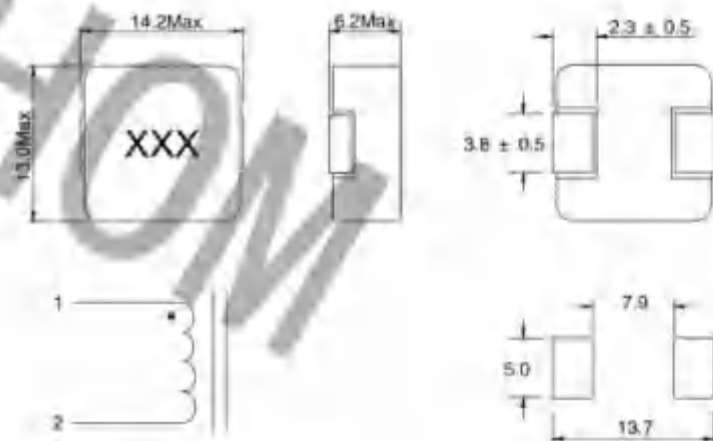
ELECTRICAL CHARACTERISTICS:

Part Number	Codes	Inductance L0(μH) ± 20% @0A dc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Max. (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	60	2.2
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-R66M	R66	0.66	35	45	2.8
LPM1360-R82M	R82	0.82	28	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	16	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 : LHP4264A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- Heat Rated Current (I_{rms}) will cause the coil temperature rise approximately, ΔT=40°C without core loss.
- Saturation Current (Isat) will cause L0 to drop approximately 25%.
- The part temperature (ambient + temp rise) should not exceed 125°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°C ~ +125°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

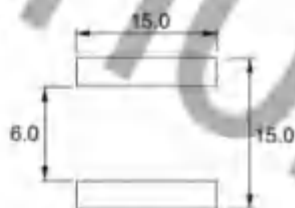
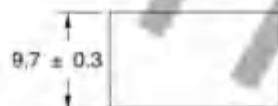
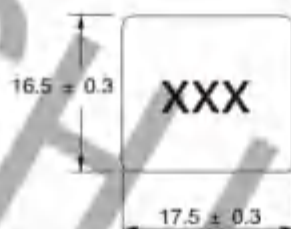


ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ± 20% @ 0A _{dc}	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ)	DCR Max. (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 and 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

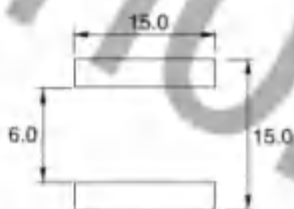
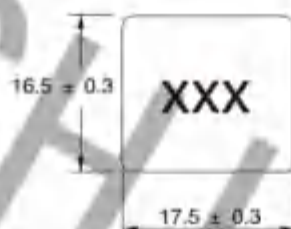


ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ± 20% @ 0A _{dc}	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)



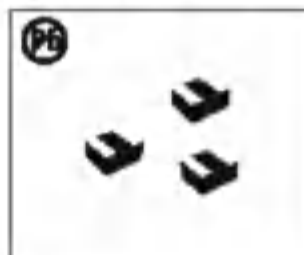
Recommended land pattern

- Test Frequency : 1MHz / 0.1V_{dc} @ 25°C
- Testing Instrument : L:HP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- Operating voltage: 0-55V
- Heat Rated Current (I_{rms}) 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 and 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, DVDRs, D6Cs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VFM 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	1.80	80
LPM0110-R47M	20%	0.47	1.40	1.40	98
LPM0110-1R0M	20%	1.0	0.95	1.04	201
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	516
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 (Imr) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L.D 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

LPM0420C SERIES

FEATURES:

- High performance (ind) 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

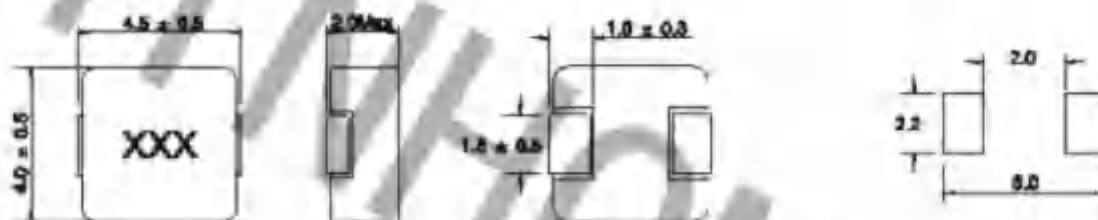


ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @0Adc	Heat rating current DC Amps (DC/A)	Saturation current DC-Amps Isat(A)	DCR Typ. (mΩ)	DCR Max. (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	9.80
LPM0420C-R47M	0.47	9.0	15.0	12.8	14.0
LPM0420C-R56M	0.56	8.0	13.0	13.0	14.0
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	95.0
LPM0420C-4R7M	4.7	3.0	5.0	112.0	125.0
LPM0420C-5R6M	5.6	2.8	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	280.0
LPM0420C-10M	10.0	1.8	3.0	265.0	310.0

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 20%
- Operating Temperature Range -40°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

PG

FEATURES:

- High performance (lead) 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 exchange
- VRM for server

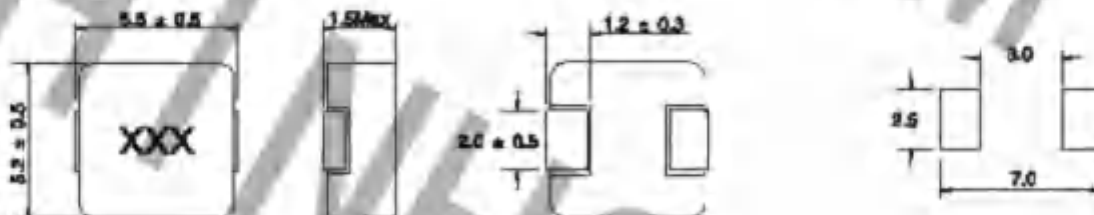


ELECTRICAL CHARACTERISTICS:

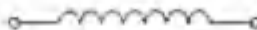
Part Number	Inductance L0(μH) ±20% ①0Adc	Heat rating current DC Amps (DC/A)	Saturation current DC Amps (sat/A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM0515C-R15M	0.15	16.0	26.0	4.50	5.40
LPM0515C-R22M	0.22	15.0	25.0	6.50	7.60
LPM0515C-R47M	0.47	12.0	20.0	11.0	13.0
LPM0515C-R88M	0.88	10.0	15.0	11.8	13.5
LPM0515C-1R0M	1.0	8.0	10.0	19.5	24.0
LPM0515C-2R2M	2.2	5.0	7.0	83.0	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	5.6	2.8	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	2.5	3.8	255.0	290.0

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

LPM0518C SERIES



FEATURES:

- High performance (least) 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:

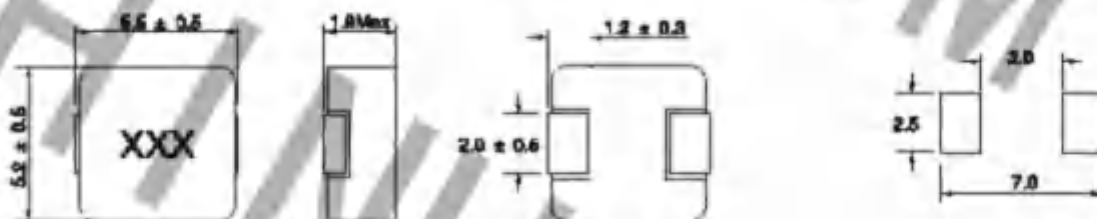
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.,
- Thin type on-board power supply module for exchange
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @5Adc	Heat rating current DC Amps (DC(A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ).	DCR Max. (mΩ).
LPM0518C-R22M	0.22	16.0	28.0	4.40	5.30
LPM0518C-R47M	0.47	13.0	22.0	8.00	8.50
LPM0518C-1R0M	1.0	8.0	14.0	14.0	16.5
LPM0518C-2R2M	2.2	6.0	9.0	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

PG



FEATURES:

- High performance (ind) 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:

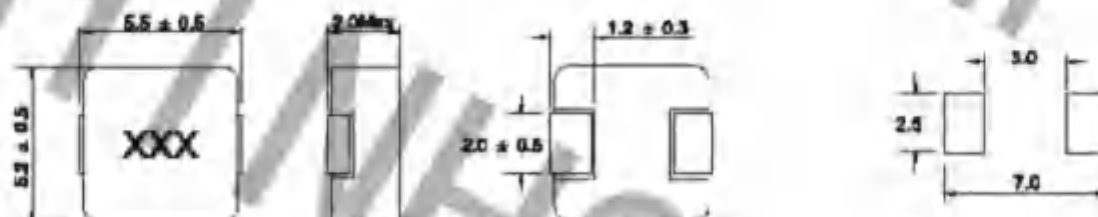
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.,
- Thin type on-board power supply module for exchange
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% ①0A/dc	Heat rating current DC Amps (DC/A)	Saturation current DC Amps (sat/A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM0520C-R10M	0.10	20.0	32.0	3.00	3.60
LPM0520C-R22M	0.22	18.0	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	84.0	98.0
LPM0520C-5R6M	5.6	3.5	5.0	84.0	98.0
LPM0520C-6R8M	6.8	3.0	4.5	93.0	105.0
LPM0520C-8R2M	8.2	2.5	4.0	132.0	148.0
LPM0520C-100M	10.0	2.0	3.5	185.0	175.0

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, PCBs 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 (low) realized by Carbonyl iron powder
- Low profile: 6.6mm x 6.2mm 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 on-board power supply module for exchange
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @0Adc	Heat rating current DC Amps (DC/A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ)	DCR Max. (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	58.0	66.0
LPM0530C-5R6M	5.6	5.0	8.0	83.0	72.0
LPM0530C-6R8M	6.8	4.5	7.0	76.0	66.0
LPM0530C-100M	10.0	4.0	6.0	111.0	122.0
LPM0530C-150M	15.0	3.0	5.0	153.0	166.0
LPM0530C-300M	33.0	2.0	3.5	315.0	340.0

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 20%
- Operating Temperature Range -40°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

PG



FEATURES:

- High performance (lead) 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:

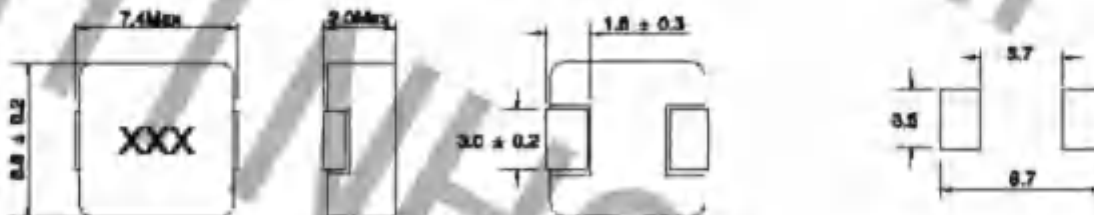
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.,
- Thin type on-board power supply module for exchange
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L(μH) ±20% @0Adc	Heat rating current DC Amps (DC/A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ)	DCR Max. (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	1.60	8.0	18.0	22.0	26.0
LPM0620C-2R2M	2.20	8.0	12.0	32.0	38.0
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-6R8M	6.80	4.0	5.0	114.0	128.0
LPM0620C-100M	10.00	3.0	5.0	147.0	163.0

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 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, PCBs 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 (ind) 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:

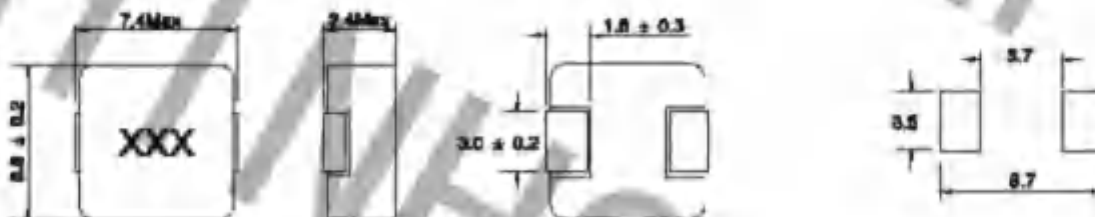
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.,
- Thin type on-board power supply module for exchange
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @0Adc	Heat rating current DC Amps (DC/A)	Saturation current DC Ampe Isat(A)	DCR Typ. (mΩ)	DCR Max. (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-R88M	0.88	14.0	23.0	7.10	8.60
LPM0624C-R82M	0.82	13.0	22.0	9.8	11.5
LPM0624C-1R0M	1.0	12.0	22.0	11.3	13.0
LPM0624C-1R6M	1.6	10.0	19.0	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	95.0	95.0
LPM0624C-150M	15.0	3.5	6.0	122.0	136.0

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, PCBs 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 (Ind) 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:

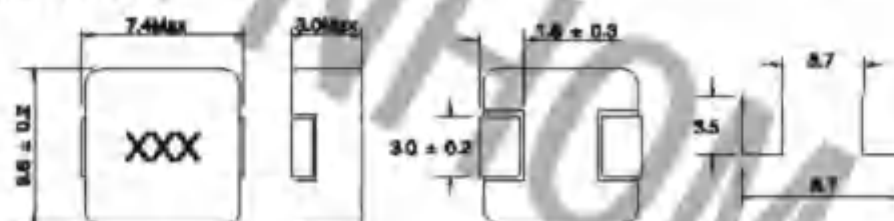
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DBCs, PDAs etc.
- Thin type oil-cooled power supply module for exchanger
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L(μH) ±20% @5A/50°C	Heat rating current DC Amps (DC(A))	Saturation current DC Amps (sat(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	85.0	1.70	2.10
LPM0630C-R22M	0.22	25.0	45.0	2.20	2.70
LPM0630C-R33M	0.33	23.0	35.0	2.80	3.20
LPM0630C-R38M	0.38	22.0	32.0	3.20	4.00
LPM0630C-R47M	0.47	21.0	31.0	3.50	4.50
LPM0630C-R55M	0.55	20.0	30.0	4.90	5.00
LPM0630C-R62M	0.62	16.0	28.0	7.30	8.50
LPM0630C-1R0M	1.0	15.0	25.0	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-5R8M	5.8	7.0	13.0	43.0	51.0
LPM0630C-8R8M	8.8	6.0	11.0	64.0	83.0
LPM0630C-10M	10.0	4.5	8.0	78.0	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:

Dimension(mm)



Winding



Note

- Test Frequency: 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (I_{HR}) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (I_{SAT}) 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

PG

FEATURES:

- High performance (lead) 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:

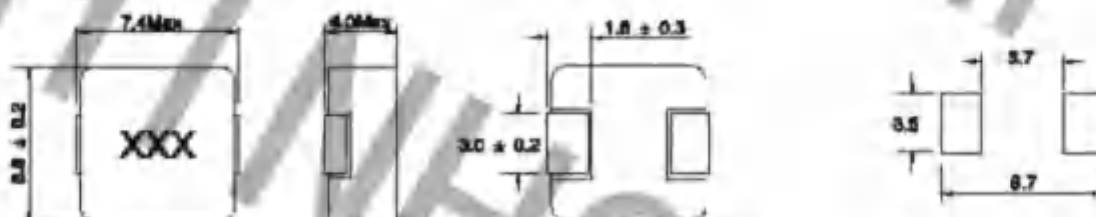
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.,
- Thin type on-board power supply module for exchange
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% ①0Adc	Heat rating current DC Amps (DC/A)	Saturation current DC Amps (sat/A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM0640C-R15M	0.15	40.0	65.0	0.65	0.80
LPM0640C-R22M	0.22	36.0	48.0	0.99	1.05
LPM0640C-R33M	0.33	25.0	36.0	1.60	2.04
LPM0640C-R56M	0.56	22.0	30.0	3.50	4.60
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:

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, PCBs 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

PG

FEATURES:

- High performance (ind) 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:

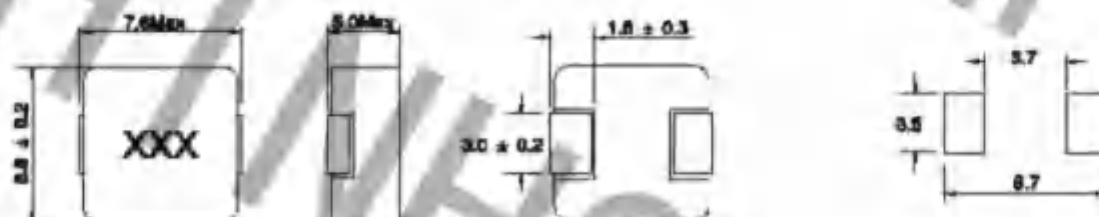
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.,
- Thin type on-board power supply module for exchange
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @0Adc	Heat rating current DC Ampe (DC/A)	Saturation current DC Ampe Isat(A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM0650C-R47M	0.47	22.0	30.0	3.20	3.60
LPM0650C-1R0M	1.0	16.0	26.0	6.00	7.50
LPM0650C-2R2M	2.2	11.0	18.0	9.60	12.0
LPM0650C-3R3M	3.3	9.0	17.0	17.5	26.0
LPM0650C-4R7M	4.7	7.0	16.0	28.0	32.0
LPM0650C-5R6M	5.6	7.0	15.0	29.0	33.0
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	93.0
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:

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, PCBs 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 (test) realized by Carbonyl iron powder
- Low profile: 0.2mm 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 on-board power supply module for exchange
- 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)
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	3.30
LPM0830C-R68M	0.68	18.0	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-3R3M	3.3	10.0	16.0	19.0	23.0
LPM0830C-4R7M	4.7	9.0	15.0	31.5	38.0
LPM0830C-5R8M	5.6	8.0	13.0	38.0	42.0
LPM0830C-6R8M	6.8	7.0	12.0	46.0	53.0
LPM0830C-8R2M	8.2	6.5	9.5	49.0	65.0
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:

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 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, PCBs 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 (lead) realized by Carbonyl iron powder
- Low profile: 0.2mm x 8.0mm x 4.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

COMMON APPLICATIONS:

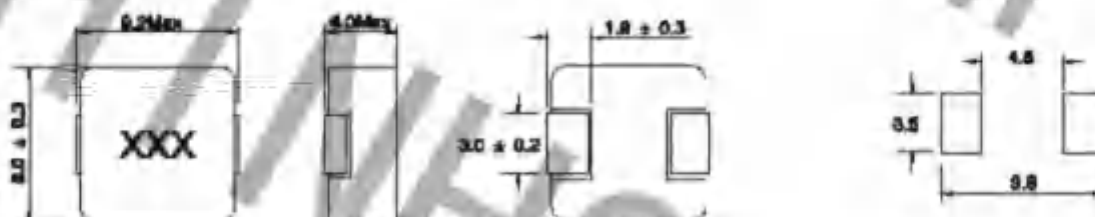
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.,
- Thin type oil-based power supply module for exchange
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance LX(μH) ±20% @0Adc	Heat rating current DC Amps (DC/A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM0840C-R22M	0.22	32.0	60.0	1.80	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-R82M	0.82	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:

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, PCBs 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

LPM0850C SERIES



FEATURES:

- High performance (lead) 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:

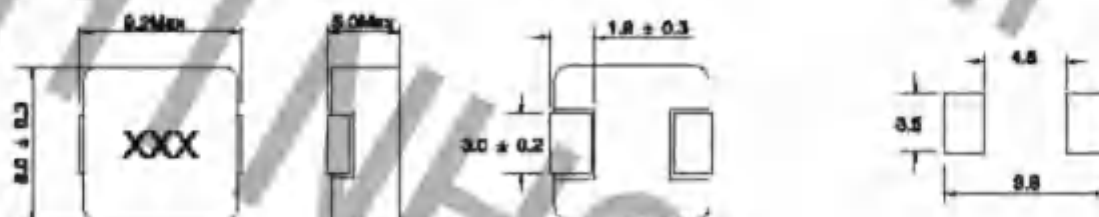
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.,
- Thin type on-board power supply module for exchange
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% ①0Adc	Heat rating current DC Amps (DC/A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM0850C-R15M	0.15	45.0	80.0	0.55	0.65
LPM0850C-R22M	0.22	35.0	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	26.5	31.0
LPM0850C-100M	10.0	8.0	15.0	41.0	47.0
LPM0850C-220M	22.0	5.0	10.0	81.0	88.0

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 -45°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, PCBs 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: 10.5mm x 10.5mm x 2.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

COMMON APPLICATIONS:

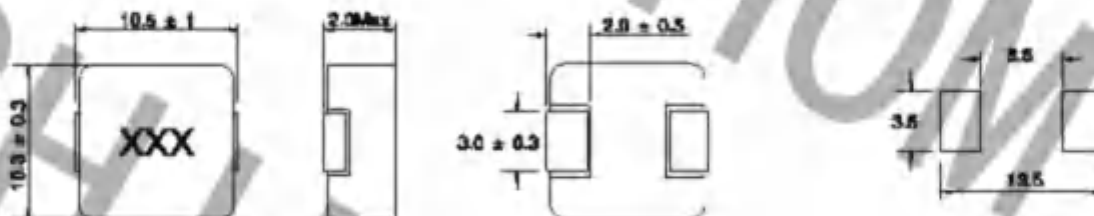
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.,
- Thin type on-board power supply module for exchange
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @0Adc	Heat rating current DC Amps (DC/A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM1020C-R33M	0.33	29.0	36.0	1.80	2.30
LPM1020C-R47M	0.47	25.0	35.0	3.00	3.60
LPM1020C-1R0M	1.0	19.0	23.0	5.50	8.90
LPM1020C-2R2M	2.2	9.0	14.0	13.3	18.5

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 (best) realized by Carbonyl iron powder
- Low profile: 10.6mm x 10.3mm x 3.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

COMMON APPLICATIONS:

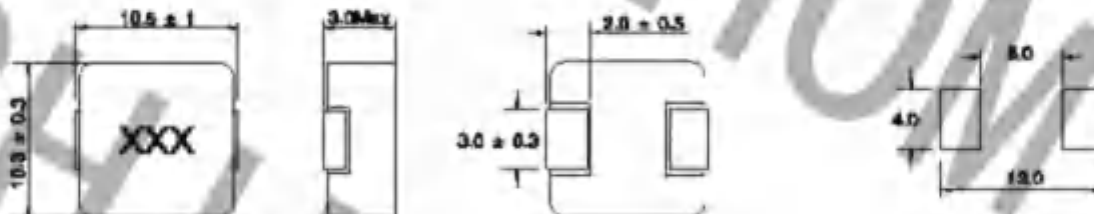
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.,
- Thin type on-board power supply module for exchange
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @5A dc	Heat rating current DC Amps (DC/A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM1020C-R36M	0.08	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	16.0	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	38.0

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

COMMON APPLICATIONS:

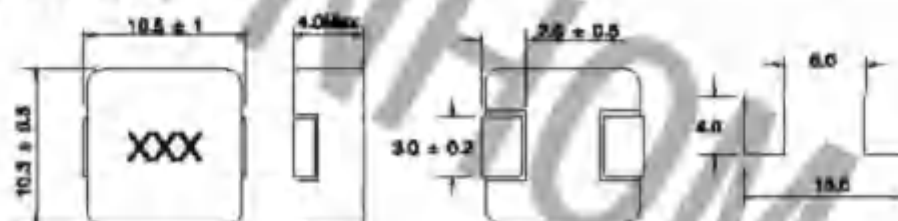
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DBCs, PDAs etc.
- Thin type oil-cooled power supply module for exchanger
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @5A _{DC}	Heat rating current DC Amper (DC(A)	Saturation current DC Amper (sat(A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM1040C-R10M	0.10	40.0	100.0	0.70	0.95
LPM1040C-R22M	0.22	36.0	80.0	0.85	0.90
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	1.65	1.60
LPM1040C-R66M	0.66	26.0	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	2.65	3.50
LPM1040C-1R5M	1.5	18.0	30.0	4.30	5.20
LPM1040C-2R2M	2.2	16.0	26.0	5.30	6.50
LPM1040C-3R0M	3.3	14.0	25.0	10.30	13.00
LPM1040C-4R7M	4.7	12.0	20.0	13.50	18.00
LPM1040C-5R6M	5.6	10.0	18.0	15.50	18.50
LPM1040C-6R6M	6.6	9.0	15.0	21.50	26.00
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	57.00	85.00
LPM1040C-33M	33	4.5	7.6	105.00	118.00
LPM1040C-47M	47	3.5	5.5	129.00	145.00

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimension(mm)



Winding



Note

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (I_{HR}) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (I_{SAT}) 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

LPM1050C SERIES



FEATURES:

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

COMMON APPLICATIONS:

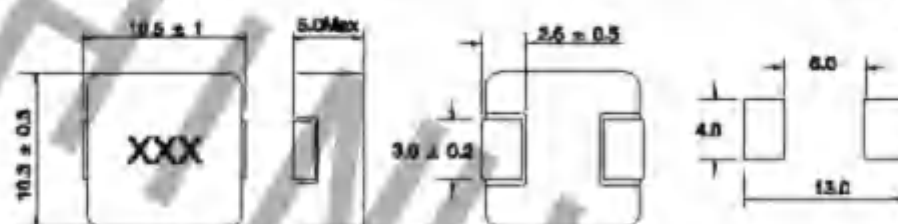
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.,
- Thin type on-board power supply module for exchange
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @5A _{DC}	Heat rating current DC Amper (DC(A)	Saturation current DC Amper (sat(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	28.0	50.0	1.30	1.60
LPM1040C-1R0M	1.00	24.0	45.0	2.10	2.50
LPM1040C-1R6M	1.60	20.0	42.0	2.06	3.80
LPM1040C-2R2M	2.20	18.0	40.0	8.0	7.10
LPM1040C-3R3M	3.30	16.0	30.0	7.8	10.0
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	16.0	24.5	28.0
LPM1040C-150M	15.00	7.0	11.0	45.0	53.0
LPM1040C-220M	22.00	6.0	10.0	48.0	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 (I_{ms}) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (I_{sat}) 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 Molded structure
- Low profile: 11.5mm x 10.2mm x 5.0mm
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

COMMON APPLICATIONS:

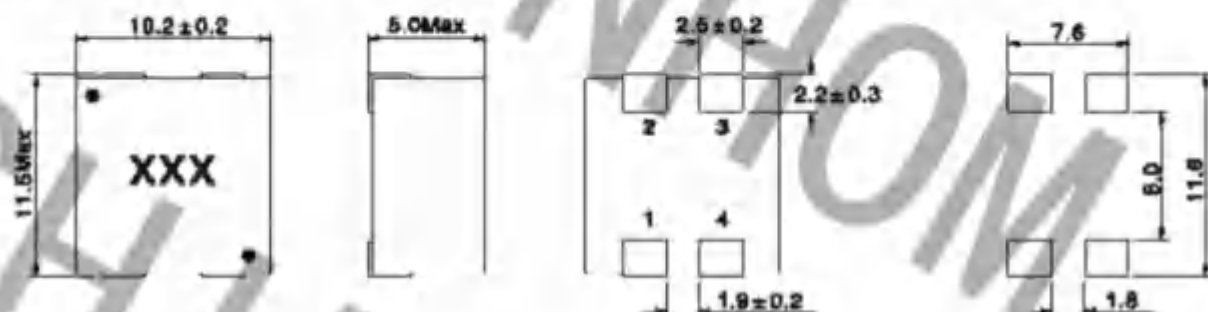
- Isolated converters, such as flyback converters
- Step-down, boost, SEPIC, Zeta, Cuk.
- A switching regulator with a second, unregulated output voltage.

ELECTRICAL CHARACTERISTICS:

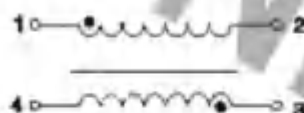
Part Number	Inductance L0(μH) ±20% @0A dc (1-2)=(3-4)	Heat rating current DC Amps (DC(A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ). (1-2)=(3-4)	DCR Max. (mΩ). (1-2)=(3-4)
LPM1050D-3R0M	3.3	7.0	32.0	18.3	22.0
LPM1050D-4R7M	4.7	6.0	30.0	27.0	32.0
LPM1050D-5R6M	5.6	6.0	23.0	38.5	46.0
LPM1050D-150M	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:

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

LPM1060C SERIES



FEATURES:

- High performance (test) realized by Carbonsyl-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, DSCs, PDAs etc.
- Thin type on-board power supply module for exchange
- VRM 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)
LPM1060C-1R0M	1.0	26.5	43.0	2.4	2.70
LPM1060C-1R5M	1.5	24.4	35.0	3.0	3.30
LPM1060C-2R2M	2.2	20.0	32.0	4.5	4.95
LPM1060C-3R3M	3.3	16.6	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:

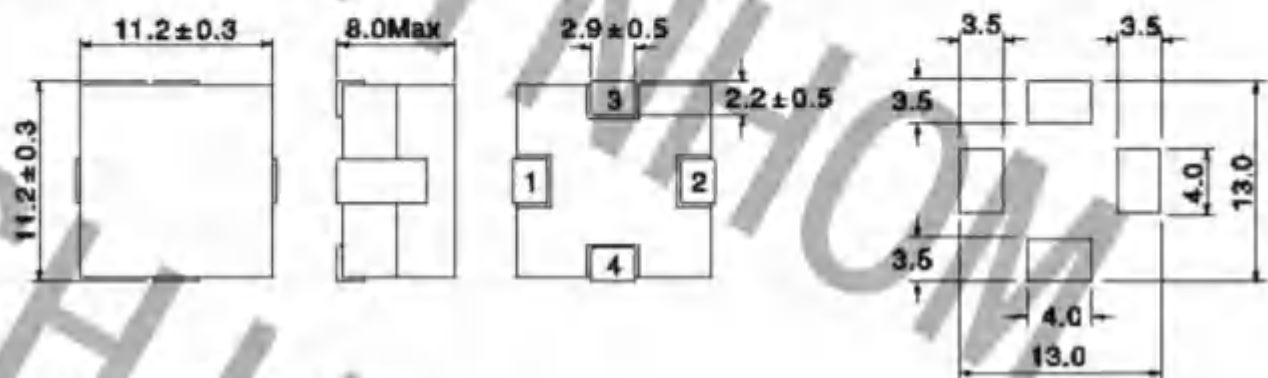
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type on-board power supply module for exchange
- VRM for server

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)
LPM1080D-8R2M	8.2	14.0	6.0	32.8	36.2
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	105.3	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
- Pb-free compliant

COMMON APPLICATIONS:

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

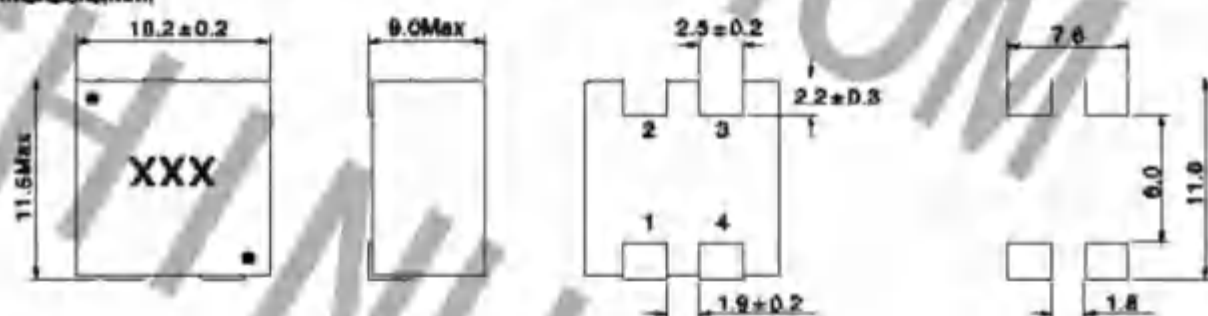


ELECTRICAL CHARACTERISTICS:

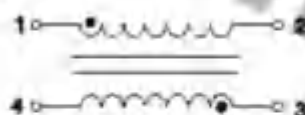
Part Number	Inductance L0(μH) ±20% @0A dc (1-2)-(3-4)	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ) (1-2)-(3-4)	DCR Max. (mΩ) (1-2)-(3-4)
LPM1090D-1R0M	1.0	17.0	43.5	4.8	5.6
LPM1090D-1R5M	1.5	12.5	34.0	5.7	6.4
LPM1090D-2R2M	2.2	11.5	29.5	10.6	12.5
LPM1090D-3R3M	3.3	7.5	26.2	23.3	26.0
LPM1090D-4R7M	4.7	7.0	24.2	36.2	40.0
LPM1090D-6R8M	6.8	6.5	21.2	46.1	51.5
LPM1090D-8R2M	8.2	6.0	18.5	66.3	83.0
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	106.0
LPM1090D-330M	33.0	3.5	10.0	121.5	143.0
LPM1090D-470M	47.0	2.3	6.0	216.0	240.0

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

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:

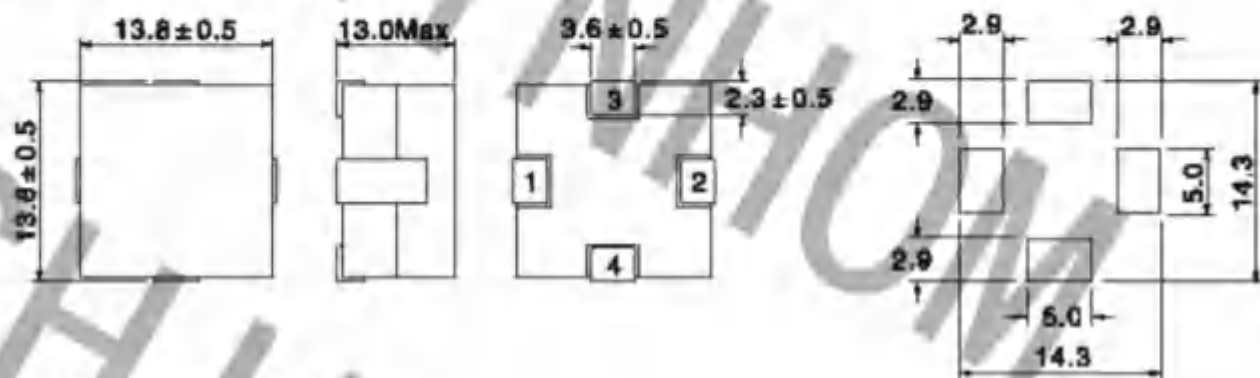
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type on-board power supply module for exchange
- VRM for server

ELECTRICAL CHARACTERISTICS:

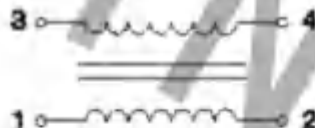
Part Number	Inductance L0(μH) ±20% @0A dc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM1213D-8R2M	8.2	25.0	10.0	16.3	17.6
LPM1213D-100M	10.0	21.0	9.0	20.8	22.55
LPM1213D-150M	15.0	16.0	7.0	34.2	36.65
LPM1213D-220M	22.0	15.0	5.5	51.2	56.0

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

COMMON APPLICATIONS:

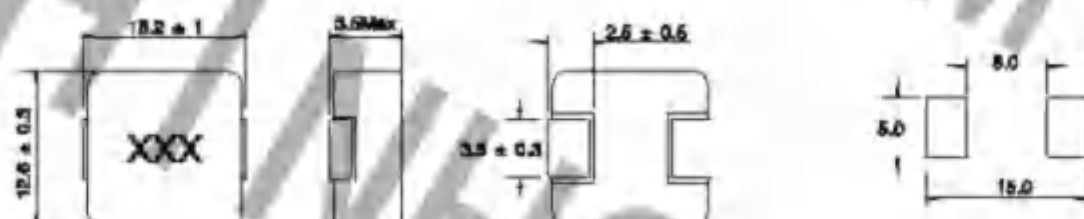
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.,
- Thin type on-board power supply module for exchange
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @5A _{DC}	Heat rating current DC Amper (DC(A))	Saturation current DC Amper (sat(A))	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM1235C-R10M	0.10	48.0	90.0	0.78	0.98
LPM1235C-R15M	0.15	46.0	80.0	0.85	0.85
LPM1235C-R22M	0.22	44.0	75.0	0.85	0.85
LPM1235C-R30M	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	62.0	2.10	2.50
LPM1235C-R82M	0.82	23.0	46.0	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	9.00
LPM1235C-3R3M	3.30	13.0	26.0	11.0	13.5
LPM1235C-4R7M	4.70	12.5	22.0	13.0	15.0
LPM1235C-5R8M	5.80	12.0	20.0	18.2	23.0
LPM1235C-6R8M	6.80	11.0	16.0	20.0	25.0
LPM1235C-8R2M	8.20	8.5	15.0	26.0	32.0
LPM1235C-100M	10.00	7.0	14.0	29.5	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 (I_{HR}) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (I_{sat}) 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

LPM1250C SERIES



FEATURES:

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

COMMON APPLICATIONS:

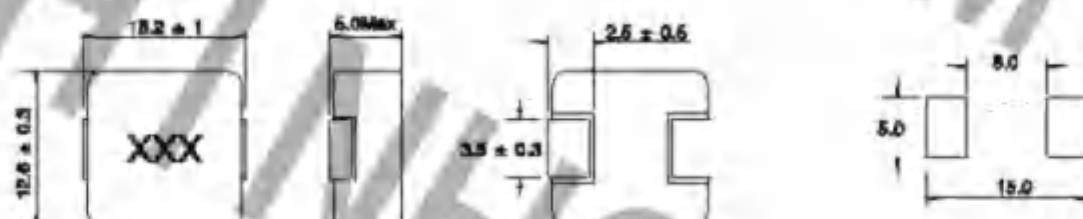
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.,
- Thin type on-board power supply module for exchange
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @5Adc	Heat rating current DC Amper (DC(A)	Saturation current DC Amper (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	65.0	0.75	1.10
LPM1250C-R36M	0.36	41.0	60.0	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	65.0	2.10	2.50
LPM1250C-1R5M	1.5	25.0	60.0	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	8.0
LPM1250C-4R7M	4.7	14.0	33.0	10.4	13.0
LPM1250C-6R8M	6.8	12.0	26.0	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 (lead) 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, DBCs, PDAs etc.
- Thin type on-board power supply module for exchange
- VRM for server

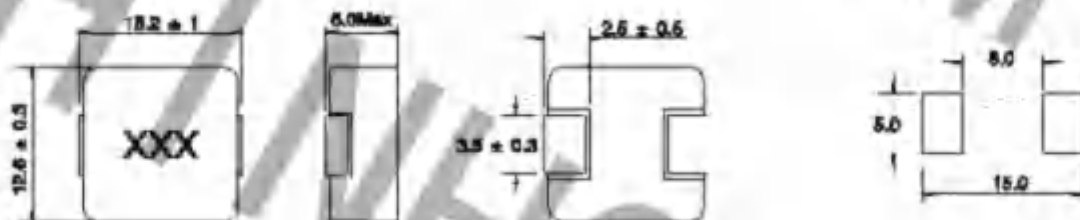


ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @5A _{dc}	Heat rating current DC Ampe (DC(A))	Saturation current DC Ampe (sat(A))	DCR Typ. (mΩ)	DCR Max. (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-1R5M	1.5	27.0	52.0	2.60	3.30
LPM1260C-2R2M	2.2	23.0	46.0	4.7	6.0
LPM1260C-3R3M	3.3	18.0	43.0	6.2	8.0
LPM1260C-4R7M	4.7	16.0	36.0	7.5	9.5
LPM1260C-6R8M	6.8	13.0	29.0	12.8	15.0
LPM1260C-100M	10.0	11.0	20.0	15.6	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 (low) resistivity by Carbonyl iron powder
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

COMMON APPLICATIONS:

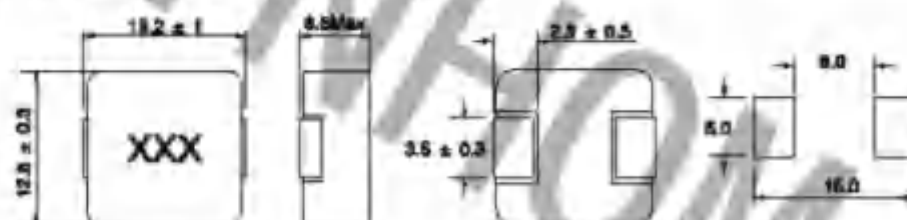
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc.
- Thin type on-board power supply module for exchangeable
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @5A _{DC}	Heat rating current DC Amper (DC(A))	Saturation current DC Amper (sat(A))	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM1265C-R15M	0.15	60.0	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	26.0	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	38.0	7.6	9.5
LPM1265C-5R6M	5.6	15.0	34.0	9.8	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	35.5	42.0
LPM1265C-330M	33.0	8.0	15.0	47.0	55.0
LPM1265C-470M	47.0	6.0	12.0	60.0	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 (I_{HR}) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (I_{SAT}) 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

LPM1280C SERIES



FEATURES:

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

COMMON APPLICATIONS:

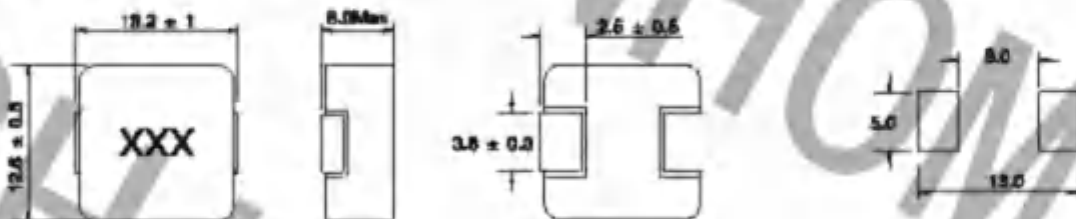
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DBOs, PDAs etc.,
- Thin type on-board power supply module for exchangeable
- VRM for server

ELECTRICAL CHARACTERISTICS:

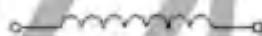
Part Number	Inductance L(μH) ±20% @ 0A dc	Heat rating current DC Amps (DC(A))	Saturation current DC Amps test(A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM1280C-1R0M	1.0	35.0	35.0	1.05	1.2
LPM1280C-1R5M	1.5	30.0	35.0	1.35	1.5
LPM1280C-2R2M	2.2	25.0	30.0	1.90	2.2

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 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

LPM1770C SERIES



FEATURES:

- High performance (lead) realized by Carbonyl Iron powder
- Low profile: 18.0mm x 17.2mm x 7.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

COMMON APPLICATIONS:

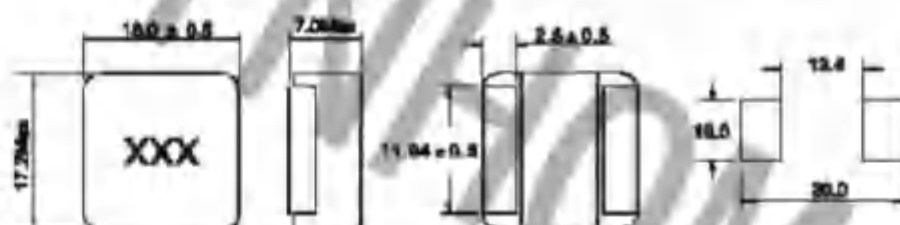
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVD's, DR's, PDAs etc.
- Thin type on-board power supply module for exchanger
- VISM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @0.1kHz	Heat rating current DC Ampere IDC(A)	Saturation current DC Ampere Isat(A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM1770C-1R0M	1.0	50.0	60.0	1.4	1.7
LPM1770C-1R5M	1.5	45.0	70.0	1.7	2.1
LPM1770C-2R2M	2.2	40.0	82.0	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	6.6	8.5
LPM1770C-100M	10.0	16.0	28.0	6.7	11.0
LPM1770C-150M	15.0	14.0	26.0	15.0	23.0
LPM1770C-220M	22.0	12.0	20.0	29.5	26.5
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	12.0	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	275.0	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 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

LPM2010C SERIES



FEATURES:

- High performance (best) realized by Galfenol 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, DVD's, D80s, PDAs etc...
- Thin type on-board power supply module for exchanger
- VPM 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)
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	36.0
LPM2010C-R56M	0.56	3.3	4.8	51.0	69.0
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 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 either the saturation current or the heating current depending on which value is lower.

SMD MOLDED POWER INDUCTORS

LPM2213C SERIES

FEATURES:

- High performance (low) realized by Carbonyl Iron powder
- Low profile: 22.0mm 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, DVRs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VDSL for server



ELECTRICAL CHARACTERISTICS:

Part Number	Inductance Lp(μH) ±20% @0Adc	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	0.58	0.67
LPM2213C-1R0M	1.0	80.0	71.0	0.88	0.89
LPM2213C-1R5M	1.5	65.0	63.0	0.90	1.20
LPM2213C-2R2M	2.2	58.0	48.0	1.10	1.28
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-5R8M	5.8	40.0	36.5	2.00	2.50
LPM2213C-6R8M	6.8	36.0	35.0	2.90	3.09
LPM2213C-100M	10.0	28.0	28.0	3.80	4.14
LPM2213C-150M	15.0	23.5	24.0	5.50	6.11
LPM2213C-220M	22.0	17.5	16.0	6.00	10.80
LPM2213C-330M	33.0	15.8	15.5	14.50	18.40
LPM2213C-470M	47.0	13.5	10.0	15.30	17.70
LPM2213C-580M	58.0	13.0	11.0	23.00	28.00
LPM2213C-680M	68.0	12.5	13.0	31.50	38.00
LPM2213C-750M	75.0	12.0	13.0	30.00	32.95
LPM2213C-820M	82.0	10.2	9.0	31.50	34.20
LPM2213C-101M	100.0	9.1	7.0	37.60	39.40
LPM2213C-151M	150.0	8.0	8A Drop 30%	65.00	80.00
LPM2213C-201M	200.0	6.0	7A Drop 50%	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 (I_{HR}) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (I_{sat}) 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

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, DVDs, D8Cs, PDAs etc...
- Thin type on-board power supply module for exchanger
- VPM 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	236.0

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding

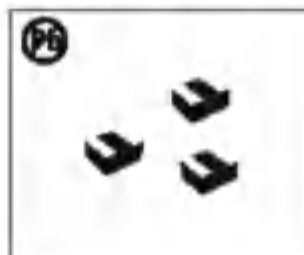


Notes

- 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

LPM2512C SERIES



FEATURES:

- High performance (test) realized by Galfenol 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:

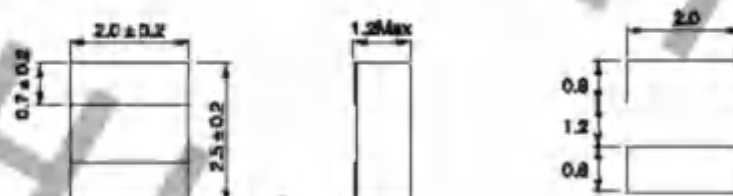
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVD's, D80s, PDAs etc...
- Thin type on-board power supply module for exchanger
- VPM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @0A _{dc}	Heat rating current DC Amps I _{DC} (A)	Saturation current DC Amps I _{sat} (A)	DCR Typ (mΩ)	DCR Max. (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	38.0
LPM2512C-1R0M	1.0	5.0	5.5	30.0	35.0
LPM2512C-1R5M	1.5	3.2	5.0	62.0	70.0
LPM2512C-2R2M	2.2	2.8	3.5	65.0	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 (I_{mr}) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (I_{sat}) 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 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
- VPM 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)
LPM3210C-1R0M	1.0	4.0	6.0	40.0	46.0

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

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:

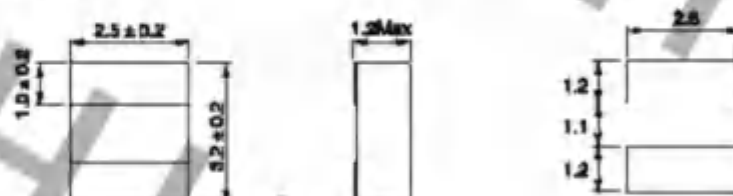
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVDs, D8Cs, PDAs etc...
- Thin type on-board power supply module for exchanger
- VPM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @0Adc	Heat rating current DC Amps I(DC)(A)	Saturation current DC Amps Isat(A)	DCR Typ (mΩ)	DCR Max. (mΩ)
LPM3212C-4R7M	4.7	2.0	9.0	160.0	192.0

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

LPM3215C SERIES



FEATURES:

- High performance (best) realized by Carbonyl iron powder
- Low profile: 3.2mm 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, DVDs, D8Cs, PDAs etc...
- Thin type on-board power supply module for exchanger
- VPM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @0A _{dc}	Heat rating current DC Amps I _{DC} (A)	Saturation current DC Amps I _{sat} (A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM3215C-R22M	0.22	13.0	11.0	7.0	7.9

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_{mr}) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (I_{sat}) 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

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, DVDs, D8Cs, PDAs etc...
- Thin type on-board power supply module for exchanger
- VPM 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)
LPM3220C-1R0M	1.00	5.4	10.0	17.8	22.0
LPM3220C-2R2M	2.20	4.0	7.0	42.0	50.0
LPM3220C-3R3M	3.30	3.0	5.5	56.0	66.0
LPM3220C-4R7M	4.70	2.8	4.5	96.0	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 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

LPM4010C SERIES



FEATURES:

- High performance (best) realized by Carburyl 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, D80s, PDAs etc...
- Thin type on-board power supply module for exchanger
- VPM 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)
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	105.0	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

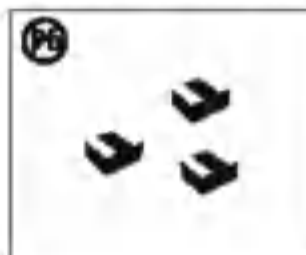


Notes

- 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 (met) 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, DVD's, D80s, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM 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)
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	45.0	55.0
LPM4012C-2R2M	2.2	4.0	6.0	52.0	63.0
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-8R8M	8.8	2.3	3.5	140.0	180.0
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 (Imr) 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

LPM4015C SERIES

**FEATURES:**

- High performance (met) realized by Cathodic 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:

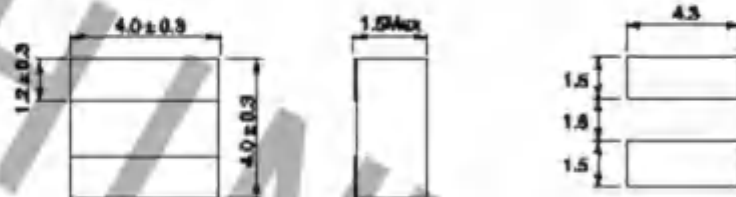
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVDs, DSCs, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

ELECTRICAL CHARACTERISTICS:

[illegible]

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions (mm)



Winding

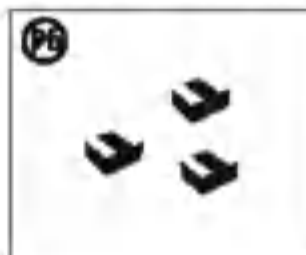


Notes

- 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 LD 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 is listed as either the saturation current or the heating current depending on which value is lower.

SMD MOLDED POWER INDUCTORS

LPM4020C SERIES



FEATURES:

- High performance (test) 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:

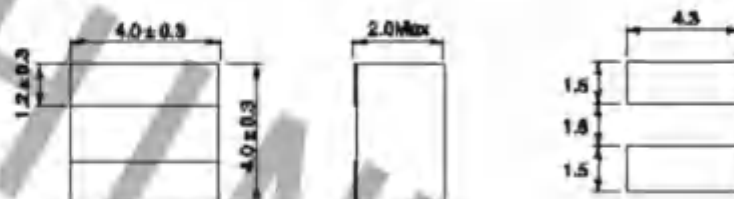
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVD's, D80's, PDAs etc.
- Thin type on-board power supply module for exchanger
- VPM for server

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)
LPM4020C-R33M	0.33	13.0	20.0	8.00	8.00
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	258.0	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 (Imr) 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 as either the saturation current or the heating current depending on which value is lower.

SMD MOLDED POWER INDUCTORS

LPM4030C SERIES



FEATURES:

- High performance (best) 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:

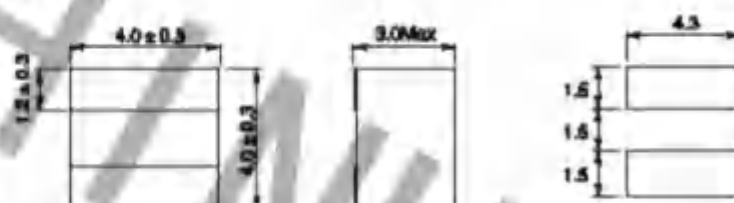
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVD's, DSD's, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @0A dc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Typ (mΩ)	DCR Max. (mΩ)
LPM4030C-R15M	0.15	26.0	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	19.9	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	60.8	66.7
LPM4030C-10M	10.0	3.8	3.1	63.0	69.5

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Winding

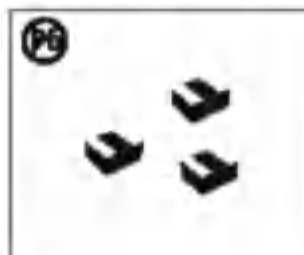


Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (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 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, DVCs, D80s, PDAs etc.
- Thin type on-board power supply module for exchanger
- VRM 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)
LPM4040C-R15M	0.15	90.2	21.0	1.5	1.8
LPM4040C-R30M	0.30	24.8	15.3	2.2	2.8
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	9.8	4.8	5.8
LPM4040C-1R5M	1.50	12.5	7.9	6.8	7.9
LPM4040C-2R2M	2.20	11.0	6.4	10.1	11.5
LPM4040C-3R3M	3.30	8.7	5.5	15.0	16.6
LPM4040C-4R7M	4.70	7.1	4.4	22.2	24.5
LPM4040C-8R8M	8.80	5.8	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 (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 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 (best) 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, D80's, PDAs etc.
- Thin type on-board power supply module for exchanger
- VPM 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)
LPM5020C-R15M	0.15	29.4	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	17.6	14.0	5.3	6.1
LPM5020C-1R0M	1.0	15.0	11.4	7.5	8.7
LPM5020C-1R5M	1.5	12.0	8.9	11.4	13.2
LPM5020C-2R2M	2.2	10.7	7.8	16.3	18.8
LPM5020C-3R3M	3.3	9.4	6.5	23.4	27.0
LPM5020C-4R7M	4.7	7.8	5.3	36.0	41.5
LPM5020C-8R8M	8.8	4.9	4.3	55.0	63.5

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimension(mm)



Winding

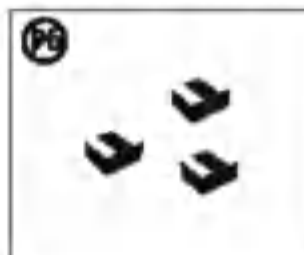


Notes

- 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 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 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, D80's, 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)
LPM5030C-R15M	0.15	92.0	90.0	1.3	1.6
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	10.6
LPM5030C-3R3M	3.3	10.0	8.4	13.3	14.9
LPM5030C-4R7M	4.7	8.5	6.7	21.8	24.5
LPM5030C-6R8M	6.8	7.3	5.5	26.6	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 (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 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
- 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, DVC's, PDA's etc..
- Thin type on-board power supply module for exchange
- VPM for server

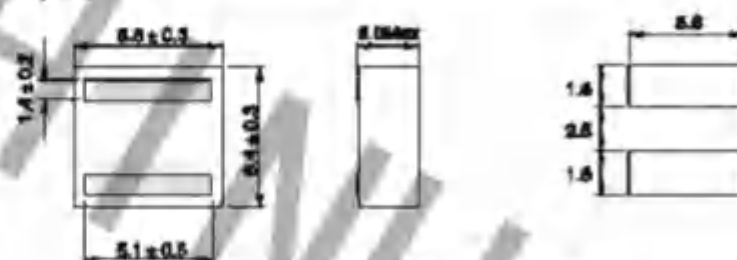


ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @0Ato	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM6030C-R15M	0.15	55.0	43.0	1.0	1.2
LPM6030C-R22M	0.22	52.0	36.0	1.2	1.5
LPM6030C-R36M	0.36	28.0	26.0	2.0	2.4
LPM6030C-R47M	0.47	26.0	26.5	2.2	2.7
LPM6030C-R68M	0.68	22.5	22.0	2.8	3.5
LPM6030C-1R0M	1.0	18.1	17.7	4.2	4.8
LPM6030C-1R5M	1.5	15.0	14.5	6.2	7.3
LPM6030C-2R2M	2.2	12.0	12.2	8.7	10.3
LPM6030C-3R3M	3.3	10.5	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	36.0	44.0

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimension(mm)



Winding

Notes:

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (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 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

LPM6060C SERIES



FEATURES:

- High performance (test) realized by Caribonyl iron powder
- Low profile: 5.0mm x 5.4mm 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 phone, LCD displays, HDDs, DVDRs, DSCs, PDAs etc.
- Thin type on-board power supply module for exchange
- VRM for server

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @0A _{DC}	Heat rating current DC Ampe IDC(A)	Saturation current DC Ampe Isat(A)	DCR Typ. (mΩ)	DCR Max. (mΩ)
LPM6060C-R22M	0.22	28.0	38.0	1.1	1.3
LPM6060C-R47M	0.47	26.0	29.5	1.5	1.8
LPM6060C-R68M	0.68	22.7	25.6	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	16.6	13.4	5.9	6.5
LPM6060C-4R7M	4.7	13.5	10.2	9.1	10.1
LPM6060C-6R8M	6.8	11.5	8.0	12.7	14.0
LPM6060C-100M	10.0	9.1	7.3	18.5	20.4
LPM6060C-150M	15.0	7.4	6.8	28.2	31.1

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensional(mm)



Winding



Note

- Test Frequency: 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (I_{ma}) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (I_{sat}) 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

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:

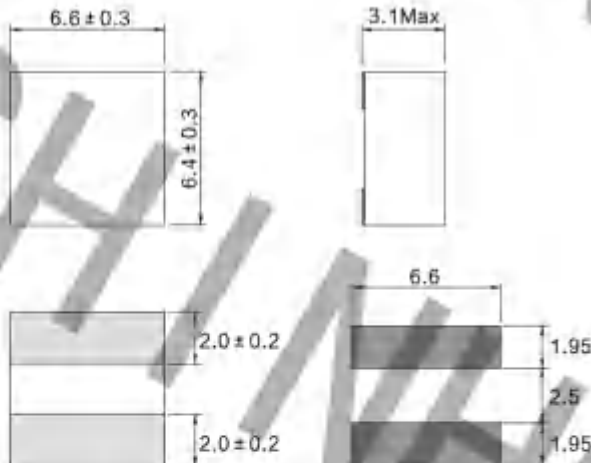
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc..
- Thin type on-board power supply module for exchanger
- VRM for server

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)

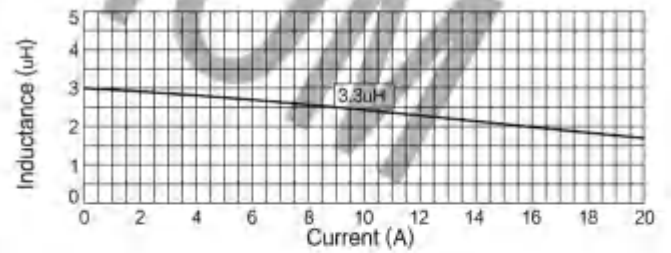
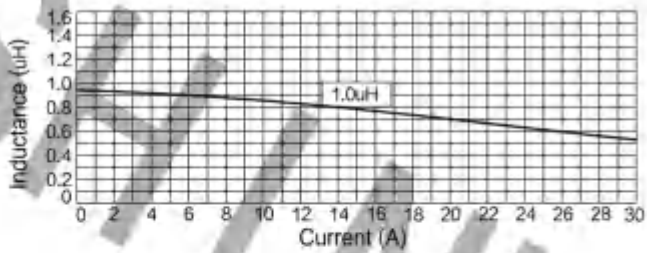
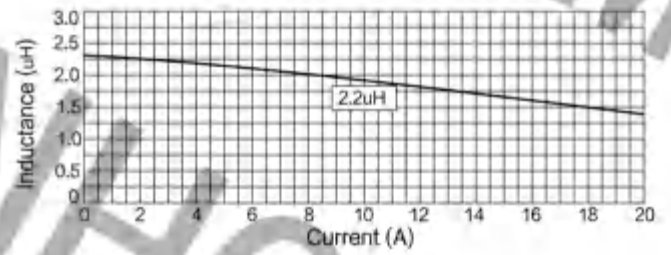
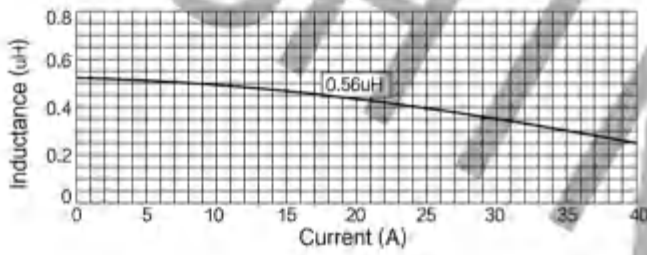
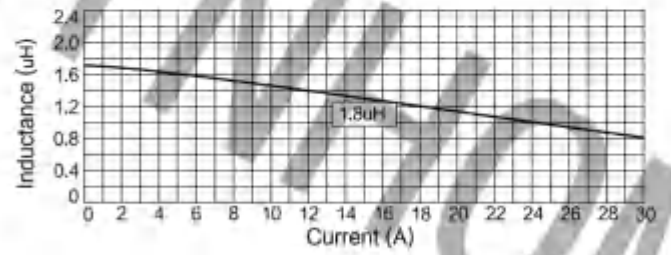
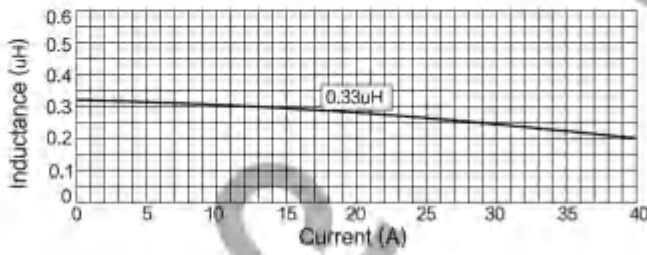
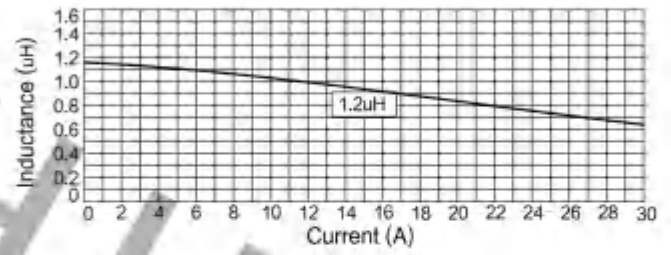
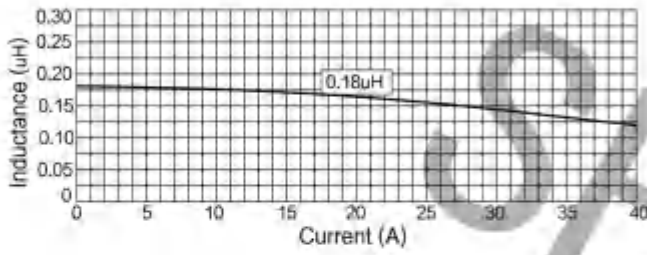


Winding

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:

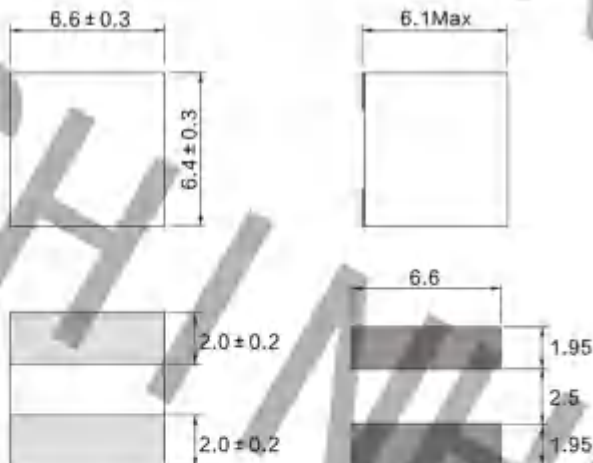
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc..
- Thin type on-board power supply module for exchanger
- VRM for server

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)



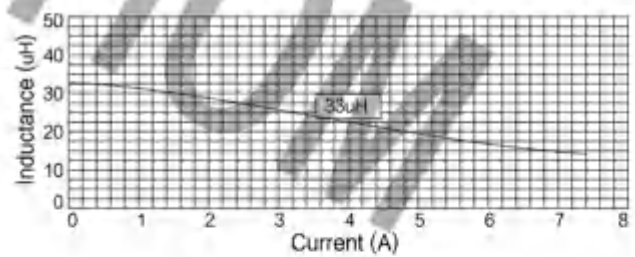
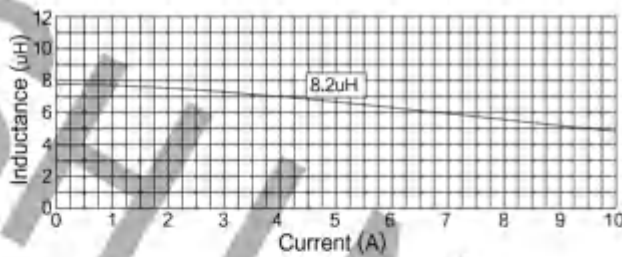
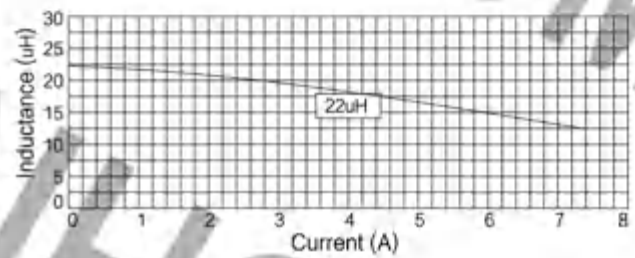
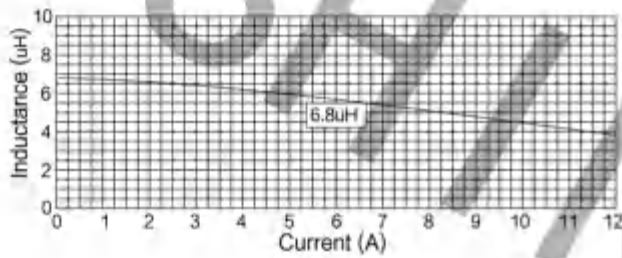
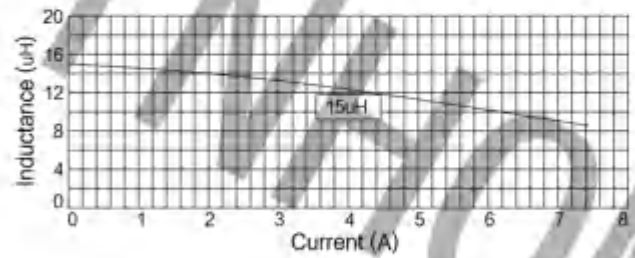
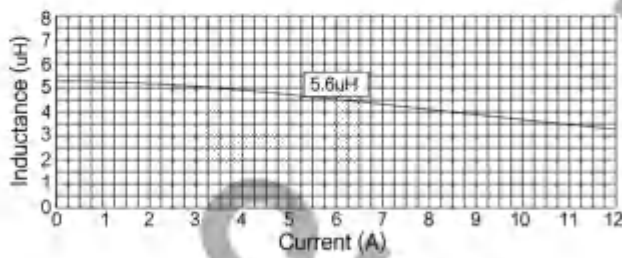
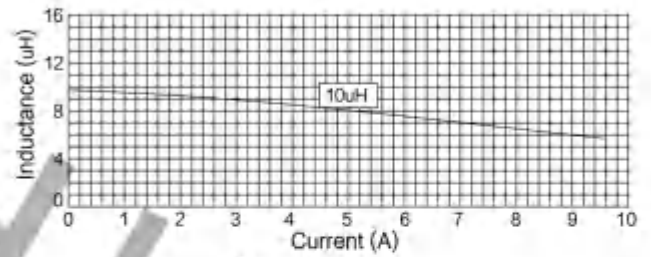
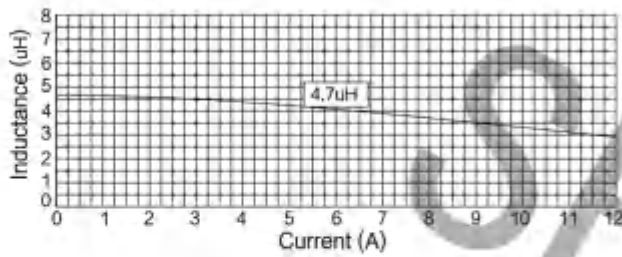
Winding



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 Carbonsyl 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 phone, LCD displays, HDDs, DVCs, DSCs, PDA etc.
- Thin type on-board power supply module for exchange
- VRM 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)
LPM10100C-1R0M	1.0	43.5	55.0	1.00	1.10
LPM10100C-1R5M	1.5	40.5	35.6	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-5R9M	5.9	18.5	21.8	8.1	8.9
LPM10100C-100M	10.0	15.5	17.5	13.4	14.8
LPM10100C-150M	15.0	13.8	15.5	18.2	19.6

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 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/ μ 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.

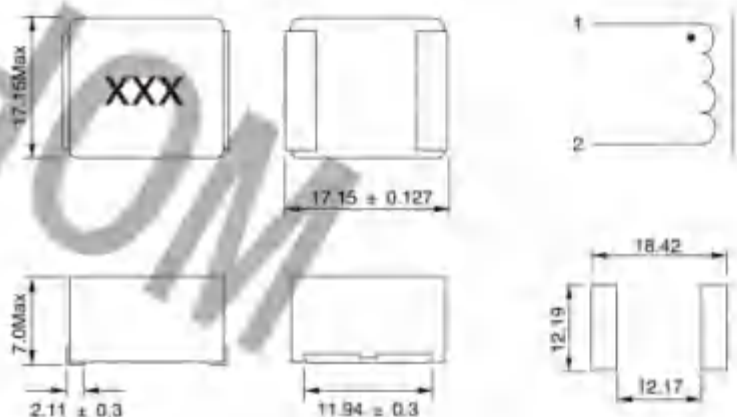
ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μ H) $\pm$ 20% @0Adc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Typ (m Ω)	DCR Max. (m Ω)
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	1.36
LPM1707-1R5M	1.5	42	65	1.78	1.88
LPM1707-1R6M	1.6	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	10.68
LPM1707-100M	10.0	16.5	25	11.6	12.0
LPM1707-150M	15.0	12.5	25	18.6	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: LHP4264A, 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°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°C - $+125^{\circ}\text{C}$.

Dimensions(mm)



Note: All specifications subject to change without notice.

SMT POWER INDUCTOR SMB0808B SERIES

FEATURES:

- SMD Inductors
- High current and lower DCR
- Ferrite core material
- Shielded construction
- Operating Temperature: -40°C to +125°C

APPLICATIONS:

- Servers
- Multi-phase and Vcore regulators
- Notebook regulators
- Battery power systems
- Graphics cards

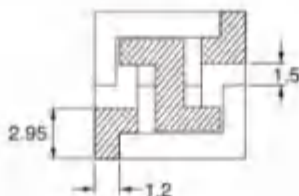
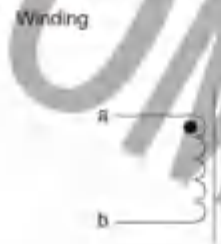
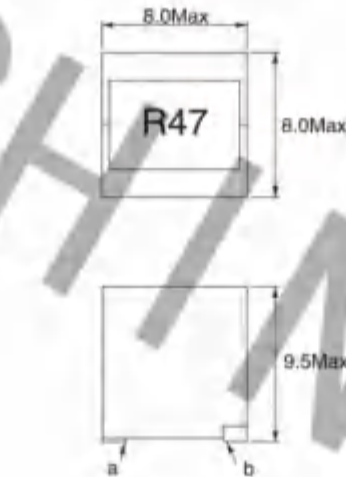


ELECTRICAL CHARACTERISTICS:

Part No.	Marking	OCL (nH) $\pm 10\%$	DCR (m Ω) $\pm 15\%$	I _{rms} (A) @ 25°C	I _{sat1} (A) @ 25°C
SMB0808B-R30K	R30	300	0.8	28	60
SMB0808B-R40K	R40	400	0.8	28	45
SMB0808B-R47K	R47	470	0.8	28	36
SMB0808B-R60K	R60	600	0.8	28	29
SMB0808B-R80K	R80	800	0.8	28	22
SMB0808B-1R0K	1R0	1000	0.8	28	15

1. Open Circuit Inductance (OCL) test condition: 100KHz, 1Vrms, 0A dc, at 25°C
2. I_{rms}: DC current for an approximate temperature rise of 40 °C without core loss. Derating is necessary for AC currents. PCB layout, trace thickness and width, air-flow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed +125 °C under worst case operating conditions verified in the end application.
3. I_{sat}: Peak current for approximately 20% rolloff @ +25 °C
4. Marking: Denotes inductance
5. Tolerance: OCL Tolerance: K= $\pm 10\%$ / L= $\pm 15\%$ / M= $\pm 20\%$ Measurement Equipment: WK3260B+WK3265B (or equivalent)

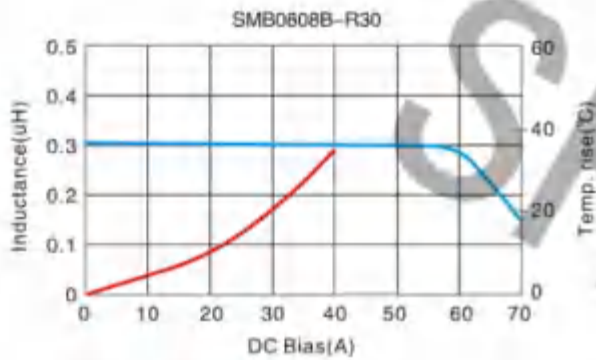
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



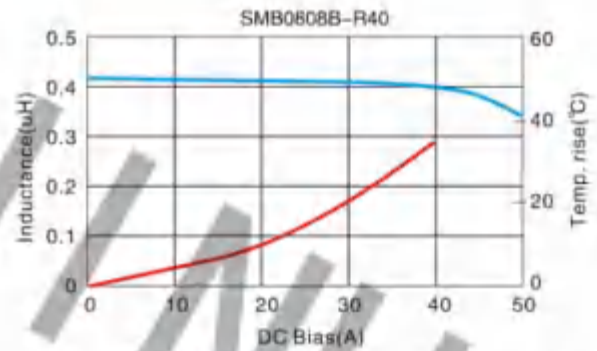
Suggested Pad Layout

- Operating Temperature: -40°C to +125°C (Ambient plus self temperature rise)
- Storage Temperature: In Original Packaging, <40°C ; <75%RH
- Moisture Sensitivity Level (MSL): 1
- Packaging: 500 pcs , 13" Reel

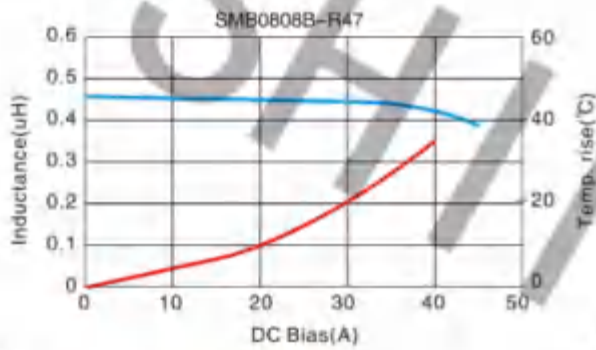
CURRENT VS INDUCTANCE & TEMPERATURE RISE:



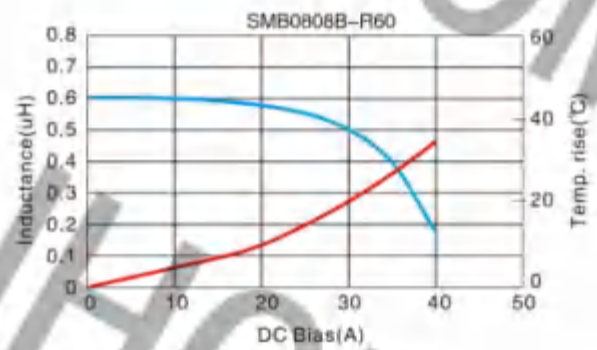
Inductance(uH) ———
Temp. rise(°C) ———



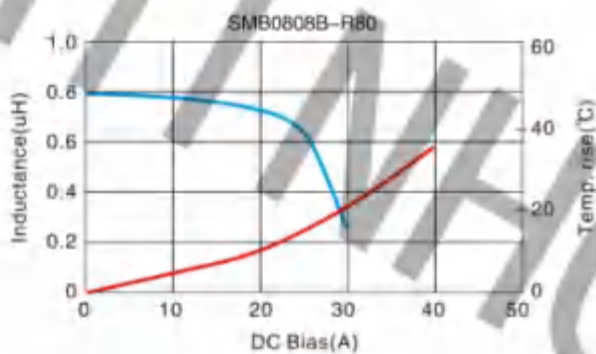
Inductance(uH) ———
Temp. rise(°C) ———



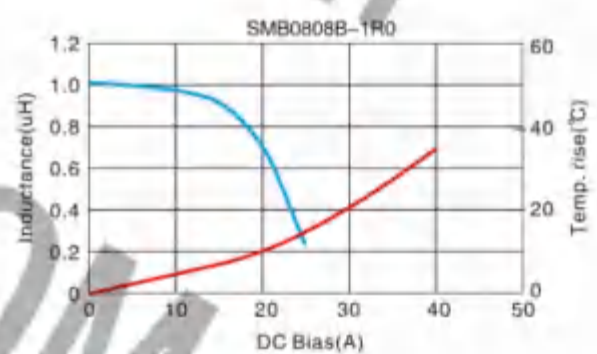
Inductance(uH) ———
Temp. rise(°C) ———



Inductance(uH) ———
Temp. rise(°C) ———



Inductance(uH) ———
Temp. rise(°C) ———



Inductance(uH) ———
Temp. rise(°C) ———

SMT POWER INDUCTOR SMB1007B SERIES



FEATURES:

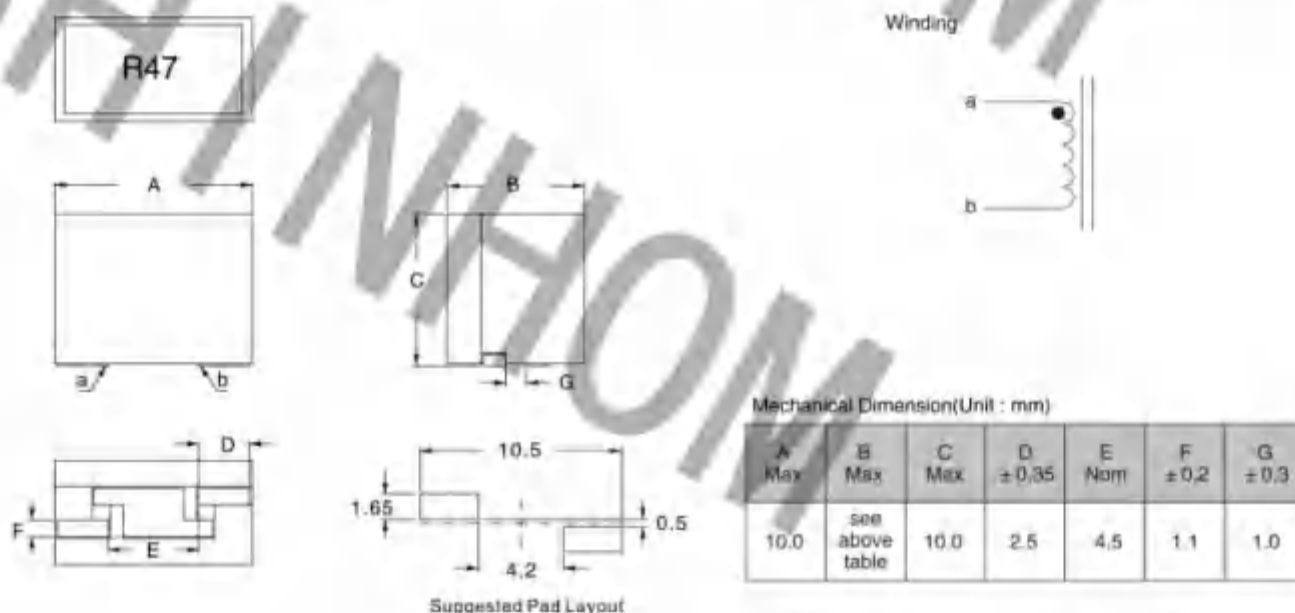
- Ferrite based SMT inductor with lower core loss.
- Inductance Range: 330.0nH to 1600.0nH, Custom values are welcomed.
- High current output chokes, up to 65.0 Amp with approx. 20% roll off
- 10.00 mm Max. height.
- Perfect for high density designs with limited board space.
- Operating frequency up to 5.0 MHz application.
- Operating Temperature Range -55°C to +130°C, RoHs & HF compliance.
- T & R Qty: 400 pcs, 13" Reel;

ELECTRICAL CHARACTERISTICS:

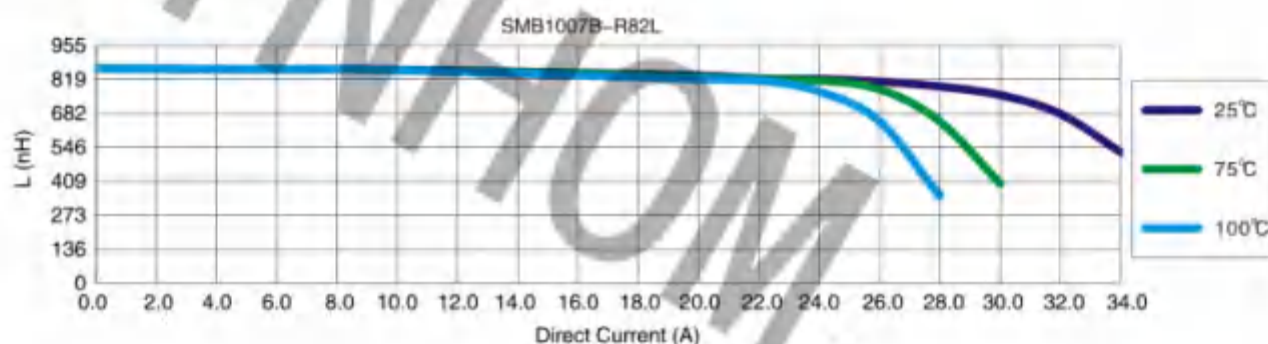
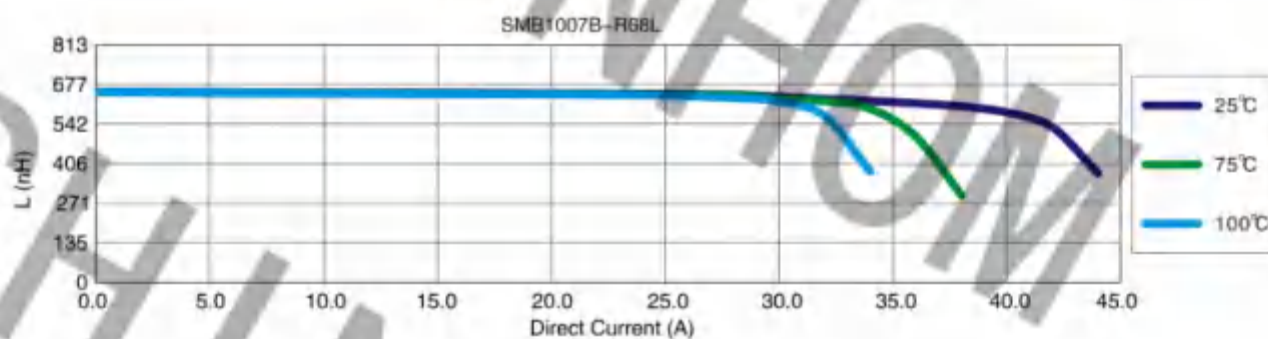
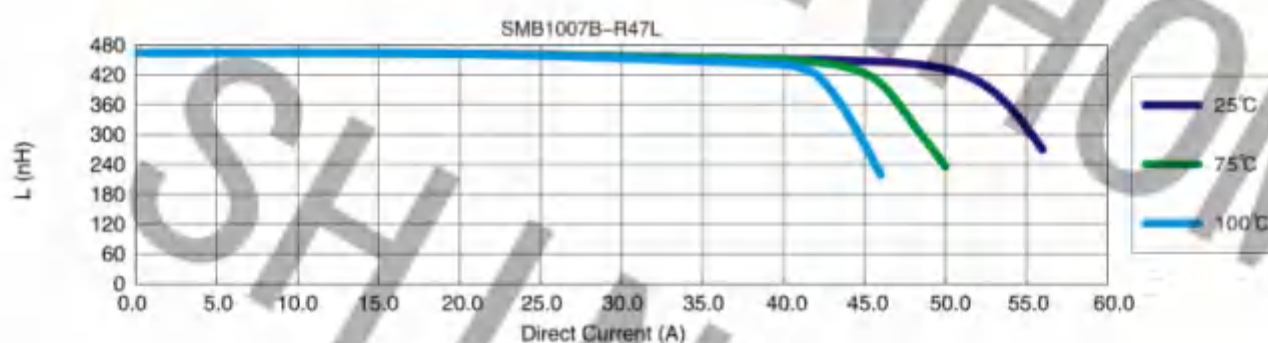
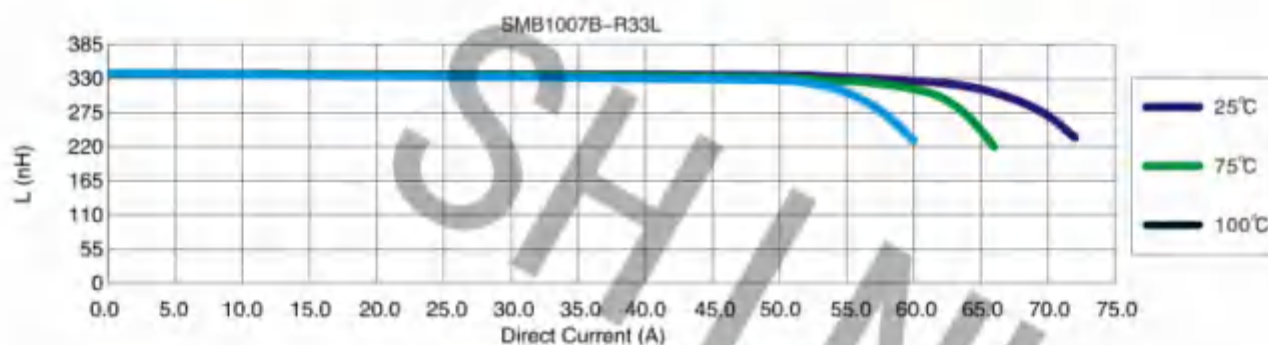
Part No.	OCL (nH) $\pm 15\%$	L @ Isat1 (nH) Min	DCR (m Ω) $\pm 10\%$	Isat1 (A) $\pm 25^\circ\text{C}$	Isat2 (A) $\pm 75^\circ\text{C}$	Isat3 (A) $\pm 100^\circ\text{C}$	Irms (A) $\pm 25^\circ\text{C}$	Dim. B Max
SMB1007B-R33L	330	231	0.81	65	58	53	30	7.3
SMB1007B-R47L	470	329	0.81	48	40	38	30	7.8
SMB1007B-R68L	680	476	0.81	34	31	29	30	7.0
SMB1007B-R82L	820	574	0.81	28	25	23	30	7.0
SMB1007B-1R0L	1000	700	0.81	23	19	18	30	7.0
SMB1007B-1R2L	1200	840	0.81	20	17	15	30	7.0
SMB1007B-1R4L	1400	980	0.81	16	14	13	30	7.0
SMB1007B-1R6L	1600	1120	0.81	14	13	12	30	7.0

1. Open Circuit Inductance (OCL) test condition: 100KHz, 0.1Vrms, 0A dc, at 25°C
2. L @ Isat and L @ Irms Test condition: 100KHz, 0.1Vrms (Ta=25°C)
3. The nominal DCR is measured from point "a" to point "b", as shown above on the mechanical drawing (Ta=25°C)
4. Isat1, Isat2, & Isat3: DC current that will cause inductance to drop approximately by 20%.
5. Irms: DC current for an approximate temperature rise of 40°C without core loss. Derating is necessary for AC currents. PCB pad layout, trace thickness and width, air-flow and proximity of other heat generating components will affect the temperature rise. It is recommended the part temperature not exceed 130°C under worst case operating conditions verified in the end application.

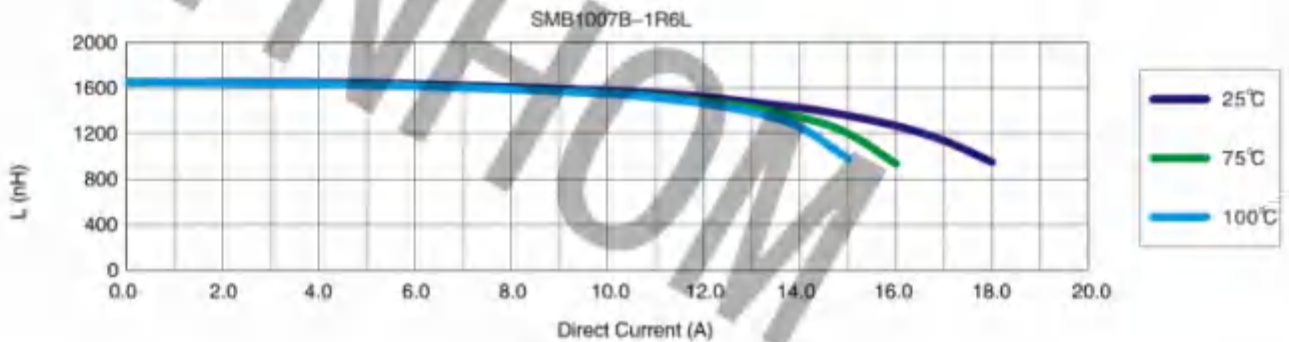
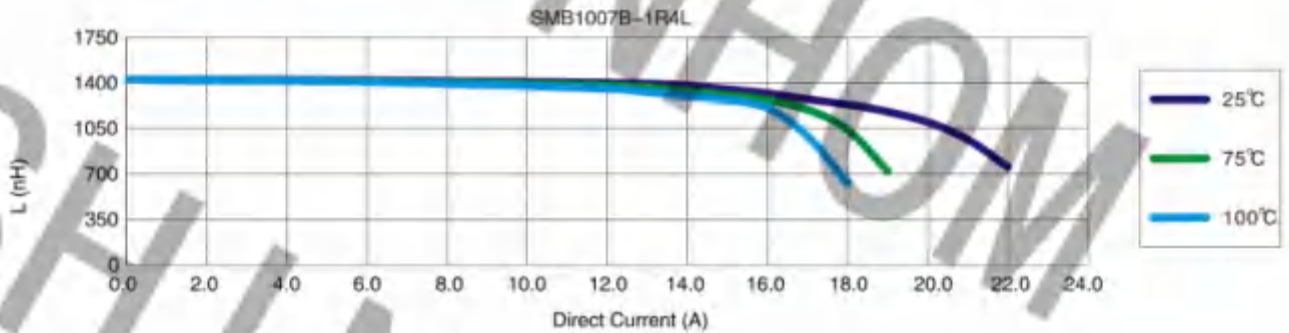
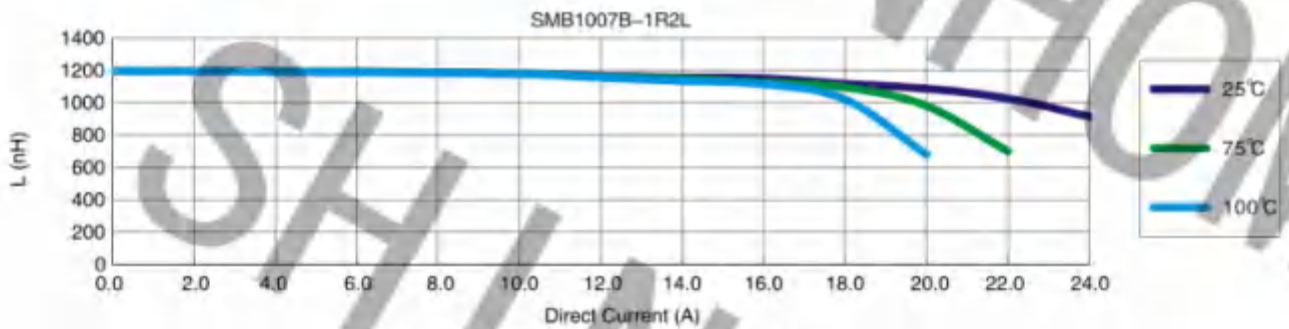
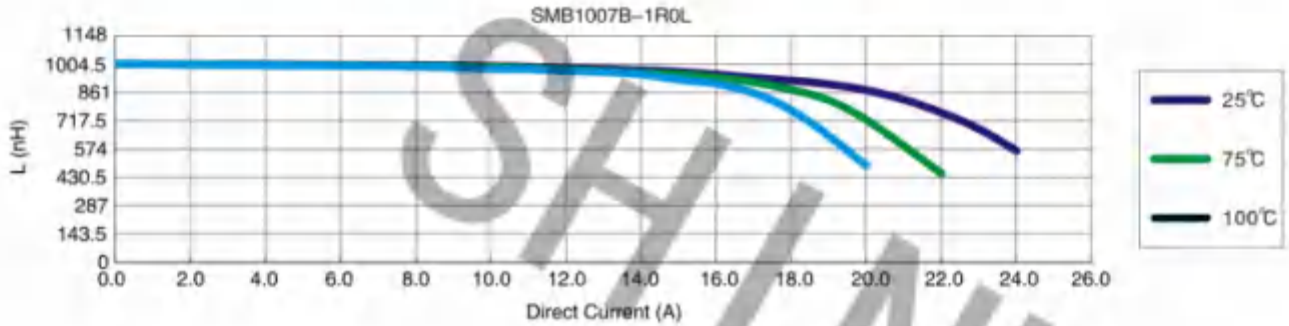
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



CURRENT VS INDUCTANCE:



CURRENT VS INDUCTANCE:

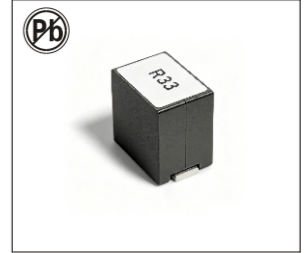


SMT SHIELDED POWER INDUCTOR

SMB100710 SERIES

FEATURES:

- Tight DCR tolerance for inductor-DCR-based current sensing circuits
- Excellent current handling
- 10x 7x 10 (Lx W x H) mm surface mount package
- Designed for use in multi-phase VRM/VRD/EVRD regulators
- Storage temperature: -40°C to +145°C
- Operating temperature: -40°C to +145°C(ambient + temp rise)
- RoHS compliant
- Packaging 400/13" reel

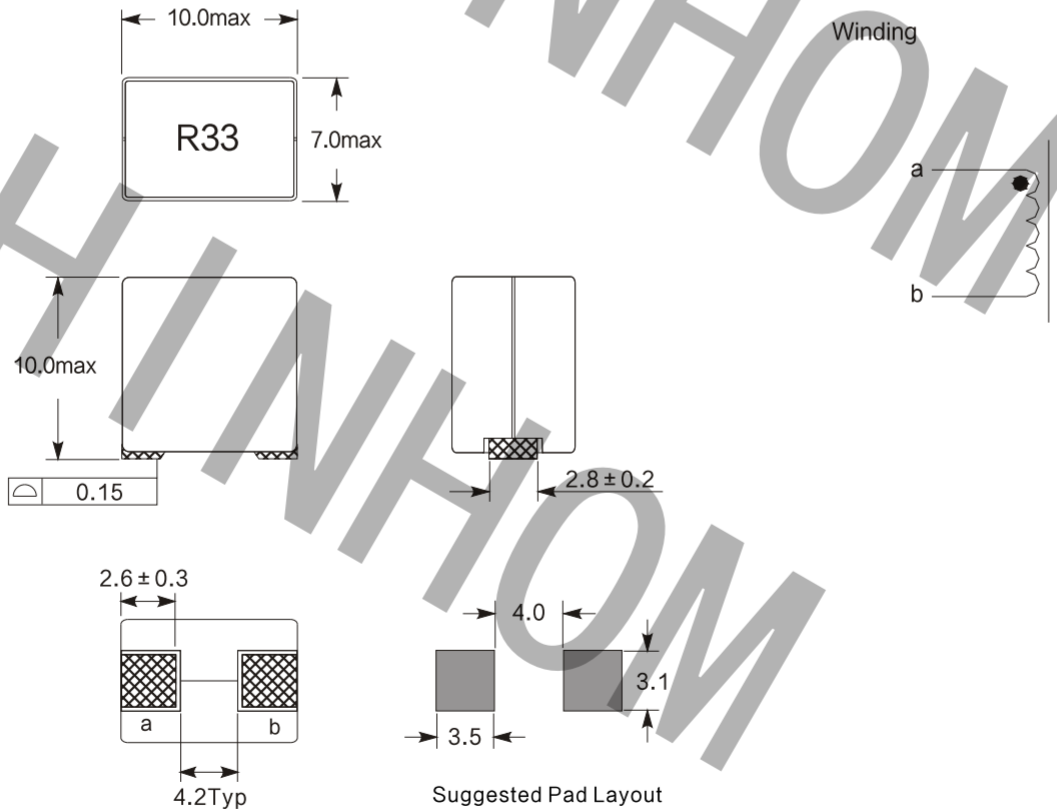


ELECTRICAL CHARACTERISTICS:

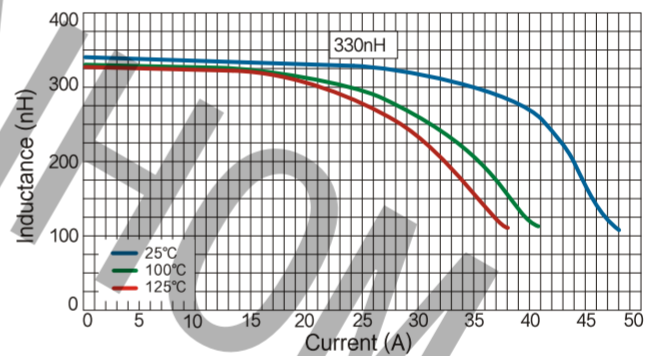
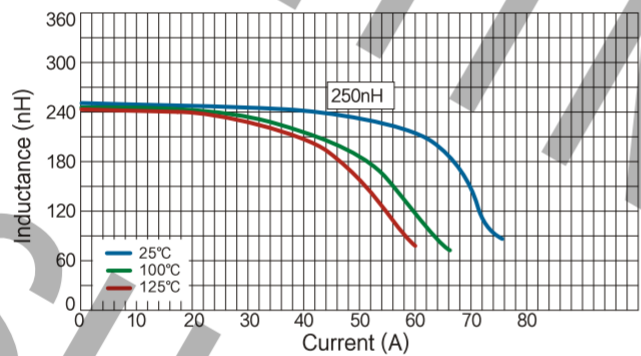
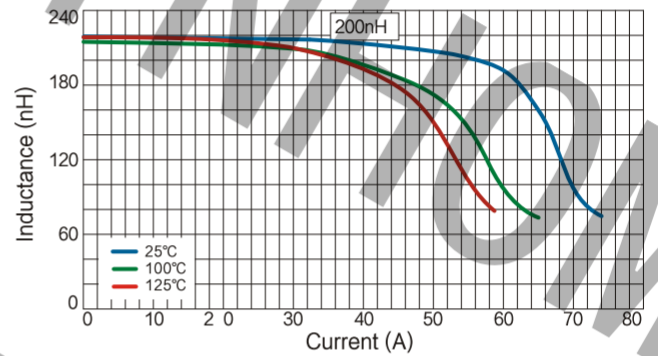
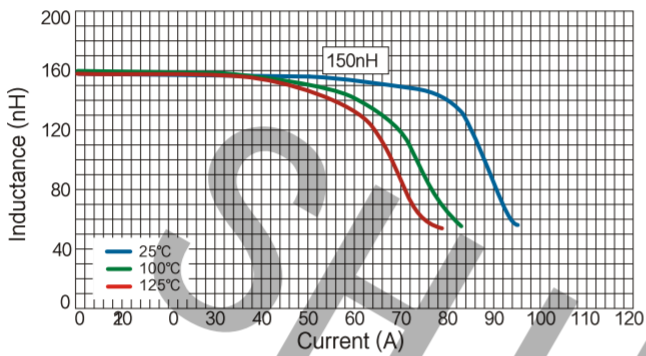
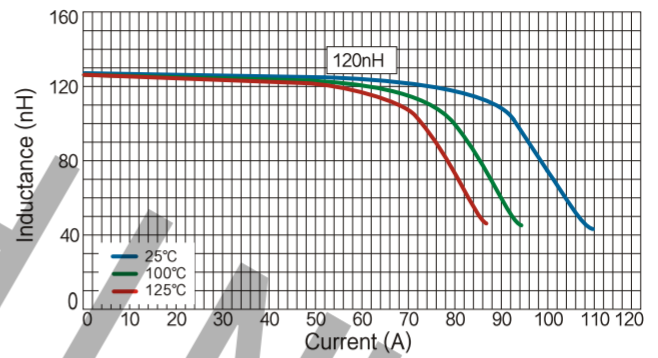
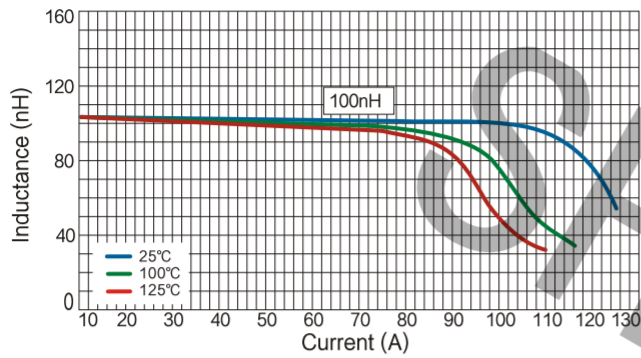
Part No.	OCL (nH)	SRF (MHz)typ	DCR (mΩ) ± 10%	Isat1 (A) @25°C	Isat2 (A) @100°C	Isat3 (A) @125°C	Irms (A) 20°C rise	Irms (A) 40°C rise
SMB100710-R10K	100 ± 10%	222	0.17	113	100	90	72	92
SMB100710-R12K	120 ± 10%	159	0.17	98	84	80	72	92
SMB100710-R15K	150 ± 10%	150	0.17	75	65	60	72	92
SMB100710-R20K	200 ± 10%	85	0.17	62	46	42	72	92
SMB100710-R25K	250 ± 10%	88	0.17	44	36	32	72	92
SMB100710-R33L	330 ± 15%	50	0.17	32	26	22	72	92

1. Inductance at 100 kHz, 0.1 Vrms, 0 Adc.
2. DC current that causes an inductance drop of 20% (typ) from its value without current.
3. Electrical specifications at 25°C

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



INDUCTANCE VS CURRENT:



INDUCTANCE VS FREQUENCY:

