

SURFACE-MOUNT MULTI-LAYER FERRITE CHIP INDUCTORS

AIML-0402 SERIES

FEATURES:

- Compact size and light weight
- Excellent solderability and heat resistance for either flow or reflow soldering
- No cross coupling between inductors due to magnetic shield

COMMON APPLICATIONS:

- Resonance circuit, traps, filter circuits
- RF choke in telecommunications equipment, cordless phones, radio equipment



P6

ELECTRICAL CHARACTERISTICS:

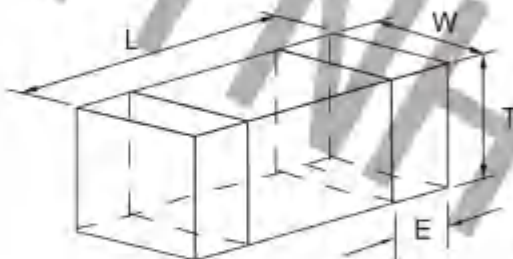
Part Number	L(μH) ± 10%	Q Min	L/Q Test Freq. (MHz)	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AIML0402-47NK	0.047	10	50	220	0.45	25
AIML0402-56NK	0.056	10	50	210	0.45	25
AIML0402-68NK	0.068	10	50	210	0.45	25
AIML0402-82NK	0.082	10	50	200	0.45	25
AIML0402-R10K	0.1	15	25	200	0.7	25
AIML0402-R12K	0.12	15	25	185	0.7	25
AIML0402-R15K	0.15	15	25	140	0.8	25
AIML0402-R18K	0.18	15	25	120	0.8	25
AIML0402-R22K	0.22	15	25	110	1.0	25
AIML0402-R27K	0.27	15	25	95	1.2	25
AIML0402-R33K	0.33	15	25	85	1.2	25
AIML0402-R39K	0.39	15	10	70	0.6	20
AIML0402-R47K	0.47	15	10	68	0.7	20
AIML0402-R56K	0.56	15	10	55	0.8	20
AIML0402-R68K	0.68	15	10	50	0.9	20
AIML0402-R82K	0.82	15	10	45	0.9	18
AIML0402-1R0K	1.0	20	10	40	0.9	15
AIML0402-1R2K	1.2	20	10	35	1.2	15

TECHNICAL INFORMATION:

- Testing: (Equivalent acceptable)
Inductance & Q-HP4195A+HP41951
DCR: VOAC-7412
SRF: HPB753C
- Solderability: 75% of the terminal electrode shall be covered
Preheat: @ 180°C ± 5°C for 2-3 minutes
Solder temperature: 230°C for 4 seconds ± 1 second Flux Emersion into methanol solution with Colophony for 3 to 5 seconds
- IDC: The DC current at which either the initial L value is decreased by 5% with the application of DC bias or the value of current at which the temperature of the element is increased by 20°C
- Operating Temperature: -25°C to +85°C
- Storage Temperature: -25°C to +85°C

PHYSICAL CHARACTERISTICS:

Dimensions:(mm)



L	1.0 ± 0.15
W	0.5 ± 0.15
T	0.5 ± 0.15
E	0.25 ± 0.1

SURFACE-MOUNT MULTI-LAYER FERRITE CHIP INDUCTORS

AIML-0603 SERIES

FEATURES:

- Compact size and light weight
- Excellent solderability and heat resistance for either flow or reflow soldering
- No cross coupling between inductors due to magnetic shield

COMMON APPLICATIONS:

- Resonance circuit, traps, filter circuits
- RF choke in telecommunications equipment, cordless phones, radio equipment



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ELECTRICAL CHARACTERISTICS:

Part Number	L(μH) ± 10%	Q Min	L/Q Test Freq (MHz)	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AIML0603-47NK	0.047	15	50	260	0.20	50
AIML0603-56NK	0.056	15	50	260	0.20	50
AIML0603-68NK	0.068	15	50	250	0.20	50
AIML0603-82NK	0.082	15	50	245	0.20	50
AIML0603-R10K	0.10	20	25	240	0.25	50
AIML0603-R12K	0.12	20	25	205	0.30	50
AIML0603-R15K	0.15	20	25	180	0.30	50
AIML0603-R18K	0.18	20	25	168	0.30	50
AIML0603-R22K	0.22	20	25	150	0.40	50
AIML0603-R27K	0.27	20	25	136	0.45	50
AIML0603-R33K	0.33	20	25	125	0.50	50
AIML0603-R39K	0.39	20	25	110	0.60	50
AIML0603-R47K	0.47	20	25	105	0.70	50
AIML0603-R56K	0.56	20	25	95	0.70	50
AIML0603-R68K	0.68	20	25	90	0.90	50
AIML0603-R82K	0.82	20	25	85	1.00	50
AIML0603-1R0K	1.0	25	10	75	0.50	25
AIML0603-1R2K	1.2	25	10	68	0.55	25
AIML0603-1R5K	1.5	25	10	60	0.70	25
AIML0603-1R8K	1.8	25	10	55	0.75	25
AIML0603-2R2K	2.2	25	10	50	0.80	25
AIML0603-2R7K	2.7	25	10	45	0.90	15
AIML0603-3R3K	3.3	25	10	40	1.00	15
AIML0603-3R9K	3.9	25	10	35	1.30	15
AIML0603-4R7K	4.7	25	4	33	1.50	15
AIML0603-5R6K	5.6	12	4	22	1.55	5
AIML0603-6R8K	6.8	12	4	20	1.55	5
AIML0603-8R2K	8.2	12	4	15	1.65	5
AIML0603-100K	10	20	2	17	1.75	3
AIML0603-120K	12	20	2	15	1.85	3
AIML0603-150M	15 ± 20%	20	1	14	2.50	1
AIML0603-180M	18 ± 20%	20	1	13	2.70	1
AIML0603-220M	22 ± 20%	20	1	12	3.00	1

TECHNICAL INFORMATION:

- Testing: (Equivalents acceptable)
Inductance & Q-HP4195A+HP41951
DCR:VOAC-7412
SRF:HPB753C
- Solderability: 75% of the terminal electrode shall be covered
Preheat: @ 180°C ± 5°C for 2-3 minutes
Solder temperature: 230°C for 4 seconds
± 1 second Flux Emersion into methanol solution with Colophony for 3 to 5 seconds
- IDC: The DC current at which either the initial L value is decreased by 5% with the application of DC bias or the value of current at which the temperature of the element is increased by 20°C
- Operating Temperature: -25°C to +85°C
- Storage Temperature: -25°C to +85°C

PHYSICAL CHARACTERISTICS:

Dimensions (mm)



L	1.6 ± 0.2
W	0.8 ± 0.2
T	0.8 ± 0.2
E	0.3 ± 0.2

SURFACE-MOUNT MULTI-LAYER HIGH CURRENT INDUCTORS

AIML-0603H SERIES

FEATURES:

- Compact size and light weight
- Excellent solderability and heat resistance for either flow or reflow soldering
- No cross coupling between inductors due to magnetic shield
- Low RDC and High IDC

COMMON APPLICATIONS:

- Cellular platform DC-DC converter circuit
- Portable AV equipment(digital camera,DVD Type)
- Cellular platform(handset Type)
- Memex(computer Type)



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ELECTRICAL CHARACTERISTICS:

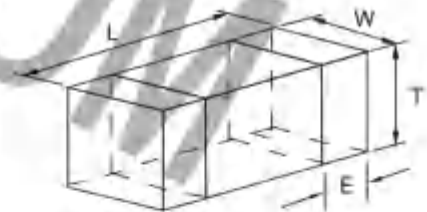
Part Number	L(μH) ±20%	L Tset Freq. (MHz)	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AIML0603H-47NM	0.047	1	260	0.12	150
AIML0603H-55NM	0.056	1	260	0.12	150
AIML0603H-68NM	0.068	1	250	0.12	150
AIML0603H-82NM	0.082	1	245	0.12	150
AIML0603H-R10M	0.10	1	240	0.15	150
AIML0603H-R12M	0.12	1	205	0.20	150
AIML0603H-R15M	0.15	1	180	0.20	150
AIML0603H-R18M	0.18	1	165	0.20	150
AIML0603H-R22M	0.22	1	150	0.25	150
AIML0603H-R27M	0.27	1	138	0.30	100
AIML0603H-R33M	0.33	1	125	0.30	100
AIML0603H-R39M	0.39	1	110	0.35	100
AIML0603H-R47M	0.47	1	105	0.45	100
AIML0603H-R56M	0.56	1	95	0.45	100
AIML0603H-R68M	0.68	1	90	0.55	100
AIML0603H-R82M	0.82	1	85	0.60	100
AIML0603H-1R0M	1.0	1	75	0.30	150
AIML0603H-1R3M	1.3	1	68	0.30	150
AIML0603H-1R5M	1.5	1	60	0.35	120
AIML0603H-1R8M	1.8	1	45	0.40	120
AIML0603H-2R2M	2.2	1	50	0.50	120
AIML0603H-2R7M	2.7	1	45	0.60	100
AIML0603H-3R3M	3.3	1	40	0.65	100
AIML0603H-3R9M	3.9	1	35	0.70	80
AIML0603H-4R7M	4.7	1	33	0.75	80
AIML0603H-5R6M	5.6	1	22	0.90	60
AIML0603H-6R8M	6.8	1	20	0.90	60
AIML0603H-8R2M	8.2	1	18	1.05	60
AIML0603H-100M	10	1	17	1.15	60
AIML0603H-120M	12	1	15	1.25	60

TECHNICAL INFORMATION:

- Testing:(Equivalents acceptable)
Inductance & Q-HP4195A+HP41951
DCR:VOAC-7412
SRF:HP8753C
- Solderability:75% of the terminal electrode shall be covered
Preheat: @ 180°C ± 5°C for 2-3 minutes
Solder temperature:230°C for 4 seconds
± 1 second Flux Emersion into methanol solution with Colophony for 3 to 5 seconds
- IDC:The DC current at which either the initial L value is decreased by 5% with the application of DC bias or the value of current at which the temperature of the element is increased by 20°C
- Operating Temperature: -25°C to +85°C
- Storage Temperature: -25°C to +85°C

PHYSICAL CHARACTERISTICS:

Dimensions:(mm)



L	1.6 ± 0.2
W	0.8 ± 0.2
T	0.8 ± 0.2
E	0.3 ± 0.3

SURFACE-MOUNT MULTI-LAYER FERRITE CHIP INDUCTORS

AIML-0805 SERIES

FEATURES:

- Compact size and light weight
- Excellent solderability and heat resistance for either flow or reflow soldering
- No cross coupling between inductors due to magnetic shield

COMMON APPLICATIONS:

- Resonance circuit, traps, filter circuits
- RF choke in telecommunications equipment, cordless phones, radio equipment



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ELECTRICAL CHARACTERISTICS:

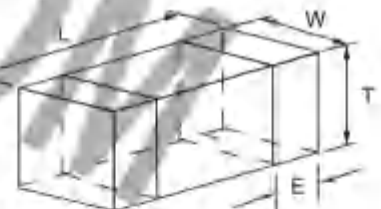
Part Number	L(μH) ± 10%	Q Min	L/Q Test Freq (MHz)	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AIML0805-47NK	0.047	25	50	320	0.15	300
AIML0805-56NK	0.056	25	50	320	0.15	300
AIML0805-68NK	0.068	25	50	280	0.20	300
AIML0805-82NK	0.082	25	50	280	0.20	300
AIML0805-R10K	0.10	20	25	235	0.20	250
AIML0805-R12K	0.12	20	25	220	0.25	250
AIML0805-R15K	0.15	20	25	200	0.25	250
AIML0805-R18K	0.18	20	25	185	0.30	250
AIML0805-R22K	0.22	20	25	170	0.30	250
AIML0805-R27K	0.27	20	25	150	0.40	250
AIML0805-R33K	0.33	20	25	145	0.40	250
AIML0805-R39K	0.39	25	25	136	0.50	200
AIML0805-R47K	0.47	25	25	125	0.50	200
AIML0805-R56K	0.56	25	25	115	0.50	150
AIML0805-R68K	0.68	25	25	105	0.65	150
AIML0805-R82K	0.82	25	25	100	0.70	150
AIML0805-1R0K	1.0	35	10	75	0.40	50
AIML0805-1R2K	1.2	35	10	65	0.40	50
AIML0805-1R5K	1.5	35	10	60	0.40	50
AIML0805-1R8K	1.8	35	10	55	0.40	50
AIML0805-2R2K	2.2	35	10	50	0.60	50
AIML0805-2R7K	2.7	35	10	45	0.60	50
AIML0805-3R3K	3.3	35	10	41	0.60	50
AIML0805-3R9K	3.9	35	10	38	0.60	50
AIML0805-4R7K	4.7	35	10	35	0.90	30
AIML0805-5R6K	5.6	30	4	32	1.00	15
AIML0805-6R8K	6.8	30	4	29	1.05	15
AIML0805-8R2K	8.2	30	4	26	1.05	15
AIML0805-100K	10	30	2	24	1.15	15
AIML0805-120K	12	30	2	22	1.15	15
AIML0805-150K	15	25	1	19	1.15	5
AIML0805-180K	18	25	1	18	1.20	5
AIML0805-220K	22	25	1	16	1.20	5
AIML0805-270K	27	25	1	15	1.50	5
AIML0805-330M	33 ± 20%	25	1	16	1.50	5
AIML0805A-390M	39 ± 20%	25	1	16	1.50	5
AIML0805A-470M	47 ± 20%	25	1	15	1.70	5

TECHNICAL INFORMATION:

- Testing: (Equivalents acceptable)
Inductance & Q-HP4195A+HP41951
DCR:VOAC-7412
SRF:HPB753C
- Solderability: 75% of the terminal electrode shall be covered
Preheat: @ 180°C ± 5°C for 2-3 minutes
Solder temperature: 230°C for 4 seconds
± 1 second Flux Emersion into methanol solution with Colophony for 3 to 5 seconds
- IDC: The DC current at which either the initial L value is decreased by 5% with the application of DC bias or the value of current at which the temperature of the element is increased by 20°C
- Operating Temperature: -25°C to +85°C
- Storage Temperature: -25°C to +85°C

PHYSICAL CHARACTERISTICS:

Dimensions (mm)



L	2.0 ± 0.2	
W	1.2 ± 0.2	
T	(0805) 0.9 ± 0.2	(0805A) 1.2 ± 0.2
E	0.5 ± 0.3	

SURFACE-MOUNT MULTI-LAYER HIGH CURRENT INDUCTORS

AIML-0805H SERIES

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FEATURES:

- Compact size and light weight
- Excellent solderability and heat resistance for either flow or reflow soldering
- No cross coupling between inductors due to magnetic shield
- Low RDC and High IDC

COMMON APPLICATIONS:

- Cellular platform DC-DC converter circuit
- Portable AV equipment (digital camera, DVD Type)
- Cellular platform (handset Type)
- Memex (computer Type)

ELECTRICAL CHARACTERISTICS:

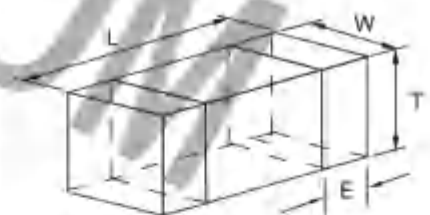
Part Number	L (μH) ± 20%	L Test Freq. (MHz)	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AIML0805H-47NM	0.047	1	320	0.15	350
AIML0805H-56NM	0.056	1	320	0.15	350
AIML0805H-68NM	0.068	1	260	0.20	350
AIML0805H-82NM	0.082	1	280	0.20	350
AIML0805H-R10M	0.10	1	235	0.20	350
AIML0805H-R12M	0.12	1	220	0.20	350
AIML0805H-R15M	0.15	1	200	0.20	350
AIML0805H-R18M	0.18	1	185	0.25	300
AIML0805H-R22M	0.22	1	170	0.25	300
AIML0805H-R27M	0.27	1	150	0.25	300
AIML0805H-R33M	0.33	1	145	0.25	300
AIML0805H-R39M	0.39	1	135	0.30	250
AIML0805H-R47M	0.47	1	125	0.30	250
AIML0805H-R56M	0.56	1	115	0.36	200
AIML0805H-R68M	0.68	1	105	0.36	200
AIML0805H-R82M	0.82	1	100	0.36	200
AIML0805H-1R0M	1.0	1	75	0.26	220
AIML0805H-1R2M	1.2	1	65	0.26	220
AIML0805H-1R5M	1.5	1	60	0.30	180
AIML0805H-1R8M	1.8	1	55	0.30	180
AIML0805H-2R2M	2.2	1	50	0.36	150
AIML0805H-2R7M	2.7	1	45	0.36	150
AIML0805H-3R3M	3.3	1	41	0.40	120
AIML0805H-3R9M	3.9	1	36	0.40	120
AIML0805H-4R7M	4.7	1	35	0.40	120
AIML0805H-5R6M	5.6	1	32	0.60	100
AIML0805H-6R8M	6.8	1	29	0.60	100
AIML0805H-8R2M	8.2	1	26	0.65	100
AIML0805H-100M	10	1	24	0.65	100
AIML0805H-120M	12	1	22	0.65	100
AIML0805H-150M	15	1	19	0.75	50
AIML0805H-180M	18	1	16	0.75	50
AIML0805H-220M	22	1	16	0.75	50

TECHNICAL INFORMATION:

- Testing: (Equivalents acceptable)
Inductance & Q: HP4195A+HP41951
DCR: VOAC-7412
SRF: HP8753C
- Solderability: 75% of the terminal electrode shall be covered
Preheat: @ 180°C ± 5°C for 2-3 minutes
Solder temperature: 230°C for 4 seconds
± 1 second Flux Emersion into molten solution with Colophony for 3 to 5 seconds
- IDC: The DC current at which either the initial L value is decreased by 5% with the application of DC bias or the value of current at which the temperature of the element is increased by 20°C
- Operating Temperature: -25°C to +85°C
- Storage Temperature: -25°C to +85°C

PHYSICAL CHARACTERISTICS:

Dimensions: (mm)



L	2.0 ± 0.2
W	1.2 ± 0.2
T	0.9 ± 0.2
E	0.5 ± 0.3

SURFACE-MOUNT MULTI-LAYER HIGH CURRENT INDUCTORS

AIML-0805UH SERIES

FEATURES:

- Compact size and light weight
- Excellent solderability and heat resistance for either flow or reflow soldering
- No cross coupling between inductors due to magnetic shield
- Low RDC and High IDC

COMMON APPLICATIONS:

- Cellular platform DC-DC converter circuit
- Portable AV equipment(digital camera,DVD Type)
- Cellular platform(handset Type)
- Memex(computer Type)



ELECTRICAL CHARACTERISTICS:

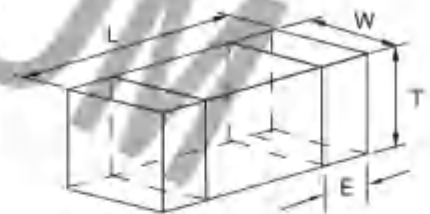
Part Number	L(μH) ±20%	L Tset Freq. (MHz)	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AIML0805UH-47NM	0.047	1	280	0.10	1100
AIML0805UH-56NM	0.056	1	280	0.10	1100
AIML0805UH-68NM	0.068	1	250	0.15	1100
AIML0805UH-82NM	0.082	1	250	0.15	1100
AIML0805UH-R10M	0.10	1	210	0.15	1100
AIML0805UH-R12M	0.12	1	200	0.15	1100
AIML0805UH-R15M	0.15	1	175	0.15	1100
AIML0805UH-R18M	0.18	1	160	0.15	1100
AIML0805UH-R22M	0.22	1	150	0.15	1100
AIML0805UH-R27M	0.27	1	130	0.15	1100
AIML0805UH-R33M	0.33	1	120	0.15	1100
AIML0805UH-R39M	0.39	1	110	0.15	1100
AIML0805UH-R47M	0.47	1	100	0.15	1100
AIML0805UH-R56M	0.56	1	100	0.30	600
AIML0805UH-R68M	0.68	1	95	0.36	600
AIML0805UH-R82M	0.82	1	90	0.36	600
AIML0805UH-1R0M	1.0	1	75	0.24	800
AIML0805UH-1R2M	1.2	1	66	0.24	800
AIML0805UH-1R5M	1.5	1	60	0.30	700
AIML0805UH-1R8M	1.8	1	45	0.36	600
AIML0805UH-2R2M	2.2	1	50	0.36	600
AIML0805UH-2R7M	2.7	1	45	0.36	600
AIML0805UH-3R3M	3.3	1	41	0.40	350
AIML0805UH-3R9M	3.9	1	38	0.40	350
AIML0805UH-4R7M	4.7	1	35	0.40	350
AIML0805UH-5R6M	5.6	1	32	0.50	250
AIML0805UH-6R8M	6.8	1	29	0.50	250
AIML0805UH-8R2M	8.2	1	26	0.56	250
AIML0805UH-100M	10	1	24	0.70	250
AIML0805UH-120M	12	1	22	0.70	250
AIML0805UH-150M	15	1	19	0.85	100

TECHNICAL INFORMATION:

- Testing:(Equivalents acceptable)
Inductance & Q-HP4195A+HP41951
DCR:VOAC-7412
SRF:HP8753C
- Solderability:75% of the terminal electrode shall be covered
Preheat: @ 180°C ± 5°C for 2-3 minutes
Solder temperature:230°C for 4 seconds
± 1 second Flux Emersion into methanol solution with Colophony for 3 to 5 seconds
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- Operating Temperature: -25°C to +85°C
- Storage Temperature: -25°C to +85°C

PHYSICAL CHARACTERISTICS:

Dimensions:(mm)



L	2.0 ± 0.2
W	1.2 ± 0.2
T	0.9 ± 0.2
E	0.5 ± 0.3

SURFACE-MOUNT MULTI-LAYER FERRITE CHIP INDUCTORS

AIML-1206 SERIES

FEATURES:

- Compact size and light weight
- Excellent solderability and heat resistance for either flow or reflow soldering
- No cross coupling between inductors due to magnetic shield

COMMON APPLICATIONS:

- Resonance circuit, traps, filter circuits
- RF choke in telecommunications equipment, cordless phones, radio equipment



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ELECTRICAL CHARACTERISTICS:

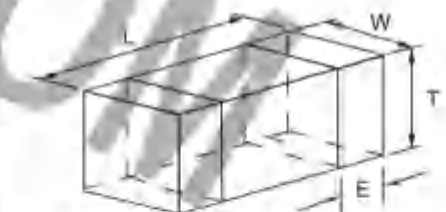
Part Number	L(μH) ± 10%	Q Min	L/Q Test Freq (MHz)	SRF (MHz) Min	DCR (Ω) Max	DC (mA) Max
AIML1206-47NK	0.047	30	50	320	0.15	300
AIML1206-56NK	0.056	30	50	320	0.20	300
AIML1206-68NK	0.068	30	50	280	0.25	300
AIML1206-82NK	0.082	30	50	280	0.25	300
AIML1206-R10K	0.10	25	25	235	0.25	250
AIML1206-R12K	0.12	25	25	220	0.25	250
AIML1206-R15K	0.15	25	25	200	0.25	250
AIML1206-R18K	0.18	25	25	185	0.30	250
AIML1206-R22K	0.22	25	25	170	0.30	250
AIML1206-R27K	0.27	25	25	150	0.30	250
AIML1206-R33K	0.33	25	25	145	0.30	250
AIML1206-R39K	0.39	20	25	135	0.50	200
AIML1206-R47K	0.47	20	25	125	0.50	200
AIML1206-R56K	0.56	20	25	115	0.60	150
AIML1206-R68K	0.68	20	25	105	0.60	150
AIML1206-R82K	0.82	20	25	100	0.60	150
AIML1206-1R0K	1.0	35	10	75	0.50	100
AIML1206-1R2K	1.2	35	10	65	0.40	100
AIML1206-1R5K	1.5	35	10	60	0.40	50
AIML1206-1R8K	1.8	35	10	55	0.40	50
AIML1206-2R2K	2.2	35	10	50	0.50	50
AIML1206-2R7K	2.7	35	10	45	0.50	50
AIML1206-3R3K	3.3	35	10	41	0.50	50
AIML1206-3R9K	3.9	35	10	38	0.60	50
AIML1206-4R7K	4.7	35	10	35	0.65	25
AIML1206-5R6K	5.6	25	4	32	0.80	25
AIML1206-6R8K	6.8	25	4	29	0.80	25
AIML1206-8R2K	8.2	25	1	26	0.80	25
AIML1206-100K	10	25	2	24	0.80	25
AIML1206-120K	12	25	2	22	0.90	15
AIML1206-150K	15	30	1	19	1.00	5
AIML1206-180K	18	30	1	16	1.00	5
AIML1206-220K	22	30	1	16	1.20	5
AIML1206-270K	27	30	1	14	1.20	5
AIML1206-330K	33	30	1	13	1.30	5
AIML1206-390K	39	30	1	13	1.30	5
AIML1206A-470K	47	30	1	12	1.60	5
AIML1206A-560M	56 ± 20%	30	1	12	1.80	5
AIML1206A-680M	68 ± 20%	30	1	11	2.00	5
AIML1206A-820M	82 ± 20%	30	1	11	2.40	5
AIML1206A-101M	100 ± 20%	30	1	8	3.00	5

TECHNICAL INFORMATION:

- Testing: (Equivalents acceptable)
Inductance & Q-HP4195A+HP41951
DCR:VOAC-7412
SRF:HPB753C
- Solderability: 75% of the terminal electrode shall be covered
Preheat: @ 180°C ± 5°C for 2-3 minutes
Solder temperature: 230°C for 4 seconds
± 1 second Flux Emersion into methanol solution with Colophony for 3 to 5 seconds
- IDC: The DC current at which either the initial L value is decreased by 5% with the application of DC bias or the value of current at which the temperature of the element is increased by 20°C
- Operating Temperature: -25°C to +85°C
- Storage Temperature: -25°C to +85°C

PHYSICAL CHARACTERISTICS:

Dimensions (mm)



L	3.2 ± 0.2	
W	1.6 ± 0.2	
T	(1206) 0.9 ± 0.2	(1206A) 1.1 ± 0.2
E	0.5 ± 0.3	

SURFACE-MOUNT MULTI-LAYER HIGH CURRENT INDUCTORS

AIML-1206H SERIES

P6



FEATURES:

- Compact size and light weight
- Excellent solderability and heat resistance for either flow or reflow soldering
- No cross coupling between inductors due to magnetic shield
- Low RDC and High IDC

COMMON APPLICATIONS:

- Cellular platform DC-DC converter circuit
- Portable AV equipment (digital camera, DVD Type)
- Cellular platform (handset Type)
- Memex (computer Type)

ELECTRICAL CHARACTERISTICS:

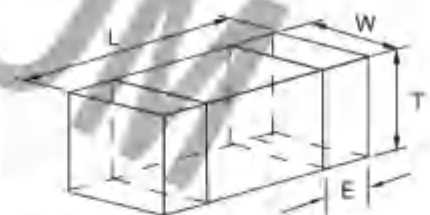
Part Number	L (uH) ±20%	L Tsol Freq. (MHz)	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AIML1206H-47NM	0.047	1	320	0.15	450
AIML1206H-56NM	0.056	1	320	0.15	450
AIML1206H-68NM	0.068	1	280	0.20	450
AIML1206H-82NM	0.082	1	280	0.20	450
AIML1206H-R10M	0.10	1	235	0.20	350
AIML1206H-R12M	0.12	1	220	0.20	350
AIML1206H-R15M	0.15	1	200	0.20	350
AIML1206H-R18M	0.18	1	185	0.20	350
AIML1206H-R22M	0.22	1	170	0.20	350
AIML1206H-R27M	0.27	1	150	0.20	330
AIML1206H-R33M	0.33	1	145	0.20	350
AIML1206H-R39M	0.39	1	135	0.30	220
AIML1206H-R47M	0.47	1	125	0.30	220
AIML1206H-R56M	0.56	1	115	0.30	220
AIML1206H-R68M	0.68	1	105	0.30	220
AIML1206H-R82M	0.82	1	100	0.30	220
AIML1206H-1R0M	1.0	1	75	0.20	250
AIML1206H-1R2M	1.2	1	65	0.20	250
AIML1206H-1R5M	1.5	1	60	0.25	250
AIML1206H-1R8M	1.8	1	55	0.25	250
AIML1206H-2R2M	2.2	1	50	0.30	200
AIML1206H-2R7M	2.7	1	45	0.30	200
AIML1206H-3R3M	3.3	1	41	0.30	200
AIML1206H-3R9M	3.9	1	38	0.35	150
AIML1206H-4R7M	4.7	1	35	0.35	150
AIML1206H-5R6M	5.6	1	32	0.50	100
AIML1206H-6R8M	6.8	1	29	0.50	100
AIML1206H-8R2M	8.2	1	26	0.50	100
AIML1206H-100M	10	1	24	0.50	100
AIML1206H-120M	12	1	22	0.80	100
AIML1206H-150M	15	1	19	0.80	50
AIML1206H-180M	18	1	18	0.80	50
AIML1206H-220M	22	1	16	1.00	50
AIML1206H-270M	27	1	14	1.00	50

TECHNICAL INFORMATION:

- Testing: (Equivalents acceptable)
Inductance & Q: HP4195A+HP41951
DCR: VOAC-7412
SRF: HP8753C
- Solderability: 75% of the terminal electrode shall be covered
Preheat: @ 180°C ± 5°C for 2-3 minutes
Solder temperature: 230°C for 4 seconds ± 1 second
Flux: Emersion into methanol solution with Colophony for 3 to 5 seconds
- IDC: The DC current at which either the initial L value is decreased by 5% with the application of DC bias or the value of current at which the temperature of the element is increased by 20°C
- Operating Temperature: -25°C to +85°C
- Storage Temperature: -25°C to +85°C

PHYSICAL CHARACTERISTICS:

Dimensions: (mm)



L	3.2 ± 0.2
W	1.6 ± 0.2
T	0.9 ± 0.2
E	0.5 ± 0.3

SURFACE-MOUNT MULTI-LAYER HIGH CURRENT INDUCTORS

AIML-1206UH SERIES

FEATURES:

- Compact size and light weight
- Excellent solderability and heat resistance for either flow or reflow soldering
- No cross coupling between inductors due to magnetic shield
- Low RDC and High IDC

COMMON APPLICATIONS:

- Cellular platform DC-DC converter circuit
- Portable AV equipment(digital camera,DVD Type)
- Cellular platform(handset Type)
- Memex(computer Type)



ELECTRICAL CHARACTERISTICS:

Part Number	L(μ H) $\pm 20\%$	L T _{test} Freq. (MHz)	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AIML1206UH-1R0M	1.0	1	60	0.15	1200
AIML1206UH-1R2M	1.2	1	65	0.15	1200
AIML1206UH-1R5M	1.5	1	60	0.17	1000
AIML1206UH-1R8M	1.8	1	55	0.24	900
AIML1206UH-2R2M	2.2	1	50	0.24	900
AIML1206UH-2R7M	2.7	1	45	0.30	800
AIML1206UH-3R3M	3.3	1	41	0.30	800
AIML1206UH-3R9M	3.9	1	38	0.38	700
AIML1206UH-4R7M	4.7	1	35	0.38	700
AIML1206UH-5R6M	5.6	1	32	0.45	500
AIML1206UH-6R8M	6.8	1	29	0.45	500
AIML1206UH-8R2M	8.2	1	26	0.55	300
AIML1206UH-100M	10	1	24	0.55	300
AIML1206UH-120M	12	1	22	0.59	300
AIML1206UH-150M	15	1	19	0.65	100
AIML1206UH-180M	18	1	18	0.65	100

TECHNICAL INFORMATION:

- Testing:(Equivalents acceptable)
Inductance & Q-HP4195A+HP41951
DCR:VOAC-7412
SRF:HP8753C
- Solderability:75% of the terminal electrode shall be covered
Preheat: @ 180°C $\pm 5^\circ$ C for 2-3 minutes
Solder temperature:230°C for 4 seconds ± 1 second Flux Emersion into methanol solution with Colophony for 3 to 5 seconds
- IDC:The DC current at which either the initial L value is decreased by 5% with the application of DC bias or the value of current at which the temperature of the element is increased by 20°C
- Operating Temperature: -25°C to +85°C
- Storage Temperature: -25°C to +85°C

PHYSICAL CHARACTERISTICS:

Dimensions:(mm)



L	3.2 $\pm$ 0.2
W	1.6 $\pm$ 0.2
T	0.9 $\pm$ 0.2
E	0.5 $\pm$ 0.3

SURFACE-MOUNT MULTI-LAYER FERRITE CHIP INDUCTORS

AIML-1210 SERIES

FEATURES:

- Compact size and light weight
- Excellent solderability and heat resistance for either flow or reflow soldering
- No cross coupling between inductors due to magnetic shield

COMMON APPLICATIONS:

- Resonance circuit, traps, filter circuits
- RF choke in telecommunications equipment, cordless phones, radio equipment



ELECTRICAL CHARACTERISTICS:

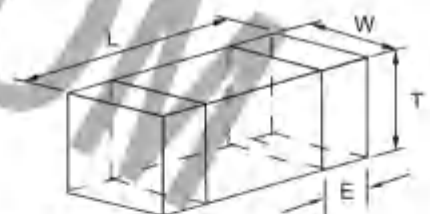
Part Number	L(μH) ± 10%	Q Min	L/Q Tset Freq (MHz)	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AIML1210-1R0K	1.0	40	10	70	0.20	600
AIML1210-1R2K	1.2	40	10	70	0.20	600
AIML1210-1R5K	1.5	40	10	70	0.30	500
AIML1210-1R8K	1.8	40	10	70	0.50	500
AIML1210-2R2K	2.2	40	10	50	0.30	500
AIML1210-2R7K	2.7	40	10	50	0.30	500
AIML1210-3R3K	3.3	40	10	50	0.40	500
AIML1210-3R9K	3.9	40	10	30	0.40	500
AIML1210-4R7K	4.7	40	10	30	0.50	500
AIML1210-5R6K	5.6	35	4	30	0.60	450
AIML1210-6R8K	6.8	35	4	20	0.80	450
AIML1210-8R2K	8.2	35	4	20	0.70	400
AIML1210-100K	10	35	2	20	0.70	400
AIML1210-120K	12	35	2	20	0.70	400
AIML1210-150K	15	35	1	20	0.70	300
AIML1210-180K	18	35	1	10	0.70	300
AIML1210-220K	22	35	1	10	0.75	250
AIML1210-270K	27	35	1	10	0.75	250
AIML1210-330K	33	35	1	10	0.80	250
AIML1210-390K	39	35	1	10	0.80	250
AIML1210-470K	47	35	1	10	1.00	200
AIML1210-560M	56 ± 20%	35	1	5	1.20	200
AIML1210-680M	68 ± 20%	35	1	5	1.30	150
AIML1210-820M	82 ± 20%	35	1	5	1.50	150
AIML1210-101M	100 ± 20%	35	1	5	1.50	150
AIML1210-121M	120 ± 20%	35	1	5	1.80	150

TECHNICAL INFORMATION:

- Testing: (Equivalents acceptable)
Inductance & Q-HP4195A+HP41951
DCR:VOAC-7412
SRF:HPB753C
- Solderability: 75% of the terminal electrode shall be covered
Preheat: @ 180°C ± 5°C for 2-3 minutes
Solder temperature: 230°C for 4 seconds
± 1 second Flux Emersion into methanol solution with Colophony for 3 to 5 seconds
- IDC: The DC current at which either the initial L value is decreased by 5% with the application of DC bias or the value of current at which the temperature of the element is increased by 20°C
- Operating Temperature: -25°C to +85°C
- Storage Temperature: -25°C to +85°C

PHYSICAL CHARACTERISTICS:

Dimensions:(mm)



L	3.2 ± 0.2
W	2.5 ± 0.2
T	1.3 ± 0.2
E	0.5 ± 0.3

SURFACE-MOUNT MULTI-LAYER FERRITE CHIP INDUCTORS

AIML-1806 SERIES

FEATURES:

- Compact size and light weight
- Excellent solderability and heat resistance for either flow or reflow soldering
- No cross coupling between inductors due to magnetic shield

COMMON APPLICATIONS:

- Resonance circuit, traps, filter circuits
- RF choke in telecommunications equipment, cordless phones, radio equipment



P6

ELECTRICAL CHARACTERISTICS:

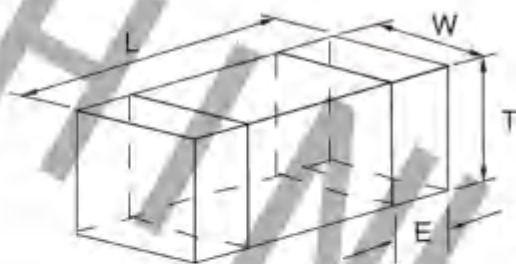
Part Number	L(μH) ± 10%	Q Min	L/Q Test Freq. (MHz)	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AIML1806-1R0K	1.0	40	10	80	0.25	500
AIML1806-1R2K	1.2	40	10	75	0.30	500
AIML1806-1R5K	1.5	40	10	60	0.30	500
AIML1806-1R8K	1.8	40	10	55	0.35	450
AIML1806-2R2K	2.2	40	10	50	0.35	400
AIML1806-2R7K	2.7	40	10	45	0.40	400
AIML1806-3R3K	3.3	40	10	40	0.45	400
AIML1806-3R9K	3.9	40	10	35	0.45	400
AIML1806-4R7K	4.7	40	10	30	0.50	300
AIML1806-5R6K	5.6	40	4	20	0.50	300
AIML1806-6R8K	6.8	35	4	20	0.60	300
AIML1806-8R2K	8.2	35	4	15	0.70	250
AIML1806-100K	10	35	2	15	0.70	250

TECHNICAL INFORMATION:

- Testing: (Equivalent acceptable)
Inductance & Q-HP4195A+HP41951
DCR: VOAC-7412
SRF: HPB753C
- Solderability: 75% of the terminal electrode shall be covered
Preheat: @ 180°C ± 5°C for 2-3 minutes
Solder temperature: 230°C for 4 seconds ± 1 second. Flux Emersion into methanol solution with Colophony for 3 to 5 seconds.
- IDC: The DC current at which either the initial L value is decreased by 5% with the application of DC bias or the value of current at which the temperature of the element is increased by 20°C
- Operating Temperature: -25°C to +85°C
- Storage Temperature: -25°C to +85°C

PHYSICAL CHARACTERISTICS:

Dimensions:(mm)



L	4.5 ± 0.2
W	1.6 ± 0.2
T	1.6 ± 0.2
E	0.5 ± 0.3

SURFACE-MOUNT MULTI-LAYER FERRITE CHIP INDUCTORS

AIML-1812 SERIES

FEATURES:

- Compact size and light weight
- Excellent solderability and heat resistance for either flow or reflow soldering
- No cross coupling between inductors due to magnetic shield

COMMON APPLICATIONS:

- Resonance circuit, traps, filter circuits
- RF choke in telecommunications equipment, cordless phones, radio equipment



P6

ELECTRICAL CHARACTERISTICS:

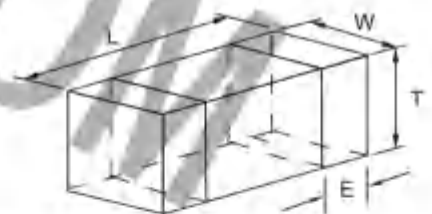
Part Number	L(μH) ± 10%	Q Min	L/Q Tset Freq (MHz)	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AIML1812-1R0K	1.0	35	10	50	0.55	650
AIML1812-1R2K	1.2	35	10	50	0.55	650
AIML1812-1R5K	1.5	35	10	45	0.55	600
AIML1812-1R8K	1.8	35	10	45	0.65	600
AIML1812-2R2K	2.2	35	10	40	0.65	500
AIML1812-2R7K	2.7	35	10	40	0.70	500
AIML1812-3R3K	3.3	35	10	35	0.75	500
AIML1812-3R9K	3.9	35	10	35	0.80	500
AIML1812-4R7K	4.7	30	10	25	0.90	500
AIML1812-5R6K	5.6	30	10	20	0.90	500
AIML1812-6R8K	6.8	30	4	18	1.0	500
AIML1812-8R2K	8.2	30	4	17	1.0	450
AIML1812-100K	10	30	2	16	1.0	450
AIML1812-120K	12	35	2	15	1.0	450
AIML1812-150K	15	35	1	14	1.0	400
AIML1812-180K	18	35	1	13	1.0	400
AIML1812-220K	22	35	1	12	1.3	300
AIML1812-270K	27	35	1	10	1.3	300
AIML1812-330K	33	40	1	10	1.5	250
AIML1812-390K	39	40	1	10	1.5	250
AIML1812-470K	47	40	1	8	1.65	250
AIML1812-560K	56	40	1	8	1.8	250
AIML1812-680M	68	40	1	6	2.0	200
AIML1812-820M	82	40	1	6	2.3	200
AIML1812-101M	100	40	1	6	2.3	150
AIML1812-121M	120	40	1	6	2.5	150

TECHNICAL INFORMATION:

- Testing: (Equivalents acceptable)
Inductance & Q-HP4195A+HP41951
DCR: VOAC-7412
SRF: HPB753C
- Solderability: 75% of the terminal electrode shall be covered
Preheat: @ 180°C ± 5°C for 2-3 minutes
Solder temperature: 230°C for 4 seconds
± 1 second Flux Emersion into methanol solution with Colophony for 3 to 5 seconds
- IDC: The DC current at which either the initial L value is decreased by 5% with the application of DC bias or the value of current at which the temperature of the element is increased by 20°C
- Operating Temperature: -25°C to +85°C
- Storage Temperature: -25°C to +85°C

PHYSICAL CHARACTERISTICS:

Dimensions: (mm)



L	4.5 ± 0.2
W	3.2 ± 0.2
T	1.5 ± 0.2
E	0.5 ± 0.3

SURFACE-MOUNT MULTI-LAYER CERAMIC CHIP INDUCTORS

AIML-0201C SERIES



FEATURES:

- Multilayer monolithic construction yields high reliability
- High self-resonant frequency
- Excellent solderability and heat resistance for either flow or reflow soldering

COMMON APPLICATIONS:

- High frequency circuits of telecommunication
- Bluetooth
- Mobile phones such as GSM, CDMA, PDC, etc.
- Other High frequency circuits in general

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L (nH) ±10%	Q Min	L/Q Tset Freq (MHz)	SRF (MHz) Min	DCR (Ω) Max	QCR (V/A) Min
AIML0201C-0N6C	0.6 ± 0.2	13	500	10000	0.06	600
AIML0201C-0N7C	0.7 ± 0.2	13	500	10000	0.06	650
AIML0201C-0N8C	0.8 ± 0.2	13	500	10000	0.07	550
AIML0201C-1N0S	1.0 ± 0.3	13	500	10000	0.08	520
AIML0201C-1N1S	1.1 ± 0.3	13	500	10000	0.11	440
AIML0201C-1N2S	1.2 ± 0.3	13	500	10000	0.12	440
AIML0201C-1N4S	1.4 ± 0.3	13	500	10000	0.12	430
AIML0201C-1N5S	1.5 ± 0.3	13	500	10000	0.12	420
AIML0201C-1N6S	1.6 ± 0.3	13	500	10000	0.13	410
AIML0201C-1N7S	1.7 ± 0.3	13	500	10000	0.15	380
AIML0201C-2N0S	2.0 ± 0.3	13	500	10000	0.20	360
AIML0201C-2N2S	2.2 ± 0.3	13	500	10000	0.20	350
AIML0201C-2N4S	2.4 ± 0.3	13	500	10000	0.22	330
AIML0201C-2N6S	2.6 ± 0.3	13	500	9400	0.22	320
AIML0201C-2N7S	2.7 ± 0.3	13	500	9200	0.23	300
AIML0201C-3N0S	3.0 ± 0.3	13	500	8800	0.25	280
AIML0201C-3N3S	3.3 ± 0.3	13	500	8100	0.30	270
AIML0201C-3N6S	3.6 ± 0.3	13	500	7700	0.32	260
AIML0201C-3N9S	3.9 ± 0.3	13	500	7400	0.42	230
AIML0201C-4N3S	4.3 ± 0.3	13	500	6800	0.44	200
AIML0201C-4N7S	4.7 ± 0.3	13	500	6200	0.45	220
AIML0201C-5N1S	5.1 ± 0.3	13	500	5900	0.46	210
AIML0201C-5N6S	5.6 ± 0.3	13	500	5500	0.46	210
AIML0201C-6N2S	6.2 ± 0.3	13	500	5100	0.48	210
AIML0201C-6N6S	6.6 ± 0.3	13	500	4900	0.50	200
AIML0201C-7N6S	7.6 ± 0.3	13	500	4700	0.50	200
AIML0201C-8N2S	8.2 ± 0.3	13	500	4300	0.56	190
AIML0201C-9N1S	9.1 ± 0.3	13	500	4100	0.72	170
AIML0201C-10N1	10 ± 0.3	13	500	3800	0.80	160
AIML0201C-12N1	12 ± 0.3	13	500	3400	0.80	160
AIML0201C-15N1	15 ± 0.3	13	500	2600	0.85	160
AIML0201C-18N1	18 ± 0.3	13	500	2300	1.05	140
AIML0201C-22N1	22 ± 0.3	13	500	1900	1.20	130
AIML0201C-27N1	27 ± 0.3	13	500	1600	1.40	120
AIML0201C-33N1	33 ± 0.3	13	300	1500	2.20	110
AIML0201C-39N1	39 ± 0.3	11	300	1400	2.30	100
AIML0201C-47N1	47 ± 0.3	11	300	1500	2.60	100
AIML0201C-56N1	56 ± 0.3	11	300	1400	2.80	90
AIML0201C-68N1	68 ± 0.3	11	300	1300	3.20	80
AIML0201C-82N1	82 ± 0.3	10	300	1100	3.60	70
AIML0201C-R10J	100 ± 5%	10	300	1000	4.00	60
AIML0201C-R12J	120 ± 5%	9	300	1000	5.00	50

TECHNICAL INFORMATION:

- Testing (Equivalents acceptable)
Inductance & Q-HP4195A+HP41951
DCR-VDA(-7412
SRF-HP6720C
- Solderability: 90% of the terminal
Electrode shall be covered
Preheat @ 260°C ± 5°C for 100 second
Solder:HS3AA Eutectic Solder
Flux:Rosin, Dip for 5 seconds ± 1 second
- Thermal Shock: Inductance shall be
Within ± 5% of initial value
and Q shall be within ± 30% of initial value
When temperature is -40°C and +85°C for 30
Min,for each 100 cycles
- Operating Temperature: -25°C to +85°C
- Storage Temperature: -40°C to +85°C

PHYSICAL CHARACTERISTICS:

Dimensions (mm)



L	0.6 ± 0.03
W	0.3 ± 0.03
T	0.3 ± 0.03
E	0.15 ± 0.05

SMD Ceramic multilayer chip inductors

AIML0201CA Seires

0201CA Series supports miniaturized devices. Its low inductance, high precision and high Q enables easy impedance matching at both RF and IF circuits and compact high frequency circuit designing.



Features

- Excellent high frequency application
- High Q factor and SRF value
- Miniaturization
- Tight tolerance
- Wide inductance range

Applications

- RF matching circuit requiring Q value
- Bluetooth, WLAN, UWB, digital TV tuners and high-frequency circuit and module

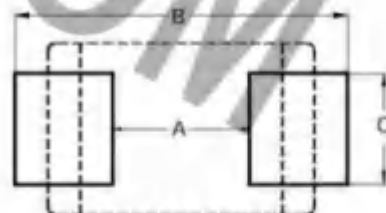
Product Identification



Shape and Dimensions



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D
AIML0201C	0.6±0.03	0.3±0.03	0.3±0.03	0.15±0.05

Dimensions in mm

TYPE	A	B	C
AIML0201C	0.3	0.75 ~ 1.05	0.3

Electrical Characteristics

Part Number AIML0201CA-	Inductance (nH)	Tolerance (%)	Q Min	Test Freq. (MHz)	Q Typical					SRF (MHz) Min	RDC (Ω) Max	IDC (mA) Max
					500 MHz	800 MHz	1.8 GHz	2.0 GHz	2.4 GHz			
0N6	0.6	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	>24	>32	>54	>57	>65	10000	0.06	900
0N7	0.7	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	>24	>32	>54	>57	>65	10000	0.06	900
0N8	0.8	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	>24	>32	>54	>57	>65	10000	0.06	900
0N9	0.9	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	>24	>32	>54	>57	>65	10000	0.06	900
1N0	1.0	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	23	32	54	57	65	10000	0.07	850
1N1	1.1	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	22	26	45	47	55	10000	0.07	850
1N2	1.2	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	22	25	43	44	52	10000	0.08	800
1N3	1.3	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	19	25	40	42	47	10000	0.09	760
1N4	1.4	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	19	24	39	41	47	10000	0.12	640
1N5	1.5	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	19	24	39	41	46	10000	0.15	600
1N6	1.6	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	19	24	39	41	46	10000	0.19	510
1N7	1.7	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	19	24	39	41	46	10000	0.11	680
1N8	1.8	$\pm 0.2nH/\pm 0.2nH/\pm 0.3nH$	14	500	19	24	39	41	46	10000	0.12	640
1N9	1.9	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	18	24	38	40	45	10000	0.13	620
2N0	2.0	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	17	24	38	39	44	10000	0.15	600
2N1	2.1	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	17	24	37	39	44	10000	0.16	550
2N2	2.2	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	17	24	38	40	43	10000	0.20	500
2N3	2.3	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	17	24	37	39	43	10000	0.24	460
2N4	2.4	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	17	23	38	38	42	10000	0.26	430
2N5	2.5	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	17	23	35	36	40	10000	0.28	415
2N6	2.6	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	17	22	34	35	39	10000	0.30	405
2N7	2.7	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	17	22	34	35	39	10000	0.32	400
2N8	2.8	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	17	22	34	35	39	9500	0.20	500
2N9	2.9	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	17	22	34	35	39	9300	0.22	480
3N0	3.0	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	17	22	34	35	39	9100	0.24	460
3N1	3.1	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	17	22	34	35	39	8900	0.25	450
3N2	3.2	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	17	22	33	35	39	8700	0.28	415
3N3	3.3	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	18	23	34	36	40	8600	0.28	415
3N4	3.4	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	17	23	33	35	39	8400	0.29	410
3N5	3.5	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	17	23	33	35	39	8200	0.30	405
3N6	3.6	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	16	23	33	35	39	8100	0.32	400
3N7	3.7	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	16	23	33	35	38	8000	0.36	370
3N8	3.8	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	16	22	33	35	38	7800	0.40	355
3N9	3.9	$\pm 0.1nH/\pm 0.2nH/\pm 0.3nH$	14	500	16	22	33	35	38	7700	0.41	350

Note: When ordering, please specify tolerance code. Tolerance : B $\pm 0.1nH$, C $\pm 0.2nH$, S $\pm 0.3nH$, H $\pm 13\%$, J $\pm 5\%$

- Operating temperature range : $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$ (Including self - temperature rise)
- IDC : Applied the current to coils, the inductance shall be less than 10% initial value
- Residual impedance of short chip : $0.48nH$
- Measure Equipment :
L & Q : Agilent E4991A+Agilent 16197A
SRF : Agilent E4991A or HP19196C
RDC : HP4338B or CHEN HWA 502

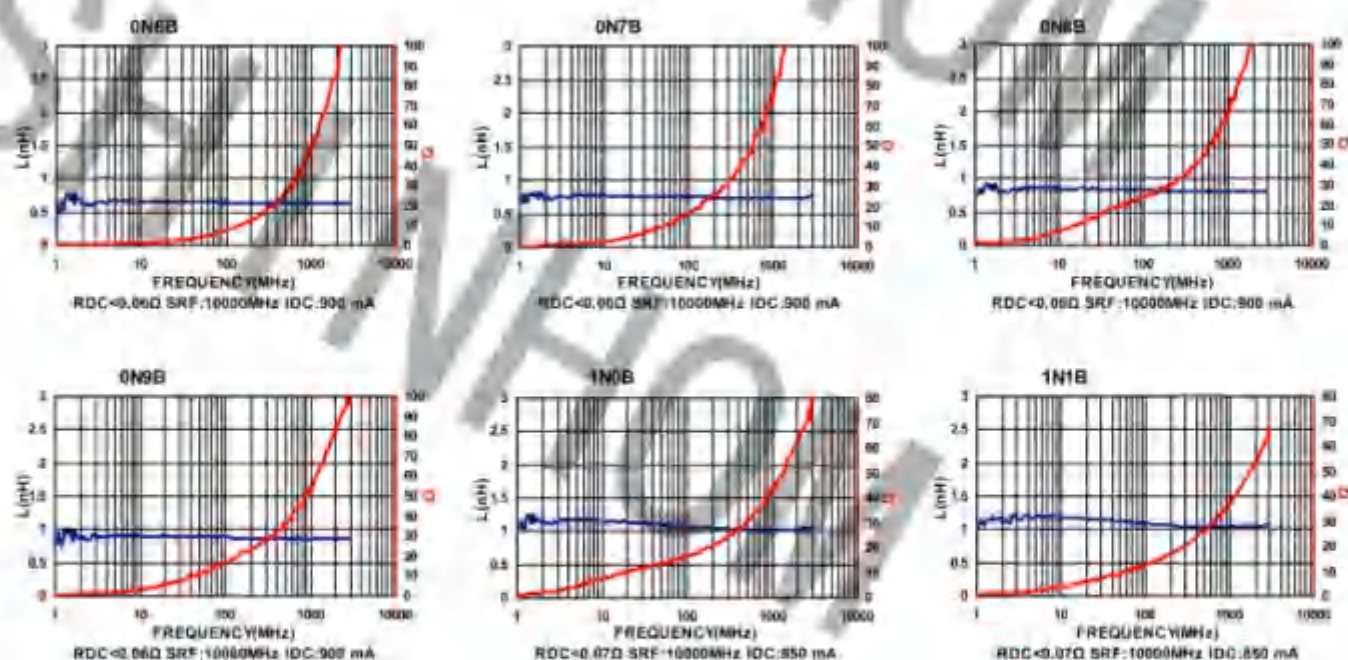
Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Q Min	Test Freq. (MHz)	Q Typical					SRF (MHz) Min	RDC (Ω) Max	IDC (mA) Max
					500 MHz	800 MHz	1.8 GHz	2.0 GHz	2.4 GHz			
4N3	4.3	±0.2nH(±0.3nH)	14	500	16	21	32	34	37	6500	0.48	320
4N7	4.7	±0.2nH(±0.3nH)	14	500	16	22	33	35	38	6400	0.42	350
5N1	5.1	±0.2nH(±0.3nH)	14	500	17	22	34	36	38	6100	0.45	330
5N6	5.6	±0.2nH(±0.3nH)	14	500	16	21	33	34	37	5500	0.47	325
6N2	6.2	±0.2nH(±0.3nH)	14	500	18	23	34	35	37	5100	0.52	305
6N8	6.8	3 / 5	14	500	17	22	32	33	35	4800	0.55	305
7N5	7.5	3 / 5	14	500	16	21	31	33	34	4600	0.55	305
8N2	8.2	3 / 5	14	500	16	21	31	32	34	4300	0.57	290
9N1	9.1	3 / 5	14	500	16	20	30	31	32	4000	0.65	270
10N	10	3 / 5	14	500	16	20	28	29	31	3800	0.85	230
12N	12	3 / 5	14	500	16	20	27	28	28	3300	0.85	230
15N	15	3 / 5	14	500	15	19	24	24	23	2600	0.89	220
18N	18	3 / 5	14	500	15	19	23	24	22	2300	1.05	205
22N	22	3 / 5	14	500	15	19	22	23	20	1900	1.29	180

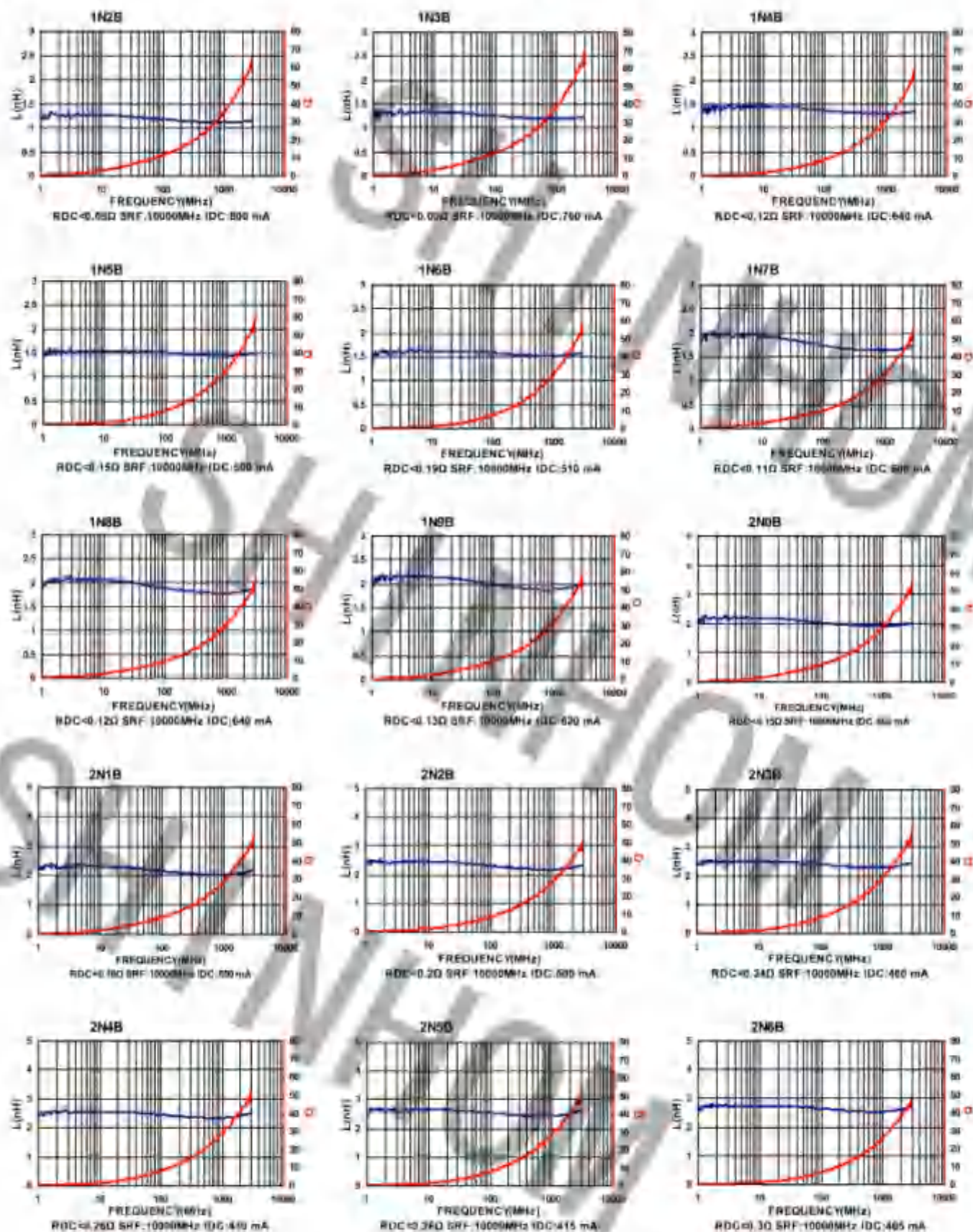
Note: When ordering, please specify tolerance code. Tolerance : B=±0.1nH , C=±0.2nH , S=±0.3nH , H=±3% , J=±5%

- Operating temperature range : -55℃ ~ 125℃(Including self - temperature rise)
- IDC : Applied the current to coils, the inductance shall be less than 10% initial value
- Residual impedance of short chip : 0.45nH
- Measure Equipment :
L & Q : Agilent E4991A+Agilent 16197A
SRF : Agilent E4991A or HP19196C
RDC : HP4338B or CHEN HWA 502

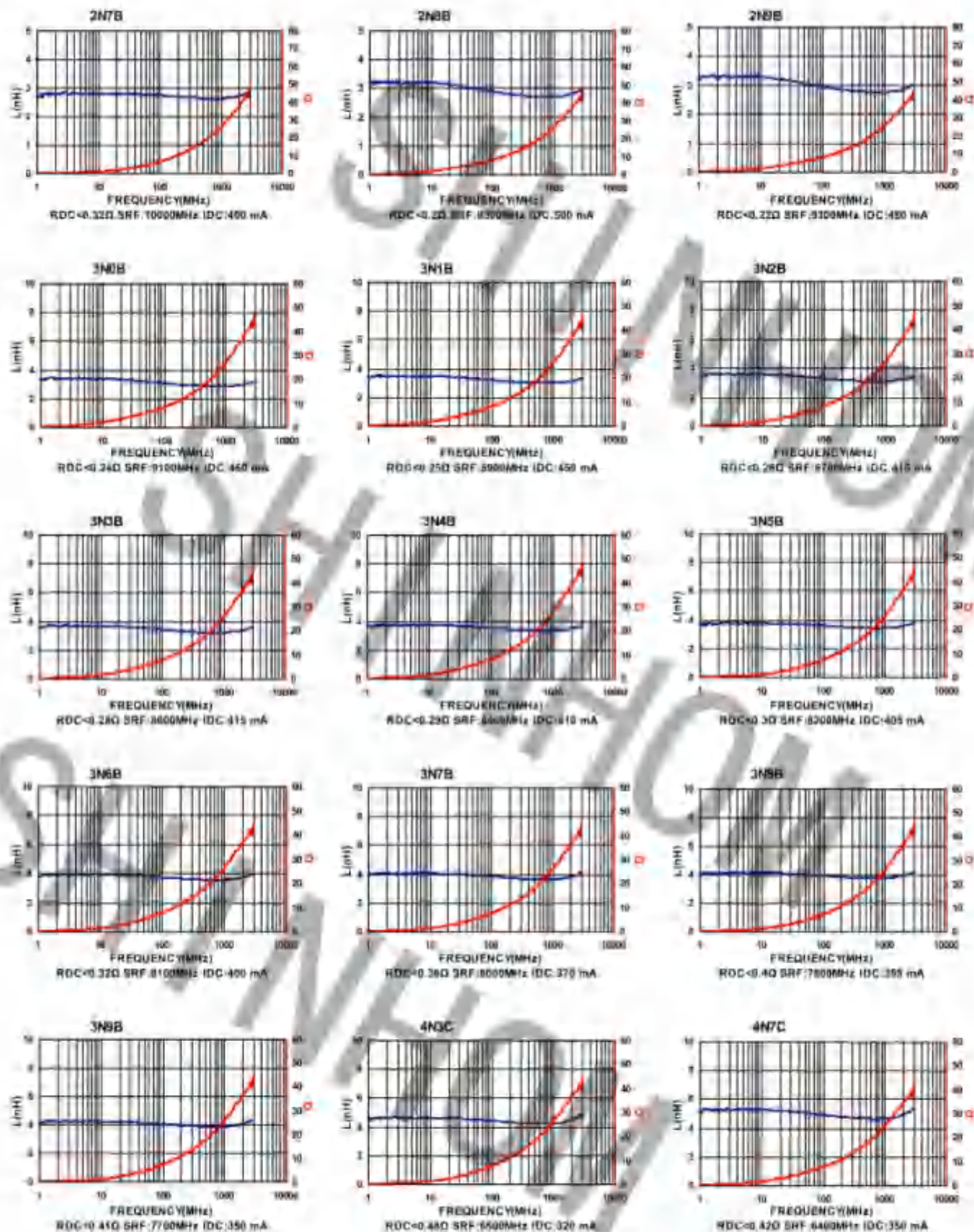
Test Instruments : Agilent E4991A Material/Impedance Analyzer



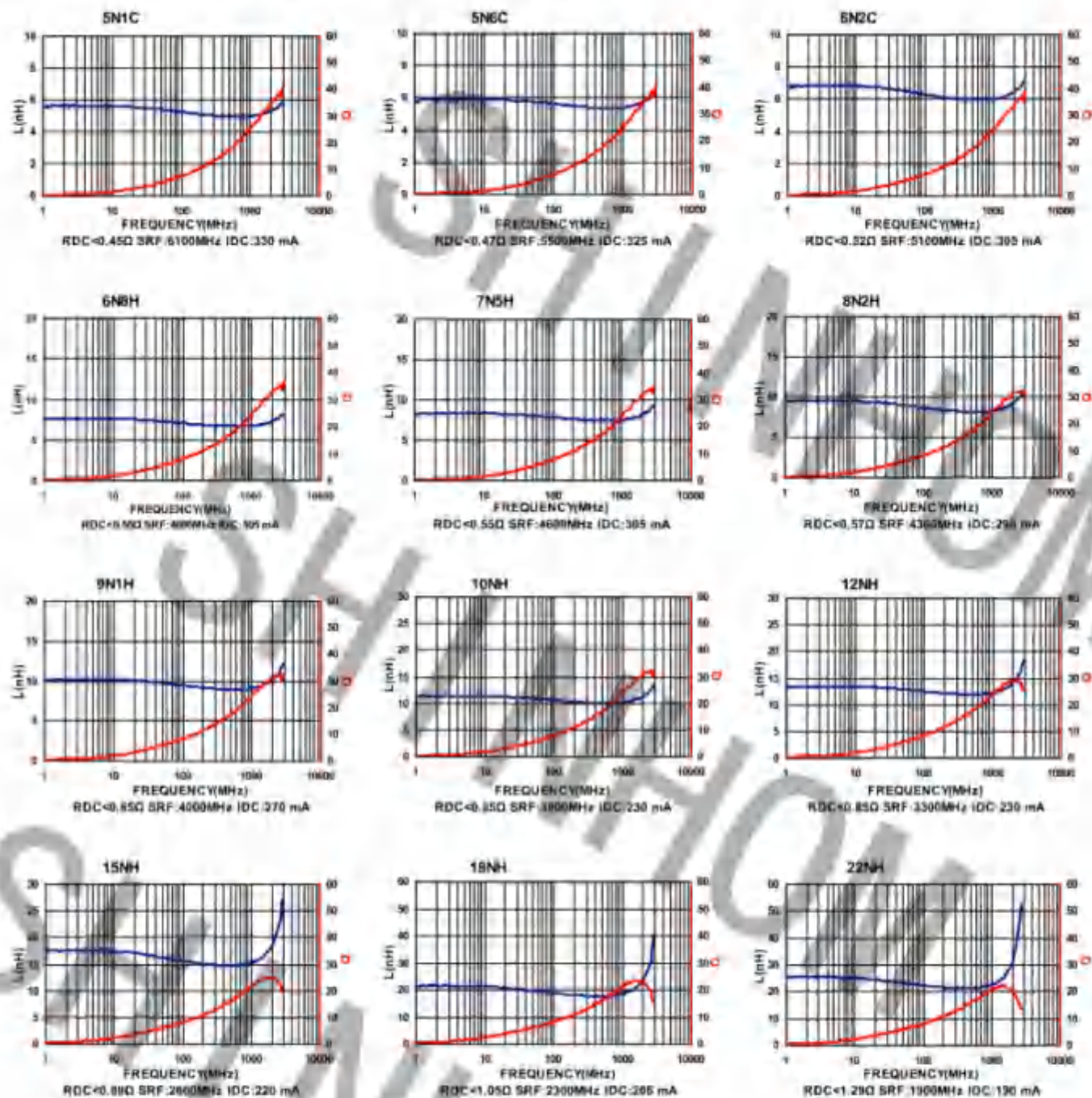
Test Instruments : Agilent E4991A Material/Impedance Analyzer



Test Instruments : Agilent E4991A Material/Impedance Analyzer



Test Instruments : Agilent E4991A Material/Impedance Analyzer



SMD Ceramic multilayer chip inductors

AIML0201CB Seires

0201CB Series supports miniaturized devices. Its low inductance, high precision and high Q enables easy impedance matching at both RF and IF circuits and compact high frequency circuit designing.



Features

- Excellent high frequency application
- High Q factor and SRF value
- Miniaturization
- Tight tolerance
- Wide inductance range

Applications

- RF matching circuit requiring Q value
- Bluetooth, WLAN, UWB, digital TV tuners and high-frequency circuit and module

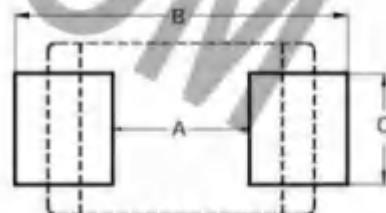
Product Identification



Shape and Dimensions



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D
AIML0201C	0.6±0.03	0.3±0.03	0.3±0.03	0.15±0.05

Dimensions in mm

TYPE	A	B	C
AIML0201C	0.3	0.75 ~ 1.05	0.3

Electrical Characteristics

Part Number A1ML0201CB-	Inductance (nH)	Tolerance (±%)	Q Min	Test Freq. (MHz)	Q Typical					SRF (MHz) Min	RDC (Ω) Max	IDC (mA) Max
					500 MHz	800 MHz	1.8 GHz	2.0 GHz	2.4 GHz			
0N1	0.1	±0.1nH/±0.2nH/±0.3nH	14	500	>24	>32	>54	>57	>65	10000	0.06	900
0N2	0.2	±0.1nH/±0.2nH/±0.3nH	14	500	>24	>32	>54	>57	>65	10000	0.06	900
0N3	0.3	±0.1nH/±0.2nH/±0.3nH	14	500	>24	>32	>54	>57	>65	10000	0.06	900
0N4	0.4	±0.1nH/±0.2nH/±0.3nH	14	500	>24	>32	>54	>57	>65	10000	0.06	900
0N5	0.5	±0.1nH/±0.2nH/±0.3nH	14	500	23	32	54	57	65	10000	0.07	850
0N6	0.6	±0.1nH/±0.2nH/±0.3nH	14	500	22	26	45	47	55	10000	0.07	850
0N7	0.7	±0.1nH/±0.2nH/±0.3nH	14	500	22	25	43	44	52	10000	0.08	800
0N8	0.8	±0.1nH/±0.2nH/±0.3nH	14	500	19	25	40	42	47	10000	0.09	760
0N9	0.9	±0.1nH/±0.2nH/±0.3nH	14	500	19	24	39	41	47	10000	0.12	640
1N0	1.0	±0.1nH/±0.2nH/±0.3nH	14	500	19	24	39	41	46	10000	0.15	600
1N1	1.1	±0.1nH/±0.2nH/±0.3nH	14	500	19	24	39	41	46	10000	0.19	510
1N2	1.2	±0.1nH/±0.2nH/±0.3nH	14	500	19	24	39	41	46	10000	0.11	680
1N3	1.3	±0.1nH/±0.2nH/±0.3nH	14	500	19	24	39	41	46	10000	0.12	640
1N4	1.4	±0.1nH/±0.2nH/±0.3nH	14	500	18	24	38	40	45	10000	0.13	620
1N5	1.5	±0.1nH/±0.2nH/±0.3nH	14	500	17	24	38	39	44	10000	0.15	600
1N6	1.6	±0.1nH/±0.2nH/±0.3nH	14	500	17	24	37	39	44	10000	0.16	550
1N7	1.7	±0.1nH/±0.2nH/±0.3nH	14	500	17	24	38	40	43	10000	0.20	500
1N8	1.8	±0.1nH/±0.2nH/±0.3nH	14	500	17	24	37	39	43	10000	0.24	480
1N9	1.9	±0.1nH/±0.2nH/±0.3nH	14	500	17	23	38	38	42	10000	0.26	430
2N0	2.0	±0.1nH/±0.2nH/±0.3nH	14	500	17	23	35	36	40	10000	0.28	415
2N1	2.1	±0.1nH/±0.2nH/±0.3nH	14	500	17	22	34	35	39	10000	0.30	405
2N2	2.2	±0.1nH/±0.2nH/±0.3nH	14	500	17	22	34	35	39	10000	0.32	400
2N3	2.3	±0.1nH/±0.2nH/±0.3nH	14	500	17	22	34	35	39	9500	0.20	500
2N4	2.4	±0.1nH/±0.2nH/±0.3nH	14	500	17	22	34	35	39	9300	0.22	480
2N5	2.5	±0.1nH/±0.2nH/±0.3nH	14	500	17	22	34	35	39	9100	0.24	460
2N6	2.6	±0.1nH/±0.2nH/±0.3nH	14	500	17	22	34	35	39	8900	0.25	450
2N7	2.7	±0.1nH/±0.2nH/±0.3nH	14	500	17	22	33	35	39	8700	0.28	415
2N8	2.8	±0.1nH/±0.2nH/±0.3nH	14	500	18	23	34	36	40	8600	0.28	415
2N9	2.9	±0.1nH/±0.2nH/±0.3nH	14	500	17	23	33	35	39	8400	0.29	410
3N0	3.0	±0.1nH/±0.2nH/±0.3nH	14	500	17	23	33	35	39	8200	0.30	405
3N1	3.1	±0.1nH/±0.2nH/±0.3nH	14	500	16	23	33	35	39	8100	0.32	400
3N2	3.2	±0.1nH/±0.2nH/±0.3nH	14	500	16	23	33	35	38	8000	0.36	370

Note: When ordering, please specify tolerance code. Tolerance : B=±0.1nH , C=±0.2nH , S=±0.3nH , H=±3% , J=±5%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- IDC : Applied the current to coils, the inductance shall be less than 10% initial value
- Residual impedance of short chip : 0nH
- Measure Equipment :
L & Q : Agilent E4991A+Agilent 16197A
SRF : Agilent E4991A or HP19196C
RDC : HP4338B or CHEN HWA 502

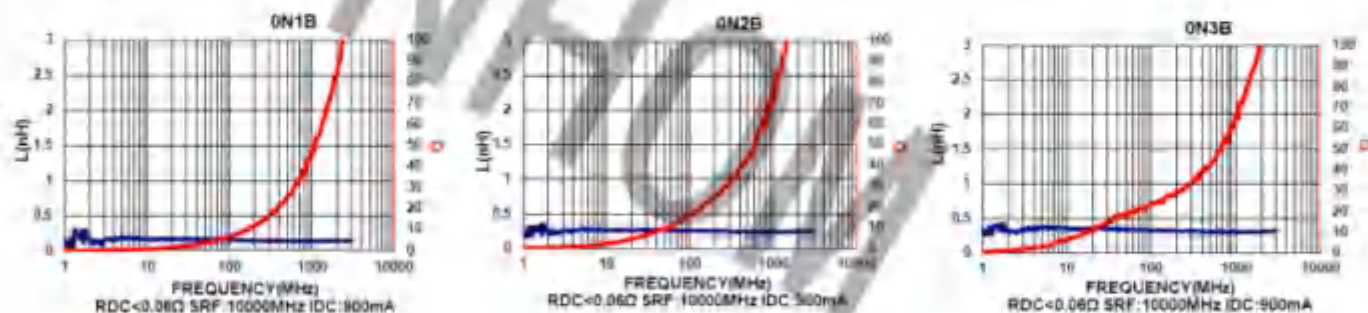
Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Q Min	Test Freq. (MHz)	Q Typical					SRF (MHz) Min	RDC (Ω) Max	IDC (mA) Max
					500 MHz	800 MHz	1.8 GHz	2.0 GHz	2.4 GHz			
3N3	3.3	±0.1nH/±0.2nH/±0.3nH	14	500	16	22	33	35	38	7800	0.40	355
3N4	3.4	±0.1nH/±0.2nH/±0.3nH	14	500	16	22	33	35	38	7700	0.41	350
3N5	3.5	±0.1nH/±0.2nH/±0.3nH	14	500	16	22	33	35	38	7700	0.41	350
3N6	3.6	±0.1nH/±0.2nH/±0.3nH	14	500	16	21	32	34	37	6500	0.48	320
3N7	3.7	±0.1nH/±0.2nH/±0.3nH	14	500	16	21	32	34	37	6500	0.48	320
3N8	3.8	±0.1nH/±0.2nH/±0.3nH	14	500	16	21	32	34	37	6500	0.48	320
3N9	3.9	±0.1nH/±0.2nH/±0.3nH	14	500	16	21	32	34	37	6500	0.48	320
4N3	4.3	±0.2nH/±0.3nH	14	500	18	22	33	35	38	6400	0.42	350
4N7	4.7	±0.2nH/±0.3nH	14	500	17	22	34	36	38	6100	0.45	330
5N1	5.1	±0.2nH/±0.3nH	14	500	16	21	33	34	37	5500	0.47	325
5N6	5.6	±0.2nH/±0.3nH	14	500	18	23	34	35	37	5100	0.52	305
6N2	6.2	±0.2nH/±0.3nH	14	500	17	22	32	33	35	4800	0.55	305
6N8	6.8	3 / 5	14	500	16	21	31	33	34	4600	0.55	305
7N5	7.5	3 / 5	14	500	16	21	31	32	34	4300	0.57	290
8N2	8.2	3 / 5	14	500	16	20	30	31	32	4000	0.65	270
9N1	9.1	3 / 5	14	500	16	20	28	29	31	3800	0.85	230
10N	10	3 / 5	14	500	16	20	28	29	31	3800	0.85	230
12N	12	3 / 5	14	500	16	20	27	28	28	3300	0.85	230
15N	15	3 / 5	14	500	15	19	24	24	23	2600	0.89	220
18N	18	3 / 5	14	500	15	19	23	24	22	2300	1.05	205
22N	22	3 / 5	14	500	15	19	22	23	20	1900	1.29	190

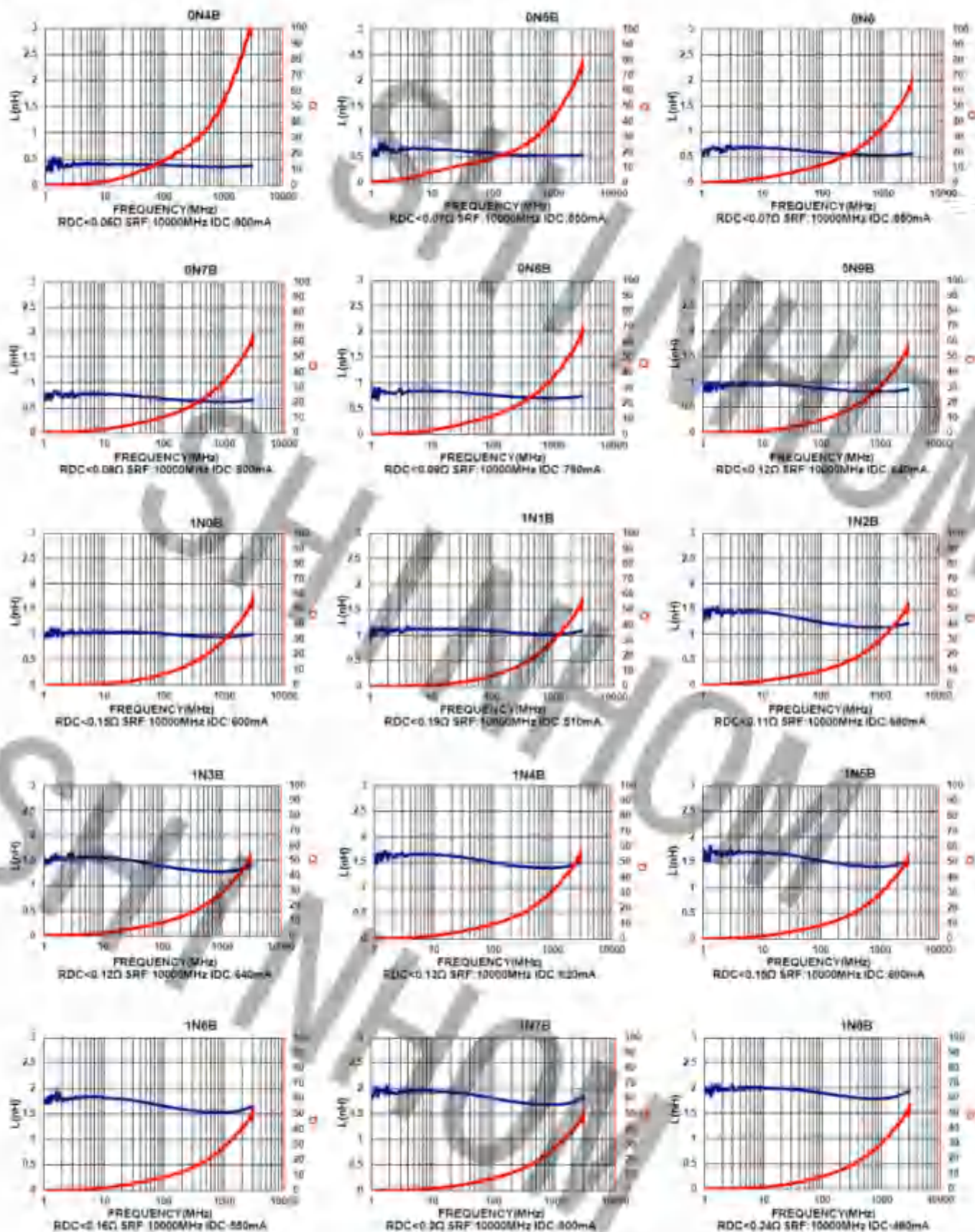
Note: When ordering, please specify tolerance code. Tolerance : B=±0.1nH , C=±0.2nH , S=±0.3nH , H=±13% , J=±5%

- Operating temperature range - 55°C ~ 125°C(including self - temperature rise)
- IDC : Applied the current to coils, the inductance shall be less than 10% initial value
- Residual impedance of short chip : 0nH
- Measure Equipment :
L & Q : Agilent E4991A+Agilent 16197A
SRF : Agilent E4991A or HP19196C
RDC : HP4388 or CHEN HWA 502

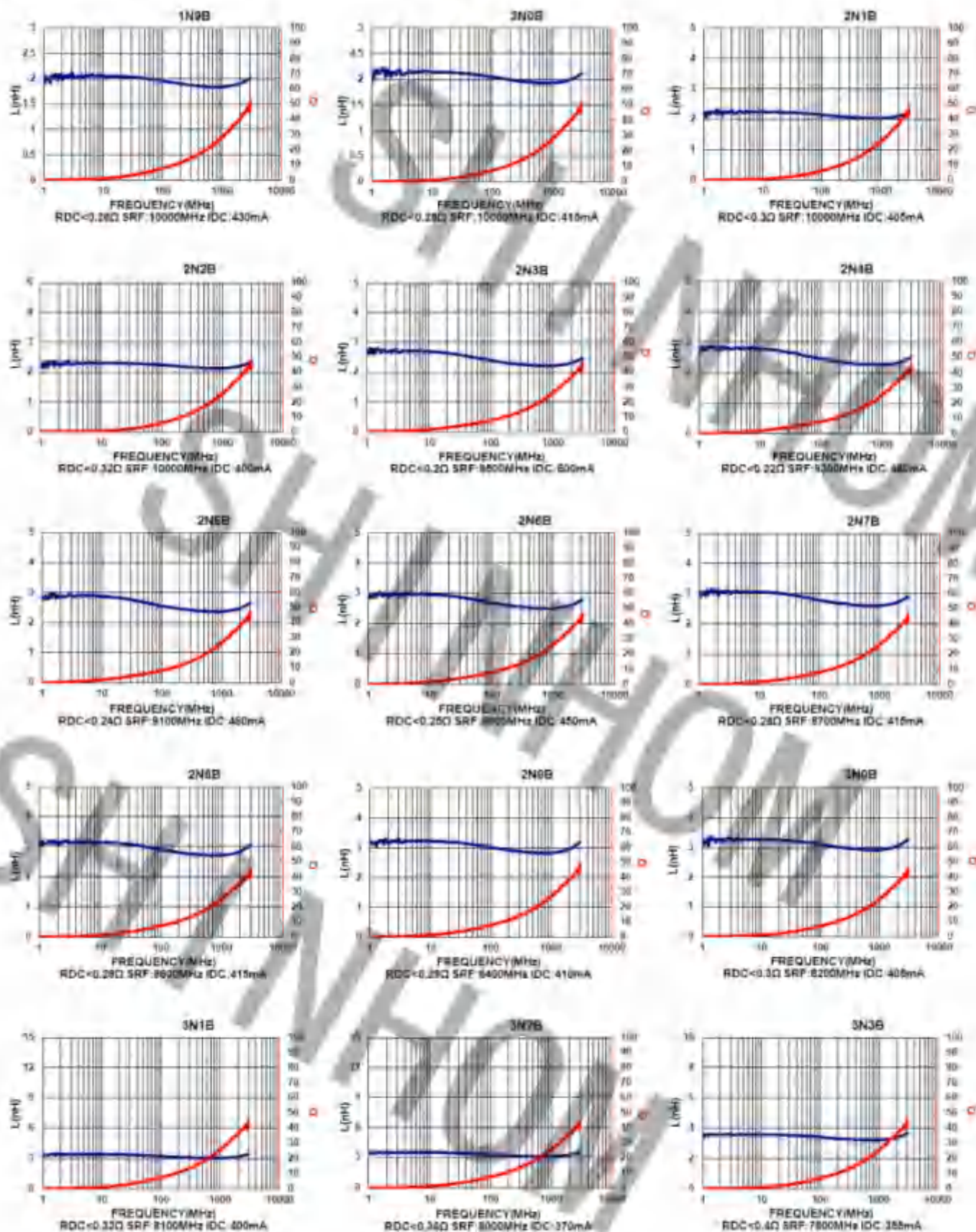
Test Instruments : Agilent E4991A Material Impedance Analyzer



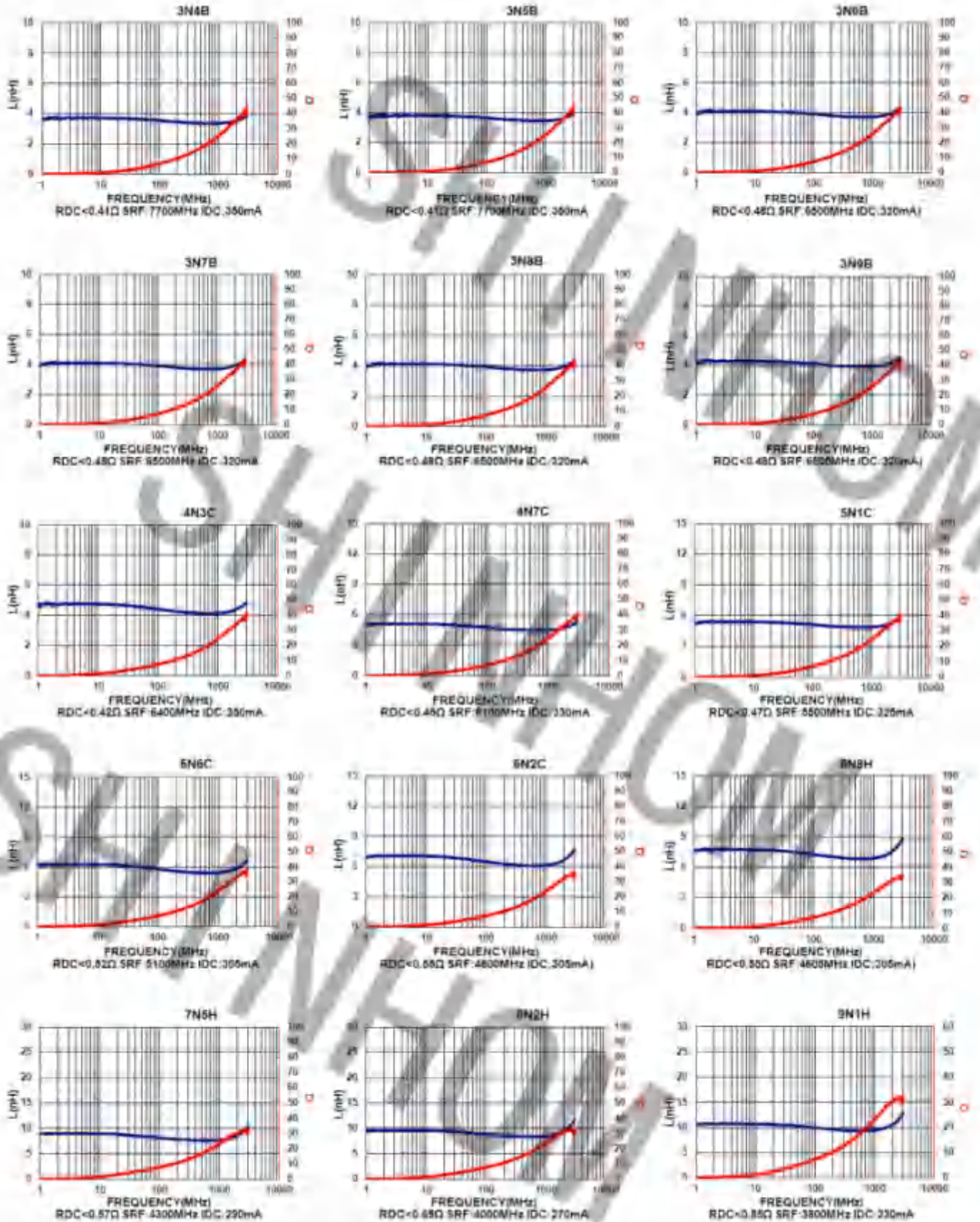
Test Instruments : Agilent E4991A Material/Impedance Analyzer



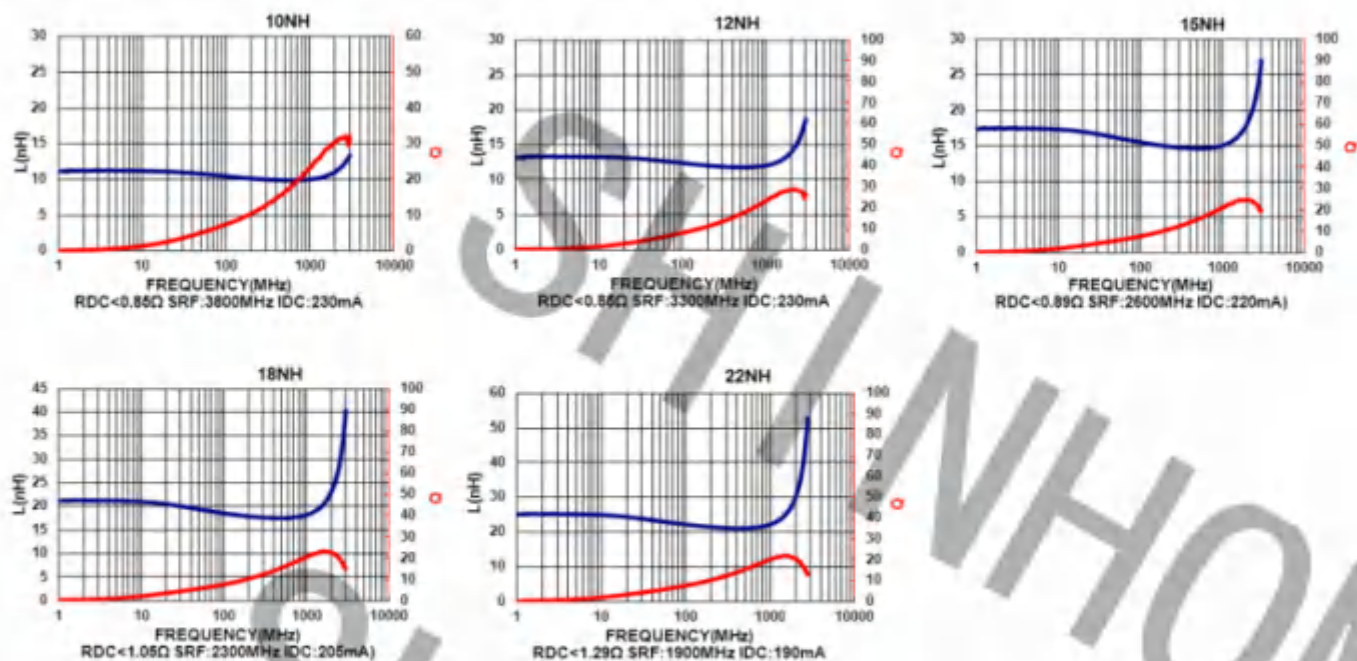
Test Instruments : Agilent E4991A Material/Impedance Analyzer



Test Instruments : Agilent E4991A Material/Impedance Analyzer



Test Instruments : Agilent E4991A Material/Impedance Analyzer



SMD Ceramic multilayer chip inductors

AIML0201CC Seires

The 0201CC Series is a type of ceramic chip inductor produced using the multilayer technology. The series provides excellent Q factor and SRF characteristics and is suitable for high frequency applications.



Features

- RoHS compliant
- Excellent Q factor and SRF characteristics
- Small size of 0201/0402/0603 is suitable for small portable devices
- Supports operating frequency up to 6GHz with nominal inductance values from 1.0nH to 100 nH.

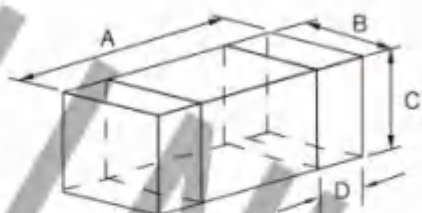
Applications

- RF resonance and impedance matching circuit
- RF and wireless communication
- Information technology equipment, computers, telecommunications, radar detectors, automotive electronics, cellular phones, pagers, PDAs, keyless remote systems
- L-C filter configurations

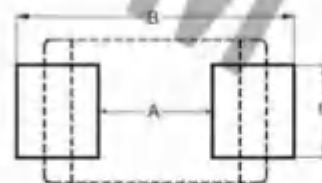
Product Identification



Shape and Dimensions



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D
AIML0201C	0.6±0.03	0.3±0.03	0.3±0.03	0.15±0.05

Dimensions in mm

TYPE	A	B	C
AIML0201C	0.3	0.75 ~ 1.05	0.3

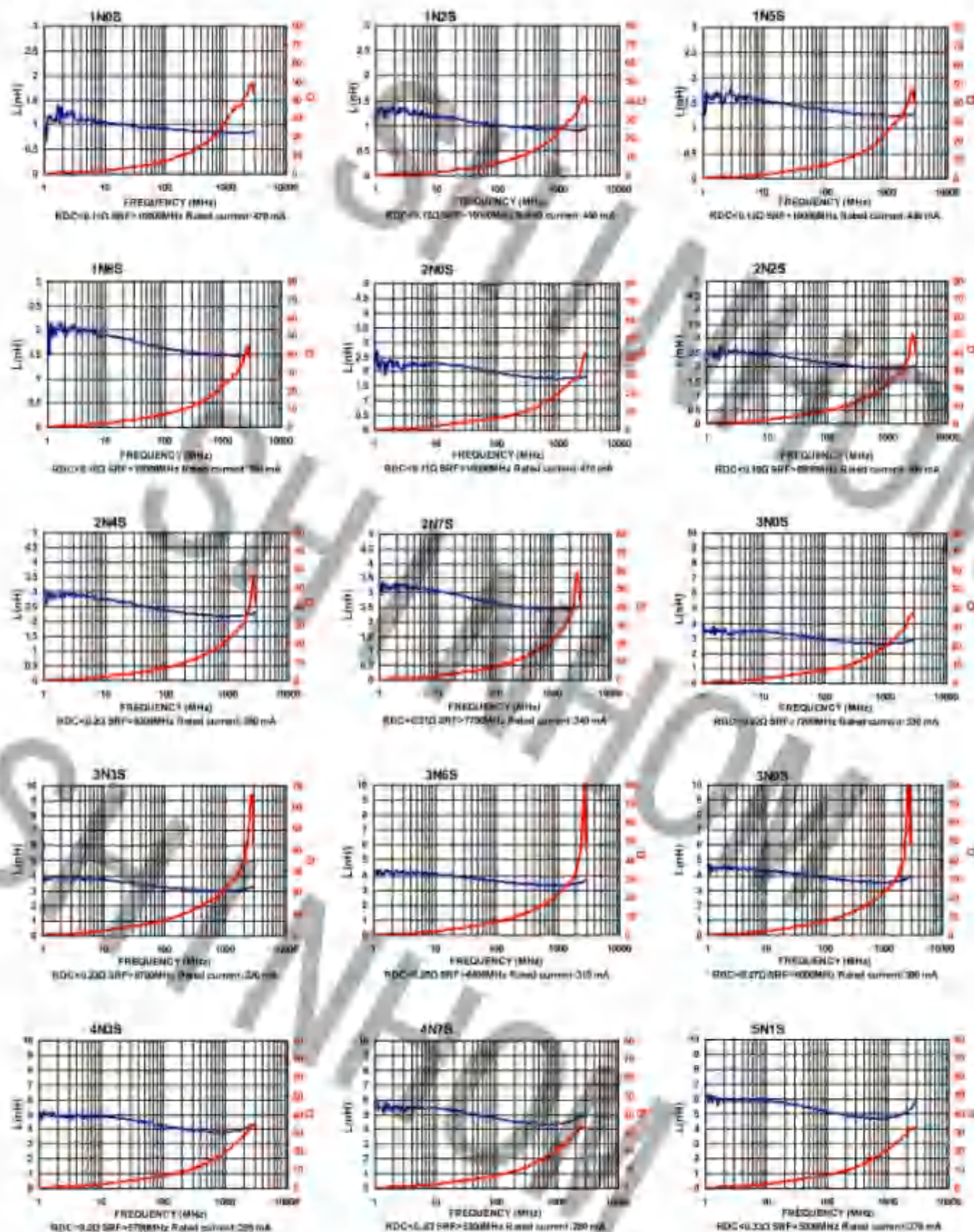
Electrical Characteristics

Part Number AIML0201CC-	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Min	RDC (Ω) Max	Rated Current (mA) Max
1N0□	1.0	±0.3nH	100	4	>10000	0.11	470
1N2□	1.2	±0.3nH	100	4	>10000	0.12	450
1N5□	1.5	±0.3nH	100	4	>10000	0.13	430
1N8□	1.8	±0.3nH	100	4	>10000	0.16	390
2N0□	2.0	±0.3nH	100	4	>10000	0.17	380
2N2□	2.2	±0.3nH	100	4	8800	0.19	360
2N4□	2.4	±0.3nH	100	4	8300	0.20	350
2N7□	2.7	±0.3nH	100	4	7700	0.21	340
3N0□	3.0	±0.3nH	100	4	7200	0.22	330
3N3□	3.3	±0.3nH	100	4	6700	0.23	320
3N6□	3.6	±0.3nH	100	4	6400	0.25	310
3N9□	3.9	±0.3nH	100	4	6000	0.27	300
4N3□	4.3	±0.3nH	100	4	5700	0.30	280
4N7□	4.7	±0.3nH	100	4	5300	0.30	280
5N1□	5.1	±0.3nH	100	4	5000	0.33	270
5N6□	5.6	±0.3nH	100	4	4600	0.36	260
6N2□	6.2	±0.3nH	100	4	4200	0.38	250
6N8□	6.8	5	100	4	3900	0.39	250
7N5□	7.5	5	100	4	3600	0.41	240
8N2□	8.2	5	100	4	3400	0.45	230
9N1□	9.1	5	100	4	3200	0.48	220
10N□	10	5	100	4	2900	0.51	220
12N□	12	5	100	4	2700	0.68	190
15N□	15	5	100	4	2300	0.71	180
18N□	18	5	100	4	2100	0.81	170
22N□	22	5	100	4	1800	1.00	150
27N□	27	5	100	4	1800	1.35	120
33N□	33	5	100	4	1700	1.47	110
39N□	39	5	100	4	1500	1.72	100
47N□	47	5	100	4	1300	1.90	100
56N□	56	5	100	4	1100	2.27	80
68N□	68	5	100	4	1100	2.66	80
82N□	82	5	100	4	1000	3.37	70
R10□	100	5	100	4	900	3.74	60

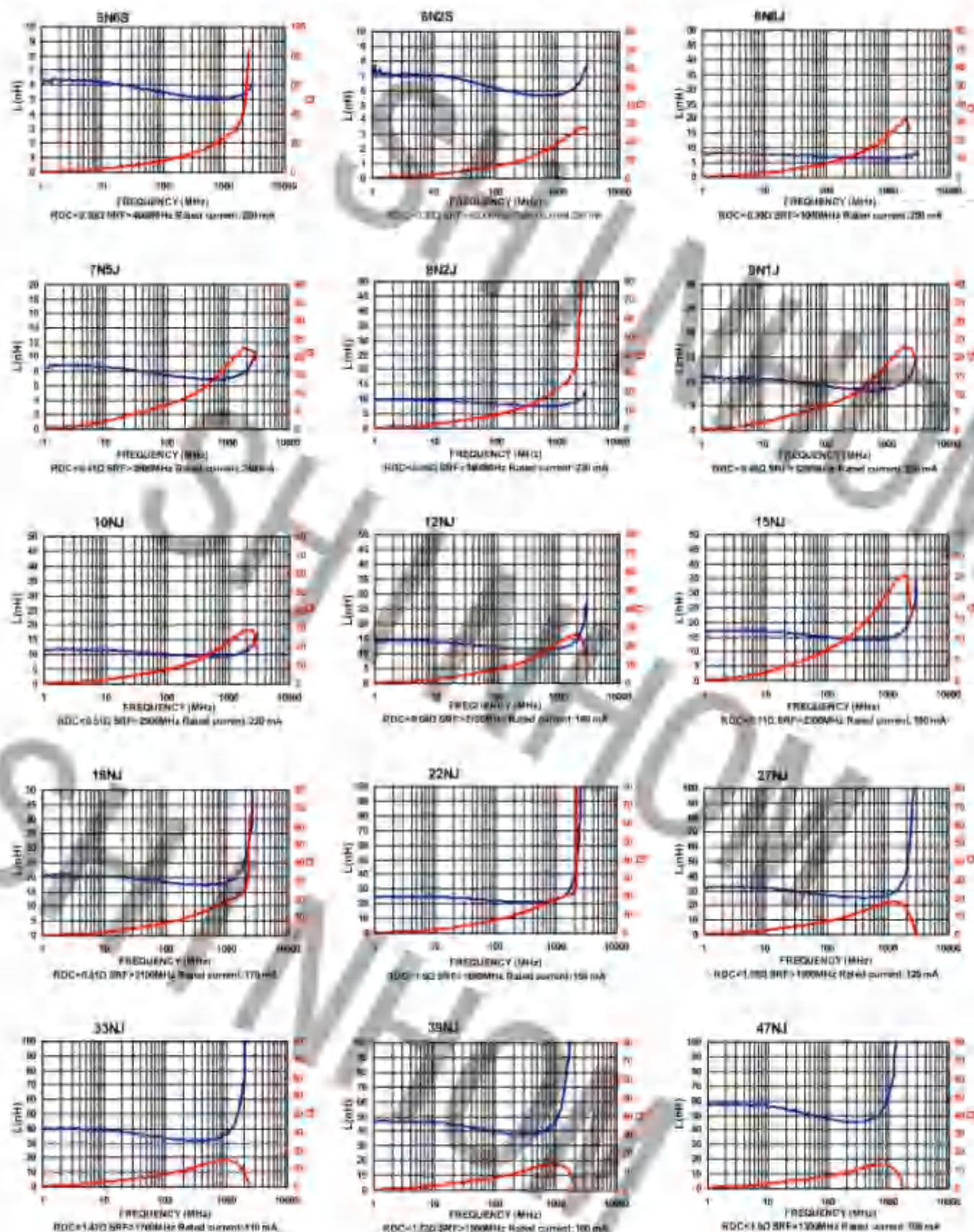
Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Rate Current :Applied the current to coils, the temperature rise shall not be more than 30°C
- Residual impedance of short chip : 0.19nH
- Measure Equipment :
L & Q : Agilent E4991A+Agilent 16197A
SRF : Agilent E4991A or HP19196C
RDC : HP4338B or CHEN HWA 502

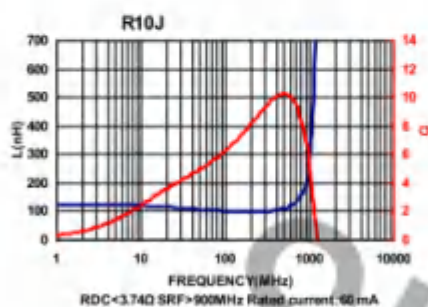
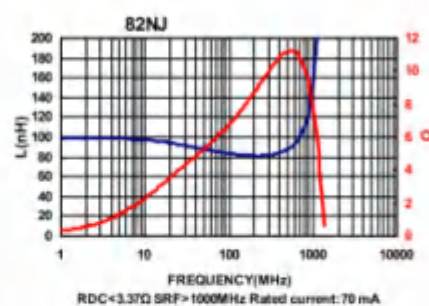
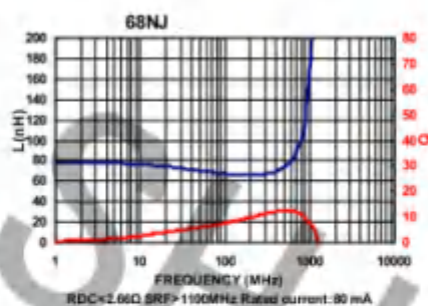
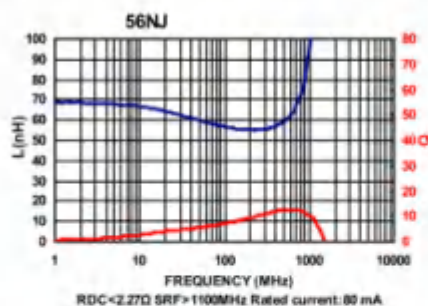
Test Instruments : Agilent E4991A Material/Impedance Analyzer



Test Instruments : Agilent E4991A Material/Impedance Analyzer



Test Instruments : Agilent E4991A Material/Impedance Analyzer



SURFACE-MOUNT MULTI-LAYER CERAMIC CHIP INDUCTORS

AIML-0402C SERIES



FEATURES:

- Multilayer monolithic construction yields high reliability
- High self-resonant frequency
- Excellent solderability and heat resistance for either flow or reflow soldering

COMMON APPLICATIONS:

- High frequency circuits of telecommunication
- Bluetooth
- Mobile phones such as GSM, CDMA, PDC, etc
- Other High frequency circuits in general

ELECTRICAL CHARACTERISTICS:

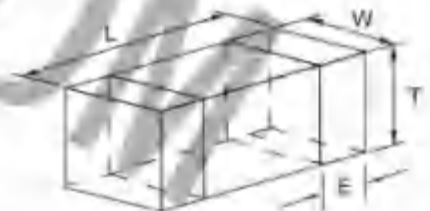
Part Number	Ind(L) ±10%	Q Min	L/Q Tset Freq (MHz)	SRF (MHz) Min	DCR (Ω) Max	QCR (mA) Min
AIML0402C-1N0S	1.0 ± 0.3	7	100	10000	0.1	400
AIML0402C-1N1E	1.1 ± 0.3	7	100	10000	0.1	400
AIML0402C-1N2S	1.2 ± 0.3	7	100	10000	0.1	400
AIML0402C-1N3S	1.3 ± 0.3	7	100	10000	0.1	400
AIML0402C-1N5S	1.5 ± 0.3	7	100	6000	0.1	300
AIML0402C-1N6S	1.6 ± 0.3	7	100	6000	0.1	300
AIML0402C-1N8S	1.8 ± 0.3	7	100	6000	0.1	300
AIML0402C-2N0S	2.0 ± 0.3	7	100	6000	0.2	300
AIML0402C-2N2S	2.2 ± 0.3	7	100	6000	0.2	300
AIML0402C-2N4S	2.4 ± 0.3	7	100	6000	0.2	300
AIML0402C-2N7S	2.7 ± 0.3	7	100	6000	0.2	300
AIML0402C-3N0S	3.0 ± 0.3	7	100	6000	0.2	300
AIML0402C-3N3S	3.3 ± 0.3	7	100	6000	0.2	300
AIML0402C-3N6S	3.6 ± 0.3	7	100	4000	0.2	300
AIML0402C-3N9S	3.9 ± 0.3	7	100	4000	0.2	300
AIML0402C-4N3S	4.3 ± 0.3	7	100	4000	0.2	300
AIML0402C-4N7S	4.7 ± 0.3	7	100	4000	0.2	300
AIML0402C-5N1S	5.1 ± 0.3	7	100	4000	0.3	300
AIML0402C-5N6S	5.6 ± 0.3	7	100	4000	0.3	300
AIML0402C-6N3S	6.2 ± 0.3	7	100	3900	0.3	300
AIML0402C-6N8J	6.8 ± 5%	7	100	3900	0.3	300
AIML0402C-7N5J	7.5 ± 5%	7	100	3700	0.4	300
AIML0402C-8N2J	8.2 ± 5%	7	100	3600	0.4	300
AIML0402C-9N1J	9.1 ± 5%	7	100	3400	0.4	300
AIML0402C-10NJ	10 ± 5%	7	100	3200	0.4	300
AIML0402C-12NJ	12 ± 5%	8	100	2700	0.5	300
AIML0402C-15NJ	15 ± 5%	8	100	2300	0.5	300
AIML0402C-18NJ	18 ± 5%	8	100	2100	0.6	300
AIML0402C-20NJ	20 ± 5%	8	100	2000	0.6	300
AIML0402C-22NJ	22 ± 5%	8	100	1800	0.6	300
AIML0402C-27NJ	27 ± 5%	8	100	1600	0.7	300
AIML0402C-33NJ	33 ± 5%	8	100	1300	0.8	200
AIML0402C-39NJ	39 ± 5%	8	100	1200	1.0	200
AIML0402C-47NJ	47 ± 5%	8	100	1100	1.1	200
AIML0402C-56NJ	56 ± 5%	8	100	750	1.2	200
AIML0402C-68NJ	68 ± 5%	8	100	730	1.4	150
AIML0402C-82NJ	82 ± 5%	8	100	750	2.4	150
AIML0402C-R10J	100 ± 5%	8	100	700	2.6	150
AIML0402C-R12J	120 ± 5%	8	100	600	2.8	150
AIML0402C-R15J	150 ± 5%	8	100	550	3.2	100
AIML0402C-R18J	180 ± 5%	8	100	500	3.7	100
AIML0402C-R22J	220 ± 5%	8	100	450	4.0	100

TECHNICAL INFORMATION:

- Testing (Equivalents acceptable)
Inductance & Q-HP4195A+HP41951
DCR-VDA(-7412
SRF:HP6720C
- Solderability: 90% of the terminal
Electrode shall be covered
Preheat: 200°C ± 5°C for 100 second
Solder:HS3AA Eutectic Solder
Flux:Rosin,Dip for 5 seconds ± 1 second
- Thermal Shock: Inductance shall be
Within ± 5% of initial value
and Q shall be within ± 30% of initial value
When temperature is -40°C and +85°C for 30
Min,for each 100 cycles
- Operating Temperature:-25°C to +85°C
- Storage Temperature:-40°C to +85°C

PHYSICAL CHARACTERISTICS:

Dimensions (mm)



L	1.0 ± 0.15
W	0.5 ± 0.15
T	0.5 ± 0.15
E	0.25 ± 0.1

SMD Ceramic multilayer chip inductors

AIML0402CA Seires

0402CA Series supports miniaturized devices. Its low inductance, high precision and high Q enables easy impedance matching at both RF and IF circuits and compact high frequency circuit designing.



Features

- Excellent high frequency application
- High Q factor and SRF value
- Miniaturization
- Tight tolerance
- Wide inductance range

Applications

- RF matching circuit requiring Q value
- Bluetooth, WLAN, UWB, digital TV tuners and high-frequency circuit and module

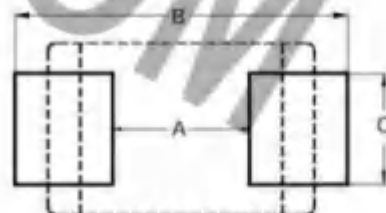
Product Identification



Shape and Dimensions



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D
AIML0402C	1.0±0.10	0.5±0.10	0.5±0.10	0.25±0.10

Dimensions in mm

TYPE	A	B	C
AIML0402C	0.4	1.2 ~ 1.4	0.5

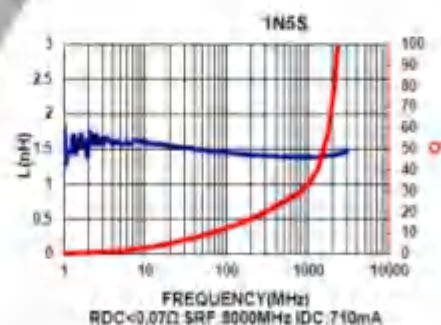
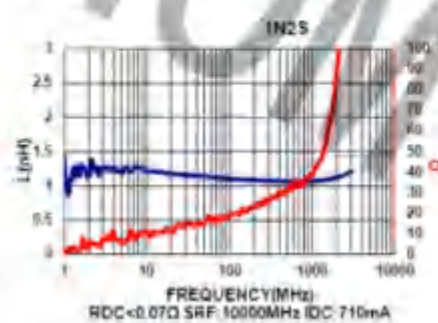
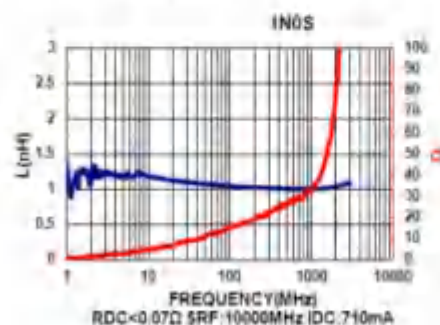
Electrical Characteristics

Part Number AIML0402CA-	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q		SRF (MHz) Min	RDC (Ω) Max	IDC (mA) Max
				Min 100MHz	Typ 250MHz			
1N0□	1.0	±0.3nH	100	8	23	10000	0.07	710
1N2□	1.2	±0.3nH	100	8	23	10000	0.07	710
1N5□	1.5	±0.3nH	100	8	20	8000	0.07	710
1N8□	1.8	±0.3nH	100	8	20	6000	0.07	710
2N0□	2.0	±0.3nH	100	8	20	6000	0.08	660
2N2□	2.2	±0.3nH	100	8	20	6000	0.08	660
2N4□	2.4	±0.3nH	100	8	18	6000	0.09	630
2N7□	2.7	±0.3nH	100	8	18	6000	0.09	630
3N0□	3.0	±0.3nH	100	8	18	6000	0.11	570
3N3□	3.3	±0.3nH	100	8	18	6000	0.12	540
3N6□	3.6	±0.3nH	100	8	18	5000	0.14	500
3N9□	3.9	±0.3nH	100	8	18	4000	0.15	490
4N3□	4.3	±0.3nH	100	8	18	4000	0.16	470
4N7□	4.7	±0.3nH	100	8	18	4000	0.17	450
5N1□	5.1	±0.3nH	100	8	17	4000	0.19	430
5N6□	5.6	±0.3nH	100	8	17	4000	0.20	420
6N2□	6.2	±0.3nH	100	8	17	3900	0.22	400
6N8□	6.8	5	100	8	17	3900	0.23	390
7N5□	7.5	5	100	8	17	3700	0.25	370
8N2□	8.2	5	100	8	17	3600	0.27	360
9N1□	9.1	5	100	8	17	3400	0.29	350
10N□	10	5	100	8	17	3200	0.31	330
12N□	12	5	100	8	17	2700	0.39	300
15N□	15	5	100	8	17	2300	0.45	280

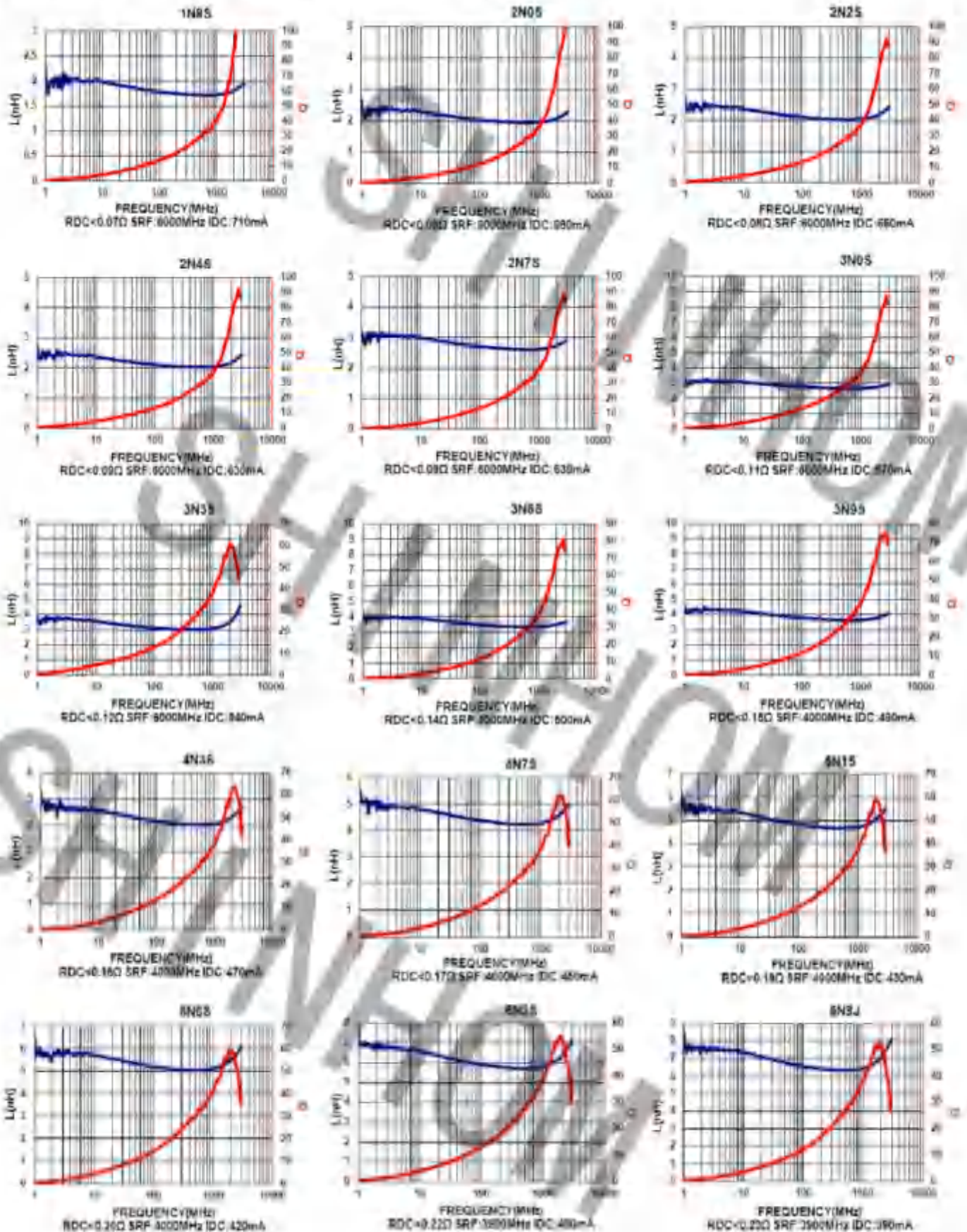
Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- IDC : Applied the current to coils, the inductance shall be less than 10% initial value
- Residual impedance of short chip : 0.15nH(Inductance ≤ 4.3nH) or 0.48nH(Inductance > 4.3nH)
- Measure Equipment :
L & Q : Agilent E4991A+Agilent 16197A
SRF : Agilent E4991A or HP19196C
RDC : HP4338B or CHEN HWA 502

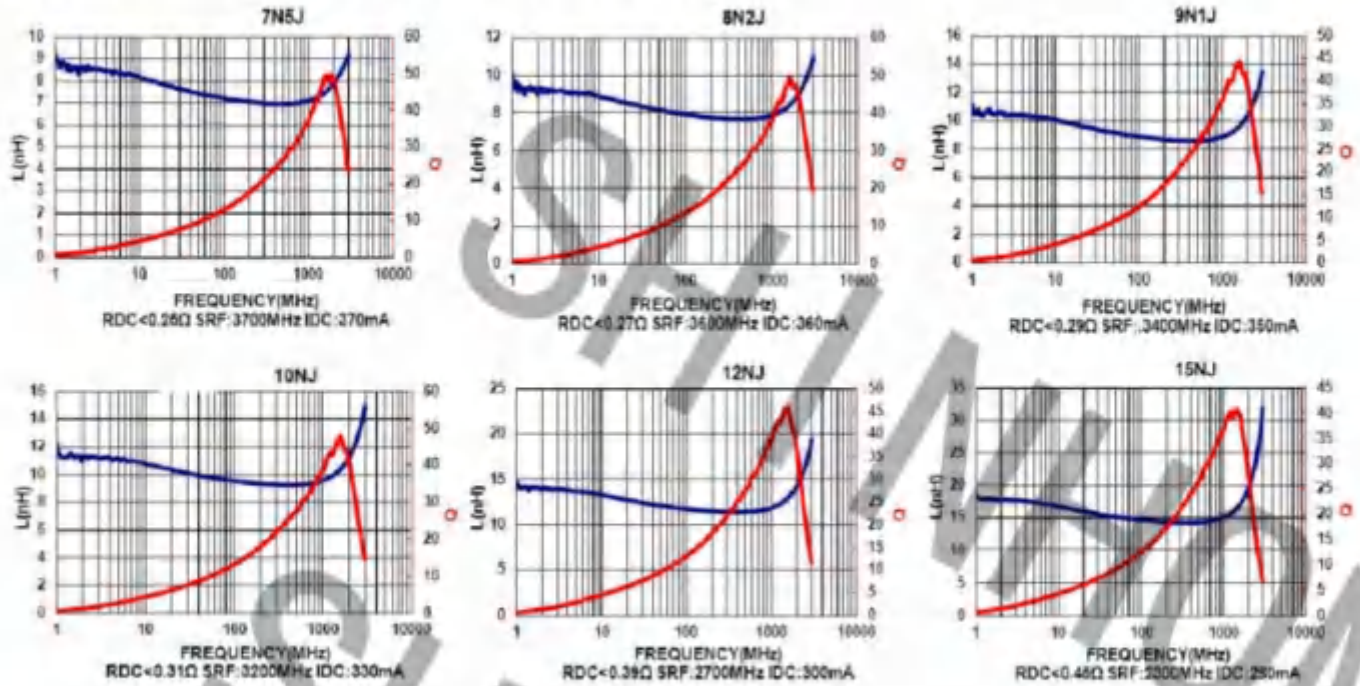
Test Instruments : Agilent E4991A Material/Impedance Analyzer



Test Instruments : Agilent E4991A Material/Impedance Analyzer



Test Instruments : Agilent E4991A Material/Impedance Analyzer



SMD Ceramic multilayer chip inductors

AIML0402CC Seires

The 0402CC Series is a type of ceramic chip inductor produced usii the multilayer technology. The series provides excellent Q factor and SRF characteristics and is suitable for high frequency applications.



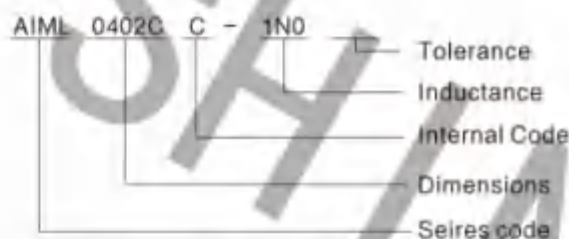
Features

- RoHS compliant
- Excellent Q factor and SRF characteristics
- Small size of 0402/0603 is suitable for small portable devices
- Supports operating frequency up to 6GHz with nominal inductance values from 1.0nH to 270 nH.

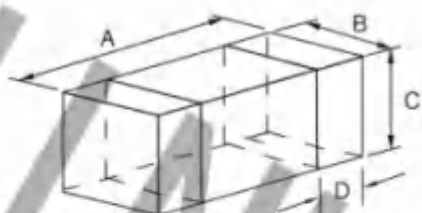
Applications

- RF resonance and impedance matching circuit
- RF and wireless communication
- Information technology equipment, computers, telecommunications, radar detectors, automotive electronics, cellular phones, pagers, PDAs, keyless remote systems
- L-C filter configurations

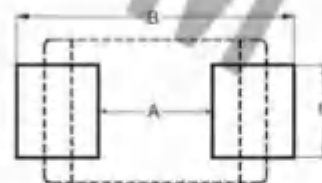
Product Identification



Shape and Dimensions



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D
AIML0402C	1.0±0.10	0.5±0.10	0.5±0.10	0.25±0.10

Dimensions in mm

TYPE	A	B	C
AIML0402C	0.4	1.2 ~ 1.4	0.5

Electrical Characteristics

Part Number AIML0402CC-	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Typ.	RDC (Ω) Max	IDC (mA) Max
1N0□	1.0	±0.3nH	100	8	10000	0.07	400
1N1□	1.1	±0.3nH	100	8	10000	0.10	400
1N2□	1.2	±0.3nH	100	8	10000	0.09	400
1N3□	1.3	±0.3nH	100	8	9000	0.10	400
1N5□	1.5	±0.3nH	100	8	9000	0.10	400
1N6□	1.6	±0.3nH	100	8	8700	0.10	400
1N8□	1.8	±0.3nH	100	8	8700	0.10	400
2N0□	2.0	±0.3nH	100	8	8100	0.10	400
2N2□	2.2	±0.3nH	100	8	8100	0.12	400
2N4□	2.4	±0.3nH	100	8	7700	0.15	400
2N7□	2.7	±0.3nH	100	8	7700	0.15	400
3N0□	3.0	±0.3nH	100	8	6300	0.15	400
3N3□	3.3	±0.3nH/10	100	8	6300	0.15	400
3N6□	3.6	±0.3nH/10	100	8	6100	0.15	400
3N9□	3.9	±0.3nH/10	100	8	6100	0.18	400
4N3□	4.3	±0.3nH/10	100	8	6000	0.18	400
4N7□	4.7	±0.3nH/10	100	8	6000	0.18	400
5N0□	5.0	±0.3nH/10	100	8	5100	0.20	400
5N1□	5.1	±0.3nH/10	100	8	5300	0.20	400
5N6□	5.6	±0.3nH/10	100	8	5100	0.20	400
6N8□	6.8	5 / 10	100	8	4550	0.24	400
8N0□	8.0	5 / 10	100	8	4100	0.30	300
8N2□	8.2	5 / 10	100	8	4100	0.24	300
9N1□	9.1	5 / 10	100	8	3900	0.26	300
10N□	10	5 / 10	100	8	3900	0.26	300
12N□	12	5 / 10	100	8	3000	0.40	300
15N□	15	5 / 10	100	8	2800	0.50	300
18N□	18	5 / 10	100	8	2500	0.55	300
22N□	22	5 / 10	100	8	2200	0.70	300
24N□	24	5 / 10	100	8	2100	0.70	300
27N□	27	5 / 10	100	8	2000	0.80	300
33N□	33	5 / 10	100	8	1800	0.9	200
39N□	39	5 / 10	100	8	1600	1.0	150
47N□	47	5 / 10	100	8	1400	1.2	150
56N□	56	5 / 10	100	8	1300	1.3	150
68N□	68	5 / 10	100	8	1100	1.5	100

Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5% , K=±10%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- IDC : Applied the current to coils, the inductance shall be less than 10% initial value
- Residual impedance of short chip : 0nH
- Measure Equipment :
L & Q : Agilent E4991A+Agilent 16197A
SRF : HP8753D
RDC : HP4338B or CHEN HWA 502

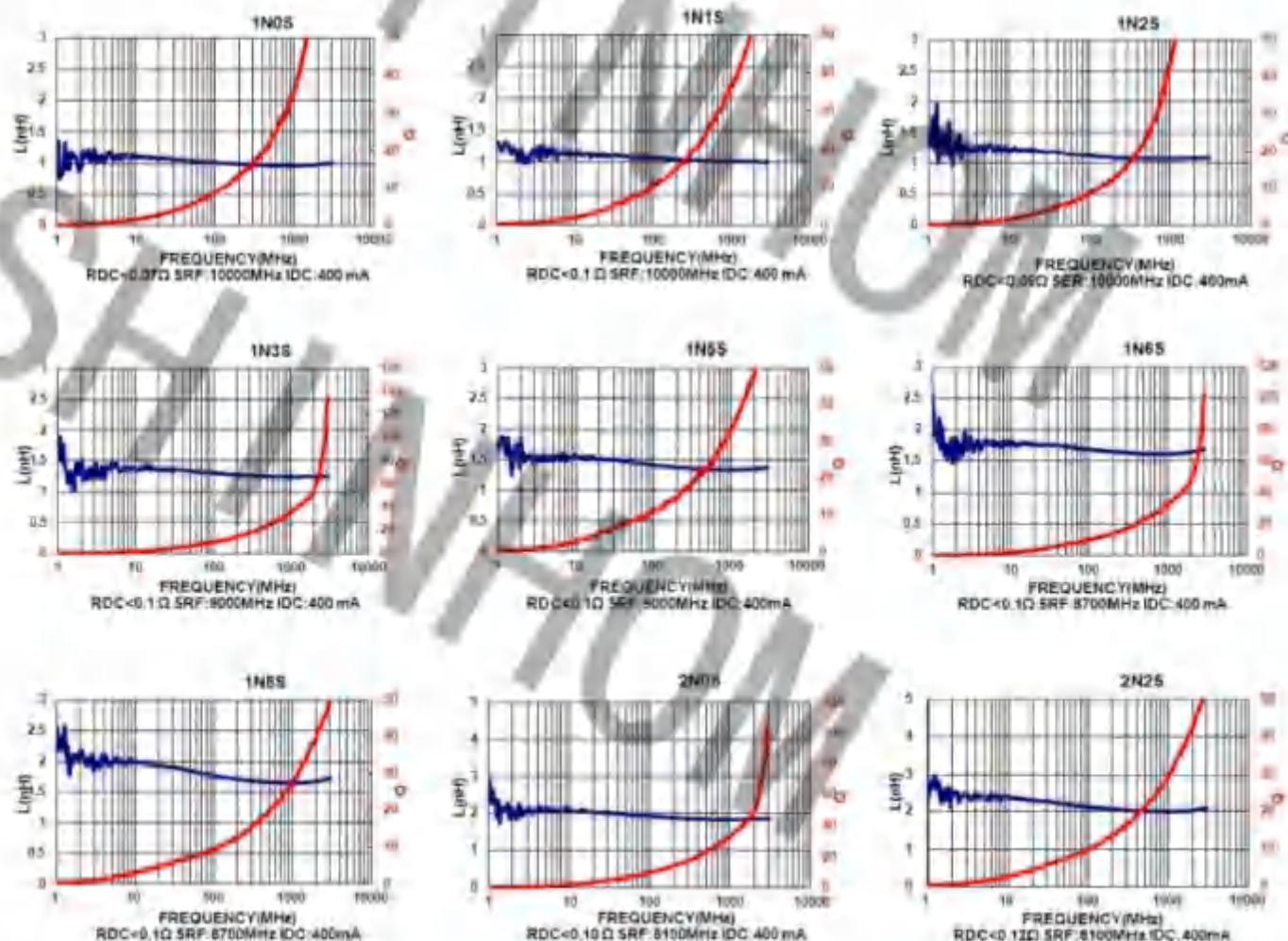
Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Typ.	RDC (Ω) Max	IDC (mA) Max
AIML0402CC-							
75N□	75	5 / 10	100	8	1080	1.5	100
82N□	82	5 / 10	100	8	1000	1.6	100
R10□	100	5 / 10	100	8	900	2.0	100
R12□	120	5 / 10	100	8	800	2.2	100
R15□	150	5 / 10	100	8	700	3.5	100
R18□	180	5 / 10	100	8	600	3.8	100
R22□	220	5 / 10	100	8	500	4.2	100
R27□	270	5 / 10	100	8	500	4.8	100

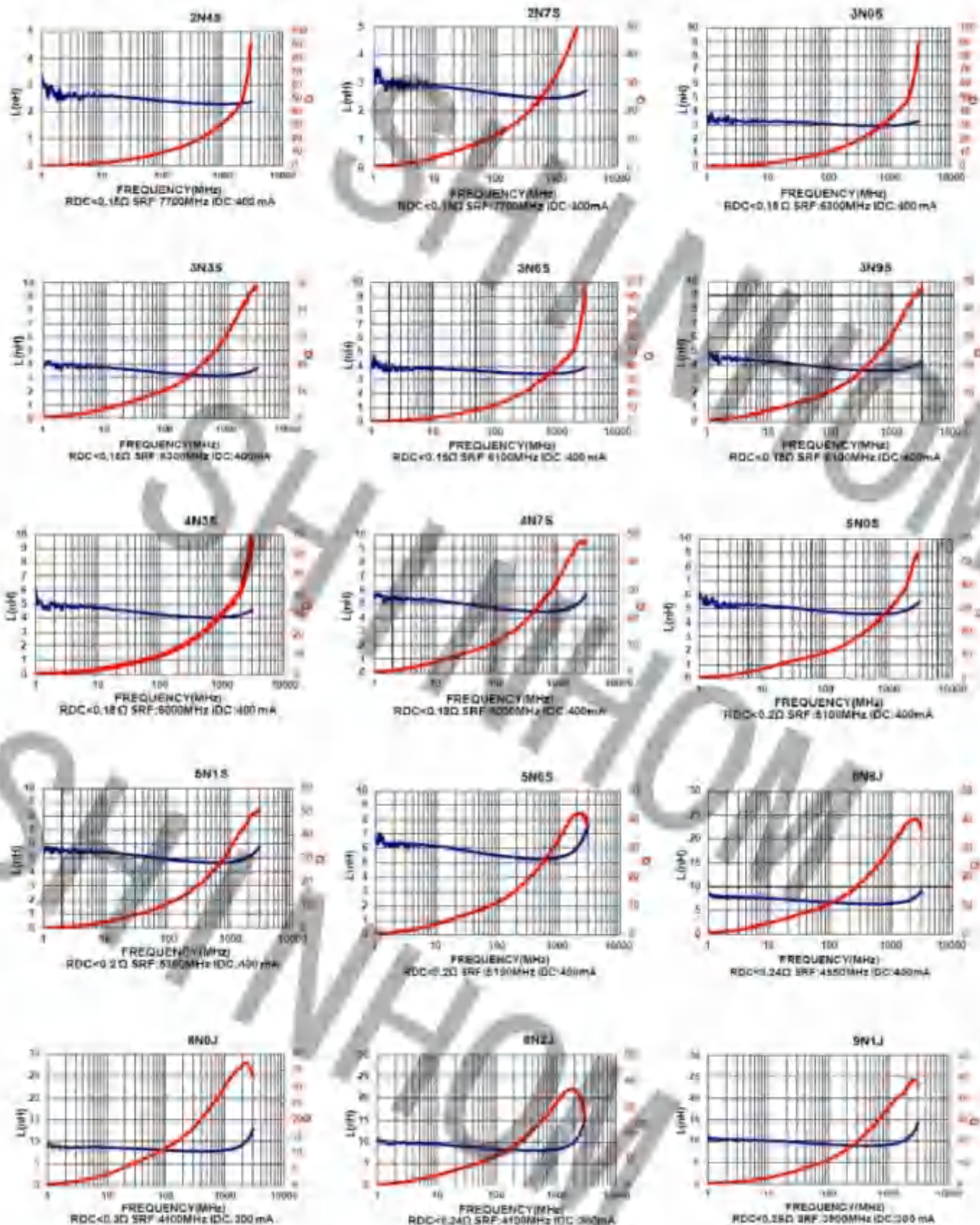
Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5% , K=±10%

- Operating temperature range : -55°C ~ 125°C(Including self - temperature rise)
- IDC : Applied the current to coils, the inductance shall be less than 10% initial value
- Residual impedance of short chip : 0nH
- Measure Equipment :
L & Q : Agilent E4991A+Agilent 16197A
SRF : HP8753D
RDC : HP4330B or CHEN HWA 502

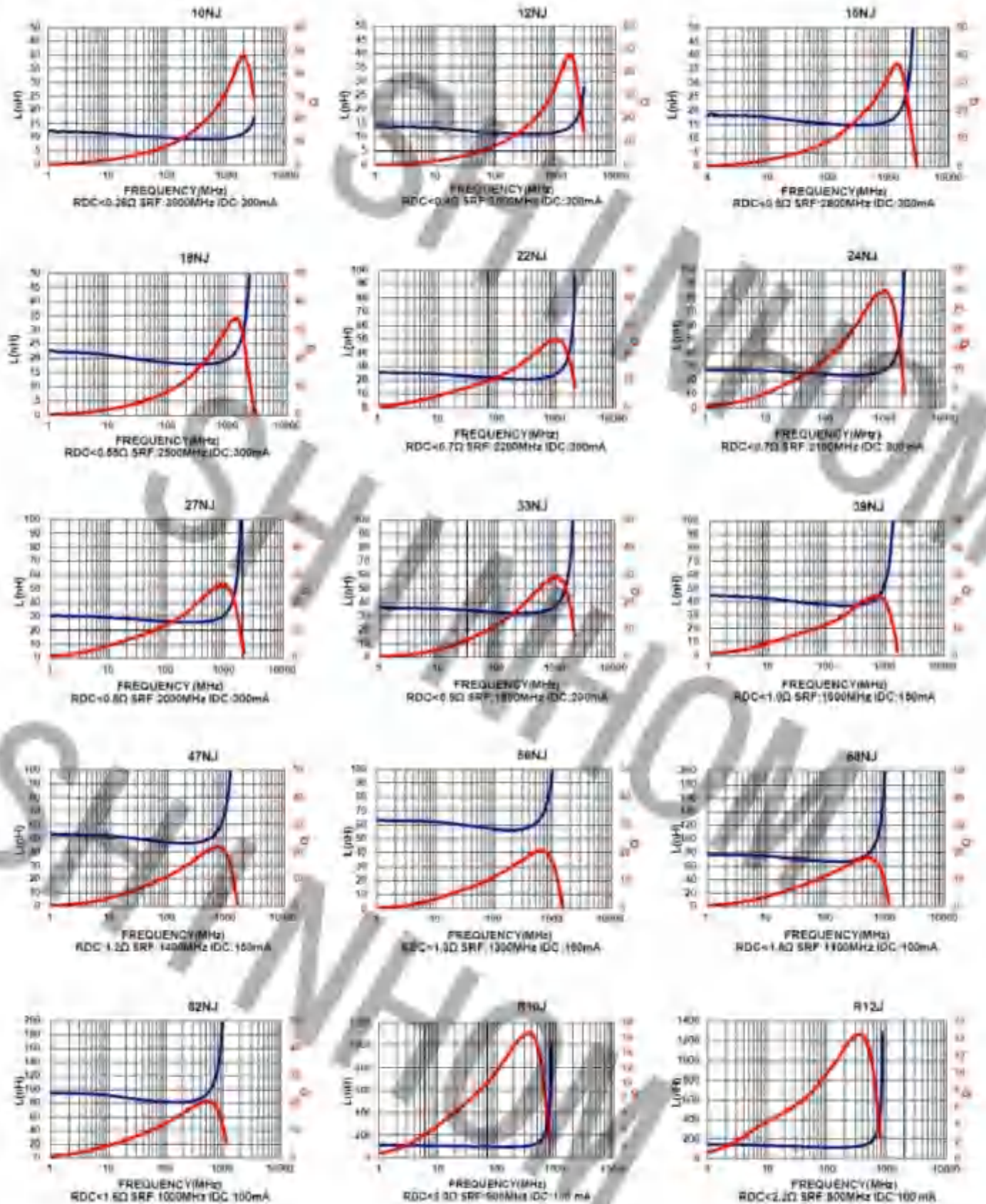
Test Instruments : Agilent E4991A Material/Impedance Analyzer



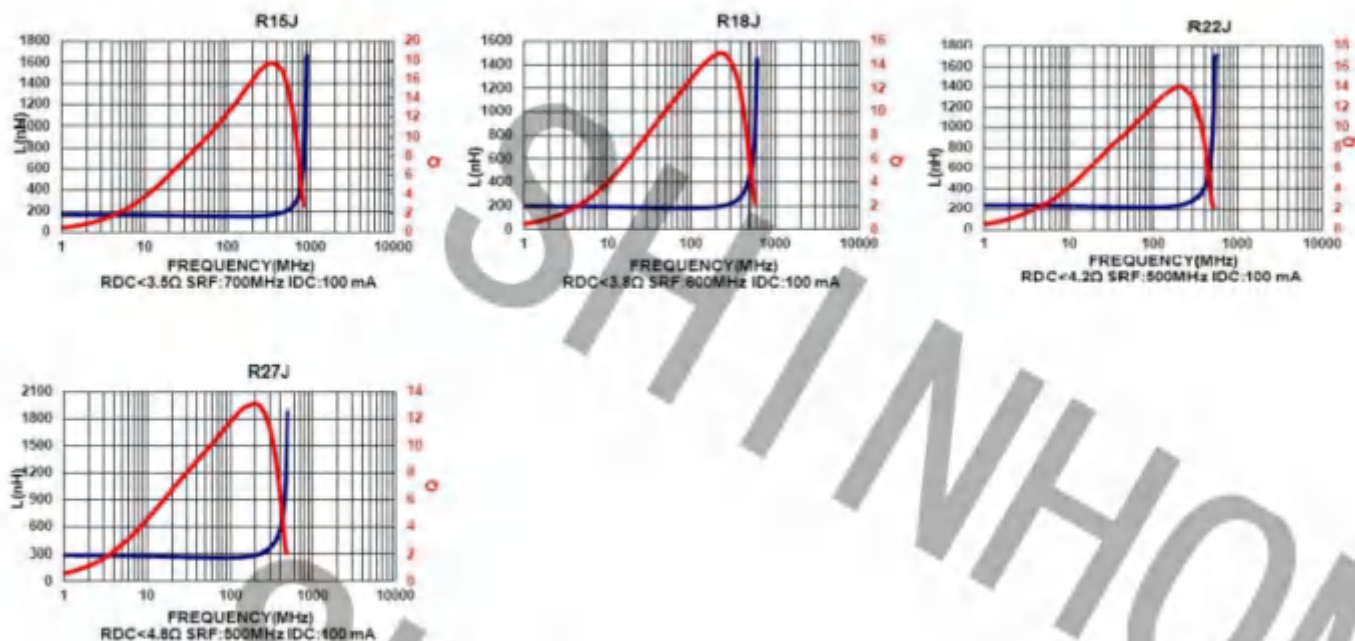
Test Instruments : Agilent E4991A Material/Impedance Analyzer



Test Instruments : Agilent E4991A Material/Impedance Analyzer



Test Instruments : Agilent E4991A Material/Impedance Analyzer



SMD Ceramic multilayer chip inductors

AIML0402CD Seires

The 0402CD Series is a type of ceramic chip inductor produced using the multilayer technology. The series provides excellent Q factor and SRF characteristics and is suitable for high frequency applications.



Features

- RoHS compliant
- Excellent Q factor and SRF characteristics
- Small size of 0402/0603 is suitable for small portable devices
- Supports operating frequency up to 6GHz with nominal inductance values from 1.0nH to 82 nH.

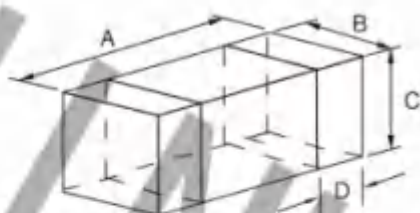
Applications

- RF resonance and impedance matching circuit
- RF and wireless communication
- Information technology equipment, computers, telecommunications, radar detectors, automotive electronics, cellular phones, pagers, PDAs, keyless remote systems
- L-C filter configurations

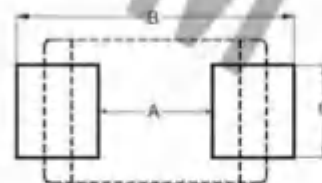
Product Identification



Shape and Dimensions



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D
AIML0402C	1.0±0.10	0.5±0.10	0.5±0.10	0.25±0.10

Dimensions in mm

TYPE	A	B	C
AIML0402C	0.4	1.2 ~ 1.4	0.5

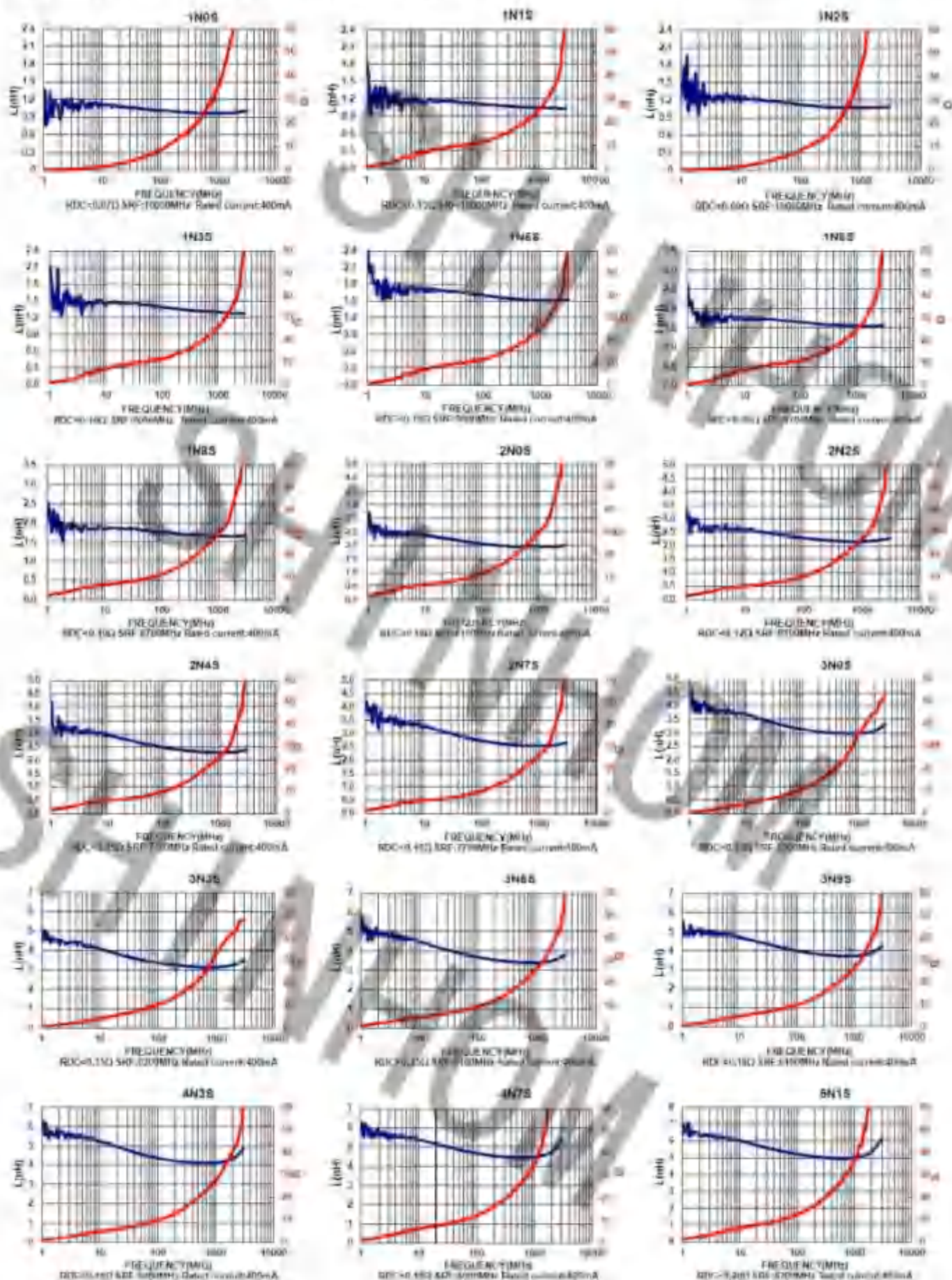
Electrical Characteristics

Part Number A1ML0402CD-	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Typ.	RDC (Ω) Max	Rated Current (mA) Max
1N0□	1.0	±0.3nH	100	8	10000	0.07	400
1N1□	1.1	±0.3nH	100	8	10000	0.10	400
1N2□	1.2	±0.3nH	100	8	10000	0.09	400
1N3□	1.3	±0.3nH	100	8	9000	0.10	400
1N5□	1.5	±0.3nH	100	8	9000	0.10	400
1N6□	1.6	±0.3nH	100	8	8700	0.10	400
1N8□	1.8	±0.3nH	100	8	8700	0.10	400
2N0□	2.0	±0.3nH	100	8	8100	0.10	400
2N2□	2.2	±0.3nH	100	8	8100	0.12	400
2N4□	2.4	±0.3nH	100	8	7700	0.15	400
2N7□	2.7	±0.3nH	100	8	7700	0.15	400
3N0□	3.0	±0.3nH	100	8	6300	0.15	400
3N3□	3.3	±0.3nH	100	8	6300	0.15	400
3N6□	3.6	±0.3nH	100	8	6100	0.15	400
3N9□	3.9	±0.3nH	100	8	6100	0.18	400
4N3□	4.3	±0.3nH	100	8	6000	0.18	400
4N7□	4.7	±0.3nH	100	8	6000	0.18	400
5N1□	5.1	±0.3nH	100	8	5300	0.20	400
5N6□	5.6	±0.3nH	100	8	5100	0.20	400
6N2□	6.2	±0.3nH/5/10	100	8	4500	0.22	400
6N8□	6.8	5 / 10	100	8	4550	0.24	400
7N5□	7.5	5 / 10	100	8	4200	0.24	300
8N2□	8.2	5 / 10	100	8	4100	0.24	300
9N1□	9.1	5 / 10	100	8	3900	0.26	300
10N□	10	5 / 10	100	8	3900	0.26	300
12N□	12	5 / 10	100	8	3000	0.28	300
15N□	15	5 / 10	100	8	2500	0.32	300
18N□	18	5 / 10	100	8	2200	0.36	300
22N□	22	5 / 10	100	8	1900	0.42	300
27N□	27	5 / 10	100	8	1700	0.46	300
33N□	33	5 / 10	100	8	1600	0.58	200
39N□	39	5 / 10	100	8	1200	0.65	200
47N□	47	5 / 10	100	8	1000	0.72	200
56N□	56	5 / 10	100	8	800	0.82	200
68N□	68	5 / 10	100	8	800	0.92	180
82N□	82	5 / 10	100	8	700	1.20	150

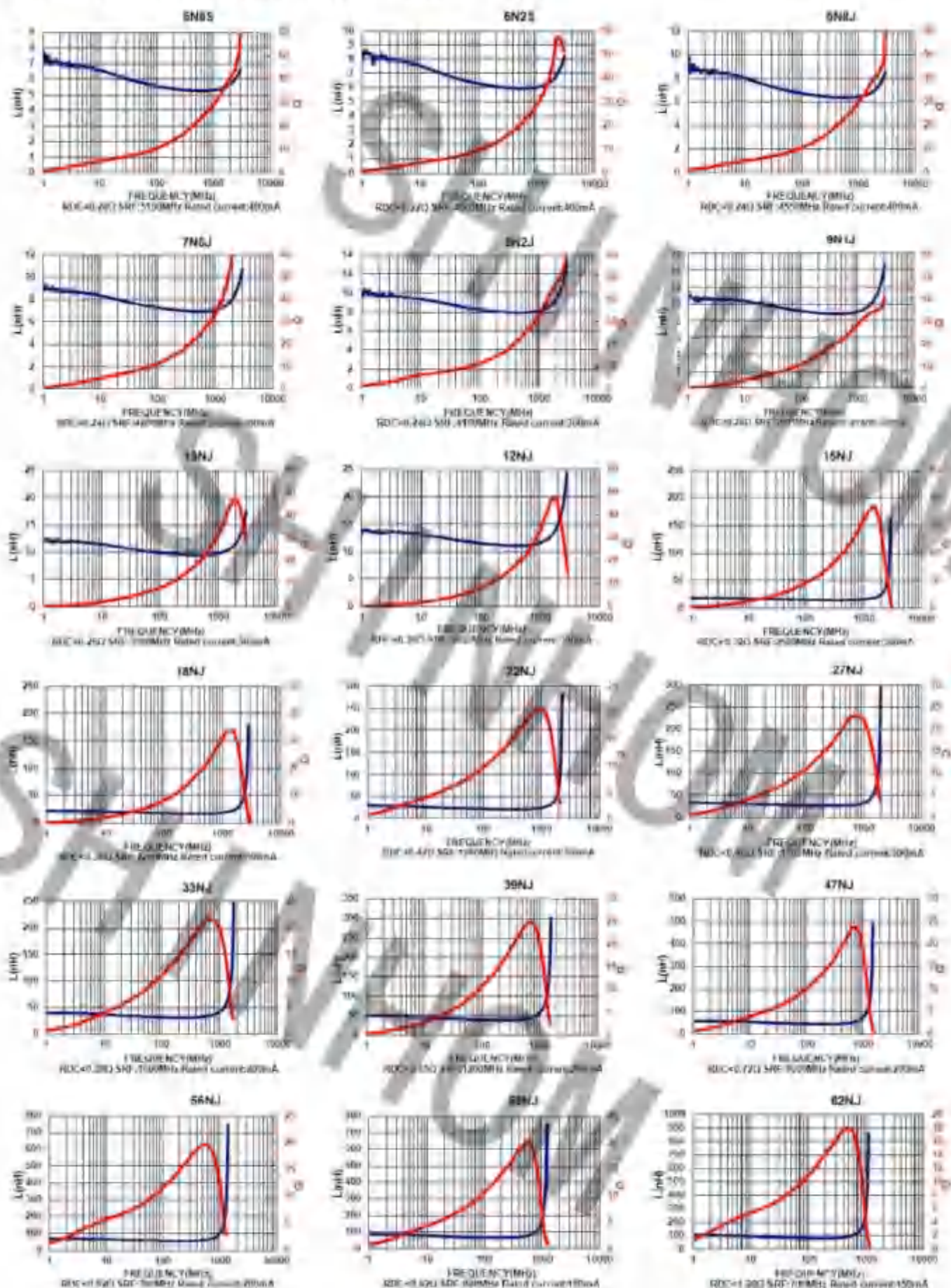
Note: When ordering, please specify tolerance code. Tolerance : C=±0.2nH, S=±0.3nH, J=±5%, K=±10%

- Operating temperature range : -55°C ~ 125°C(Including self - temperature rise)
- Rate Current : Applied the current to coils, the temperature rise shall not be more than 30 °C
- Residual impedance of short chip : 0nH
- Measure Equipment :
L & Q : Agilent E4991A+Agilent 16197A
SRF : HP8753D
RDC : HP4338B or CHEN HWA 502

Test Instruments : Agilent E4991A Material/Impedance Analyzer



Test Instruments : Agilent E4991A Material/Impedance Analyzer



SMD Ceramic multilayer chip inductors

AIML0402CE Seires

The 0402CE Series is a type of ceramic chip inductor produced using the multilayer technology. The series provides excellent Q factor and SRF characteristics and is suitable for high frequency applications.



Features

- RoHS compliant
- Excellent Q factor and SRF characteristics
- Small size of 0402/0603 is suitable for small portable devices
- Supports operating frequency up to 6GHz with nominal inductance values from 1.0nH to 15 nH.

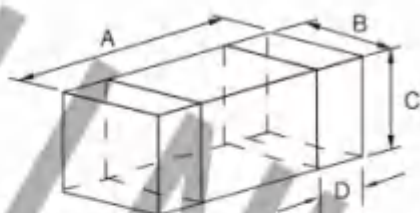
Applications

- RF resonance and impedance matching circuit
- RF and wireless communication
- Information technology equipment, computers, telecommunications, radar detectors, automotive electronics, cellular phones, pagers, PDAs, keyless remote systems
- L-C filter configurations

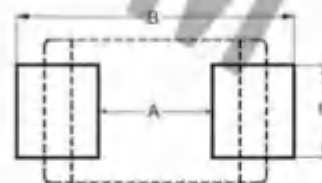
Product Identification



Shape and Dimensions



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D
AIML0402C	1.0±0.10	0.5±0.10	0.5±0.10	0.25±0.10

Dimensions in mm

TYPE	A	B	C
AIML0402C	0.4	1.2 ~ 1.4	0.5

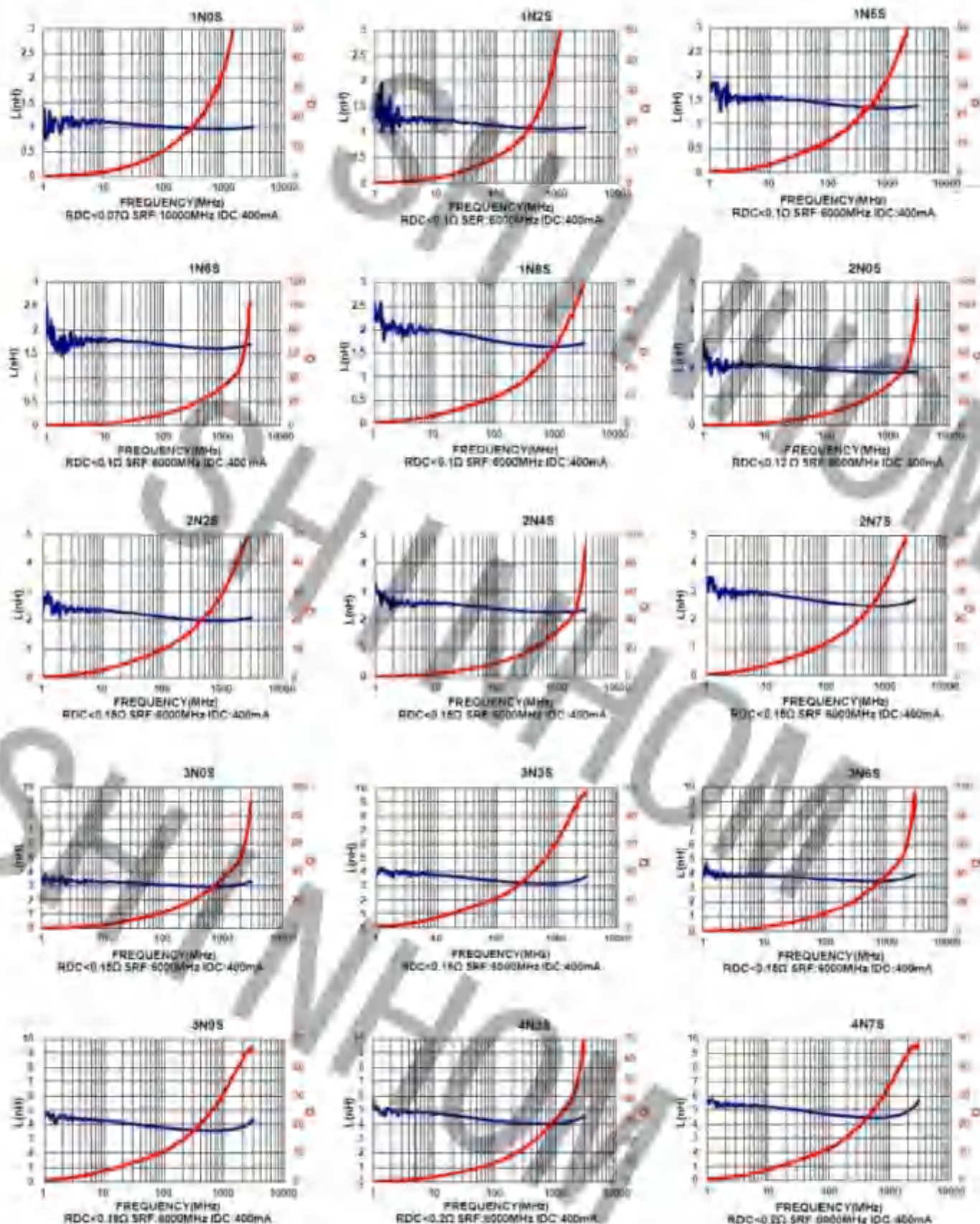
Electrical Characteristics

Part Number AIML0402CE-	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Typ.	RDC (Ω) Max	IDC (mA) Max
1N0□	1.0	±0.3nH	100	8	10000	0.07	400
1N2□	1.2	±0.3nH	100	8	6000	0.10	400
1N5□	1.5	±0.3nH	100	8	6000	0.10	400
1N6□	1.6	±0.3nH	100	8	6000	0.10	400
1N8□	1.8	±0.3nH	100	8	6000	0.10	400
2N0□	2.0	±0.3nH	100	8	6000	0.12	400
2N2□	2.2	±0.3nH	100	8	6000	0.15	400
2N4□	2.4	±0.3nH	100	8	6000	0.15	400
2N7□	2.7	±0.3nH	100	8	6000	0.15	400
3N0□	3.0	±0.3nH	100	8	6000	0.15	400
3N3□	3.3	±0.3nH	100	8	6000	0.15	400
3N6□	3.6	±0.3nH	100	8	6000	0.15	400
3N9□	3.9	±0.3nH	100	8	6000	0.19	400
4N3□	4.3	±0.3nH	100	8	6000	0.20	400
4N7□	4.7	±0.3nH	100	8	6000	0.20	400
5N1□	5.1	±0.3nH	100	8	6000	0.20	400
5N6□	5.6	±0.3nH	100	8	5300	0.20	400
6N2□	6.2	5	100	8	4300	0.25	400
6N8□	6.8	5	100	8	4200	0.25	400
7N5□	7.5	5	100	8	3900	0.25	400
8N2□	8.2	5	100	8	3600	0.30	300
9N1□	9.1	5	100	8	3400	0.34	300
10N□	10	5	100	8	3200	0.35	300
12N□	12	5	100	8	2800	0.35	300
15N□	15	5	100	8	2300	0.46	300

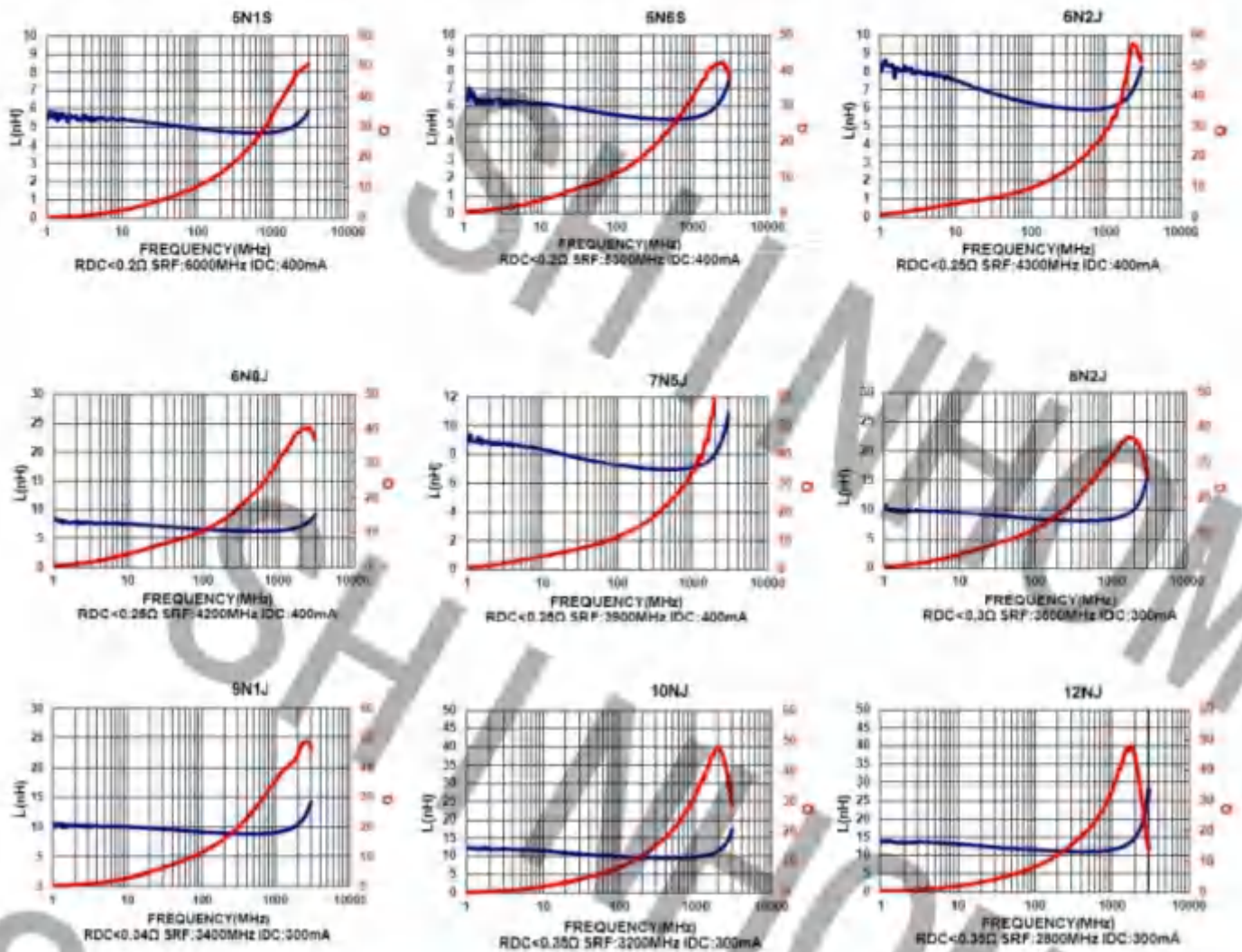
Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- IDC : Applied the current to coils, the inductance shall be less than 10% initial value
- Residual impedance of short chip : 0.55nH
- Measure Equipment :
L & Q : Agilent E4991A+Agilent 16197A
SRF : HP8753D
RDC : HP4338B or CHEN HWA 502

Test Instruments : Agilent E4991A Material/Impedance Analyzer



Test Instruments : Agilent E4991A Material/Impedance Analyzer



SURFACE-MOUNT MULTI-LAYER CERAMIC CHIP INDUCTORS

AIML-0603C SERIES



FEATURES:

- Multilayer monolithic construction yields high reliability
- High self-resonant frequency
- Excellent solderability and heat resistance for either flow or reflow soldering

COMMON APPLICATIONS:

- High frequency circuits of telecommunication
- Bluetooth
- Mobile phones such as GSM, CDMA, PDC, etc
- Other High frequency circuits in general

ELECTRICAL CHARACTERISTICS:

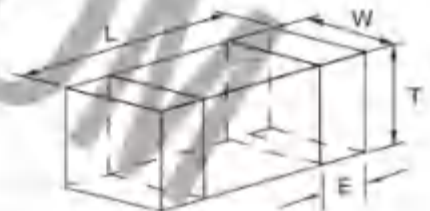
Part Number	Inductance L(mH) ±10%	Q Min	L/Q Tset Freq (MHz)	SRF (MHz) Min	DCR (Ω) Max	DCR (mΩ) Max
AIML0603C-1N0S	1.0 ± 0.3	8	100	10000	0.05	500
AIML0603C-1N2S	1.2 ± 0.3	8	100	10000	0.10	500
AIML0603C-1N5S	1.5 ± 0.3	8	100	10000	0.10	400
AIML0603C-1N8S	1.8 ± 0.3	8	100	9800	0.12	400
AIML0603C-2N2S	2.2 ± 0.3	8	100	7800	0.20	400
AIML0603C-2N7S	2.7 ± 0.3	8	100	7000	0.20	400
AIML0603C-3N3S	3.3 ± 0.3	8	100	6200	0.20	400
AIML0603C-3N8S	3.8 ± 0.3	8	100	5600	0.25	400
AIML0603C-4N7S	4.7 ± 0.3	8	100	4800	0.30	400
AIML0603C-5N8S	5.8 ± 0.3	8	100	4600	0.30	400
AIML0603C-6N8J	6.8 ± 5%	8	100	4200	0.35	400
AIML0603C-8N2J	8.2 ± 5%	8	100	3500	0.35	400
AIML0603C-10NJ	10 ± 5%	8	100	3200	0.40	300
AIML0603C-12NJ	12 ± 5%	8	100	2800	0.45	300
AIML0603C-15NJ	15 ± 5%	8	100	2600	0.45	300
AIML0603C-18NJ	18 ± 5%	8	100	2400	0.60	300
AIML0603C-22NJ	22 ± 5%	8	100	2000	0.60	300
AIML0603C-27NJ	27 ± 5%	8	100	1900	0.80	300
AIML0603C-33NJ	33 ± 5%	8	100	1600	0.80	300
AIML0603C-39NJ	39 ± 5%	8	100	1400	1.00	300
AIML0603C-47NJ	47 ± 5%	8	100	1200	1.00	200
AIML0603C-56NJ	56 ± 5%	8	100	1000	1.00	200
AIML0603C-68NJ	68 ± 5%	8	100	900	1.00	200
AIML0603C-82NJ	82 ± 5%	8	100	800	1.00	200
AIML0603C-R10J	100 ± 5%	8	100	700	1.40	200
AIML0603C-R15J	150 ± 5%	8	50	600	1.80	150
AIML0603C-R22J	220 ± 5%	8	50	500	2.40	150
AIML0603C-R33J	330 ± 5%	8	50	350	2.80	150
AIML0603C-R47J	470 ± 5%	8	50	300	3.40	150
AIML0603C-R68J	680 ± 5%	8	50	250	3.60	150

TECHNICAL INFORMATION:

- Testing (Equivalents acceptable)
Inductance & Q-HP4195A+HP41951
DCR-VOAC-7412
SRF-HP6720C
- Solderability: 90% of the terminal
Electrode shall be covered
Preheat: 260°C ± 5°C for 160 second
Solder: H63AA Eutectic Solder
Flux: Rosin, Dip for 5 seconds ± 1 second
- Thermal Shock: Inductance shall be
Within ± 5% of initial value
and Q shall be within ± 30% of initial value
When temperature is -40°C and +85°C for 30
Min. for each 100 cycles
- Operating Temperature: -25°C to +85°C
- Storage Temperature: -40°C to +85°C

PHYSICAL CHARACTERISTICS:

Dimensions (mm)



L	1.6 ± 0.2
W	0.8 ± 0.2
T	0.8 ± 0.2
E	0.3 ± 0.2

SMD Ceramic multilayer chip inductors

AIML0603CE Seires

The 0603CE Series is a type of ceramic chip inductor produced using the multilayer technology. The series provides excellent Q factor and SRF characteristics and is suitable for high frequency applications.



Features

- RoHS compliant
- Excellent Q factor and SRF characteristics
- Small size of 0402/0603 is suitable for small portable devices
- Supports operating frequency up to 6GHz with nominal inductance values from 1.0nH to 390 nH.

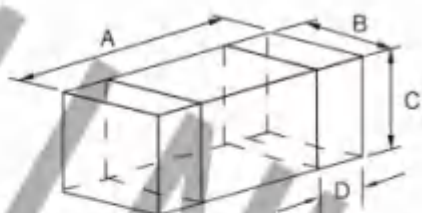
Applications

- RF resonance and impedance matching circuit
- RF and wireless communication
- Information technology equipment, computers, telecommunications, radar detectors, automotive electronics, cellular phones, pagers, PDAs, keyless remote systems
- L-C filter configurations

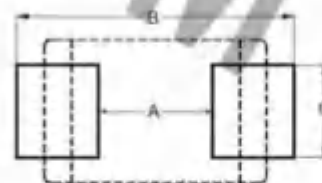
Product Identification



Shape and Dimensions



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D
AIML0603C	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2

Dimensions in mm

TYPE	A	B	C
AIML0603C	0.7 ~ 0.8	1.8 ~ 2.0	0.6 ~ 0.8

Electrical Characteristics

Part Number AIML0603CE-	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Typ.	RDC (Ω) Max	IDC (mA) Max
1N0S	1.0	±0.3nH	100	8	10000	0.10	600
1N2S	1.2	±0.3nH	100	8	10000	0.10	600
1N5S	1.5	±0.3nH	100	8	8000	0.10	600
1N6S	1.6	±0.3nH	100	8	8000	0.10	600
1N8S	1.8	±0.3nH	100	8	8000	0.10	600
2N2S	2.2	±0.3nH	100	8	7200	0.10	600
2N7S	2.7	±0.3nH	100	10	6200	0.10	600
3N0S	3.0	±0.3nH	100	10	5200	0.12	600
3N3□	3.3	±0.3nH/10	100	10	5200	0.12	600
3N6S	3.6	±0.3nH	100	10	5000	0.14	600
3N9□	3.9	±0.3nH/10	100	10	5000	0.14	600
4N3□	4.3	±0.3nH/10	100	10	4750	0.16	600
4N7□	4.7	±0.3nH /10	100	10	4750	0.16	600
5N1□	5.1	±0.3nH /10	100	10	4100	0.18	600
5N6□	5.6	±0.3nH/10	100	10	4100	0.18	600
6N2□	6.2	5 / 10	100	10	3750	0.22	600
6N8□	6.8	5 / 10	100	10	3750	0.22	600
7N5□	7.5	5 / 10	100	10	3300	0.24	600
8N2□	8.2	5 / 10	100	10	3300	0.24	600
10N□	10	5 / 10	100	12	3000	0.26	600
12N□	12	5 / 10	100	12	2600	0.28	600
15N□	15	5 / 10	100	12	2500	0.32	600
16N□	16	5 / 10	100	12	2400	0.35	600
18N□	18	5 / 10	100	12	2400	0.35	600
22N□	22	5 / 10	100	12	2000	0.40	500
27N□	27	5 / 10	100	12	1900	0.45	500
33N□	33	5 / 10	100	12	1600	0.55	400
39N□	39	5 / 10	100	12	1400	0.60	400
47N□	47	5 / 10	100	12	1300	0.70	400
56N□	56	5 / 10	100	12	1100	0.75	400
62N□	62	5 / 10	100	12	1050	0.85	400
68N□	68	5 / 10	100	12	1050	0.85	400
75N□	75	5 / 10	100	12	900	1.00	300
82N□	82	5 / 10	100	12	900	1.00	300

Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5% , K=±10%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- IDC : Applied the current to coils, the inductance shall be less than 10% initial value
- Residual impedance of short chip : 0nH
- Measure Equipment :

L & Q : Agilent E4991A+Agilent 16197A

SRF : HP8753D

RDC : HP4338B or CHEN HWA 502

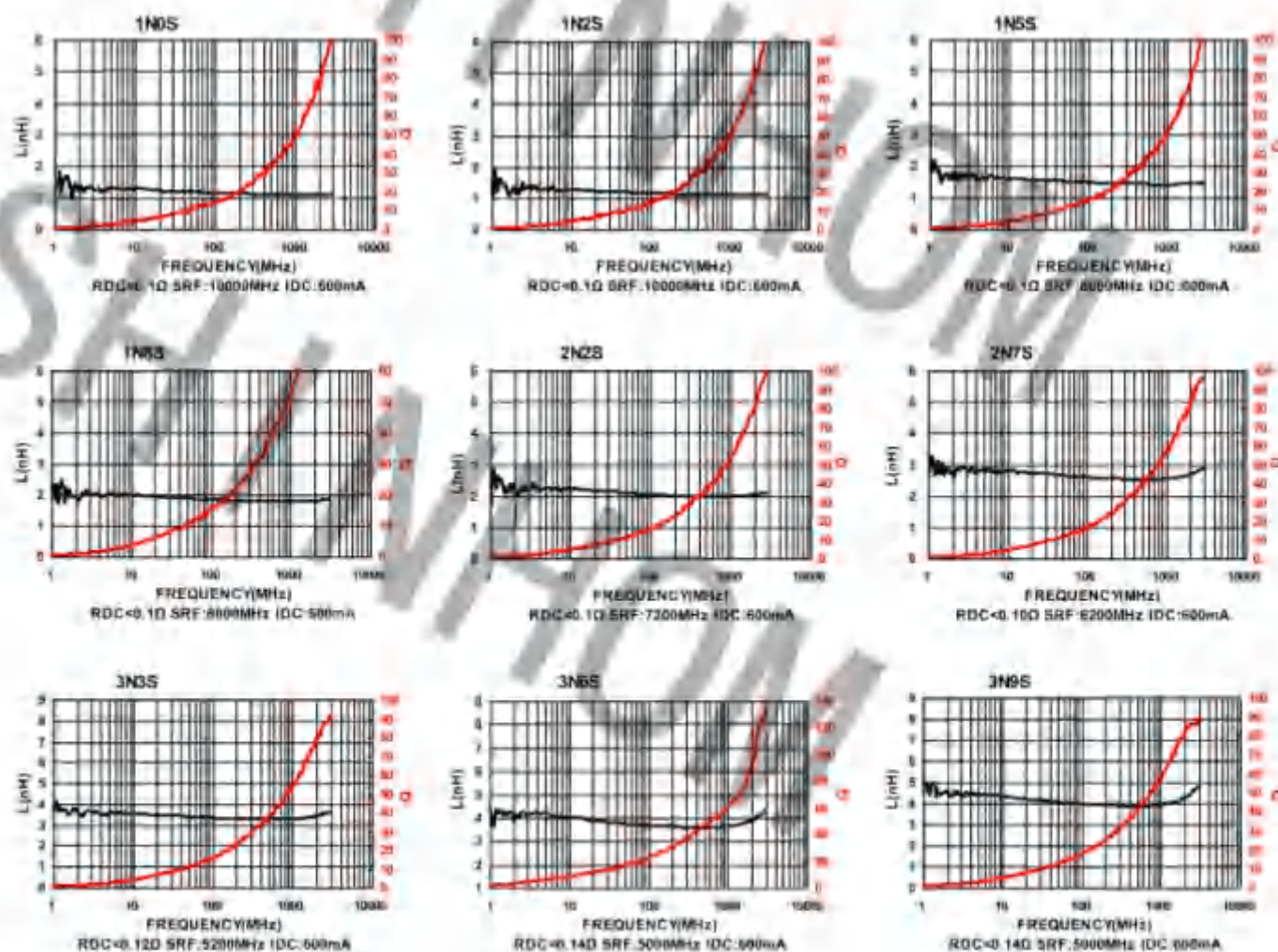
Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	SRF (MHz) Typ.	RDC (Ω) Max	IDC (mA) Max
AIML0603CE-							
R10	100	5 / 10	100	12	770	1.20	300
R12	120	5 / 10	50	8	650	1.30	300
R15	150	5 / 10	50	8	550	1.70	250
R18	180	5 / 10	50	8	520	1.90	250
R22	220	5 / 10	50	8	500	2.00	250
R27	270	5 / 10	50	8	470	2.20	150
R33	330	5 / 10	50	8	420	2.80	100
R39	390	5 / 10	50	8	300	3.00	100

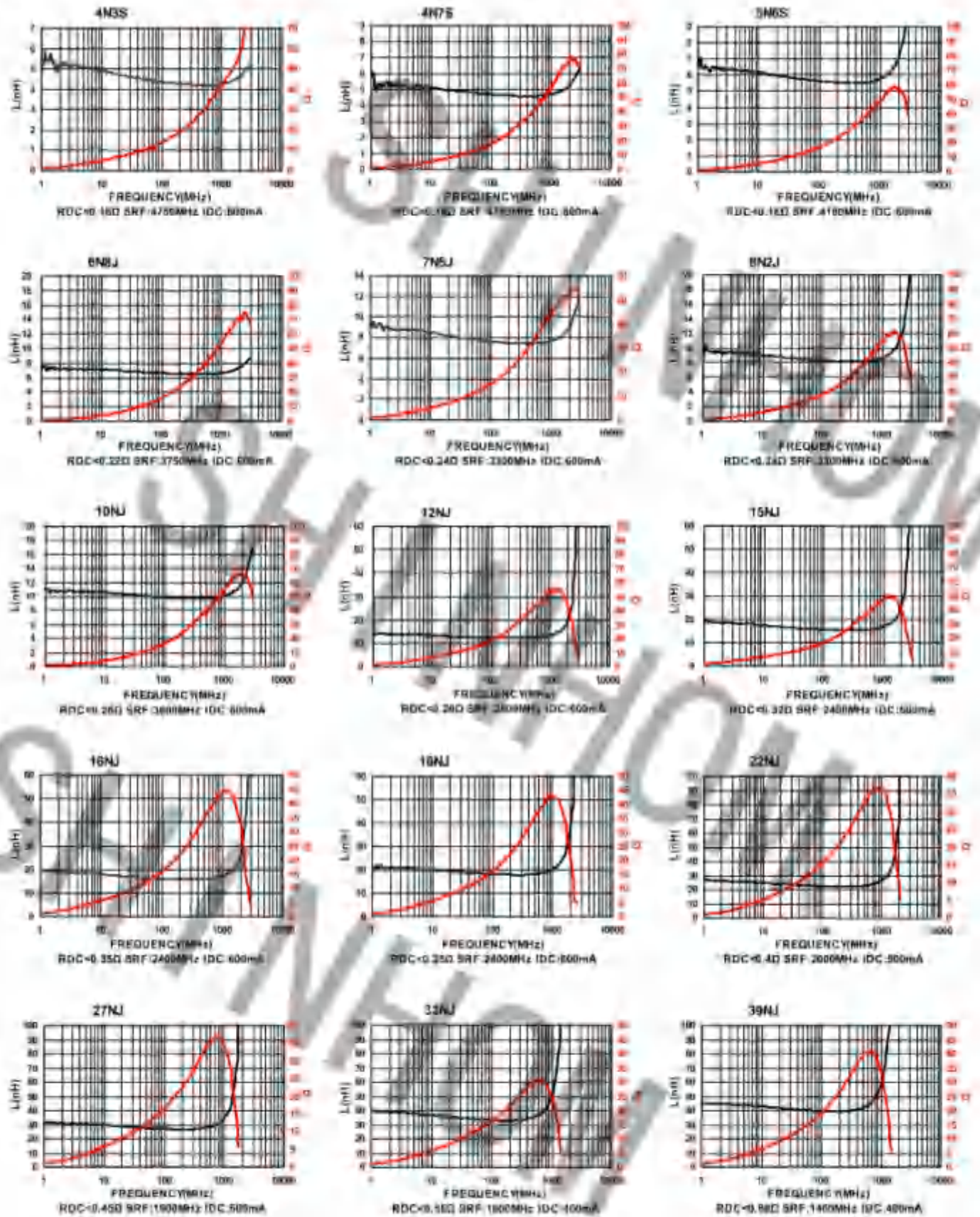
Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5% , K=±10%

- Operating temperature range : -55°C ~ 125°C (including self - temperature rise)
- IDC : Applied the current to coils, the inductance shall be less than 10% initial value
- Residual impedance of short chip : 0nH
- Measure Equipment :
L & Q : Agilent E4991A+Agilent 16197A
SRF : HP8753D
RDC : HP4330B or CHEN HWA 502

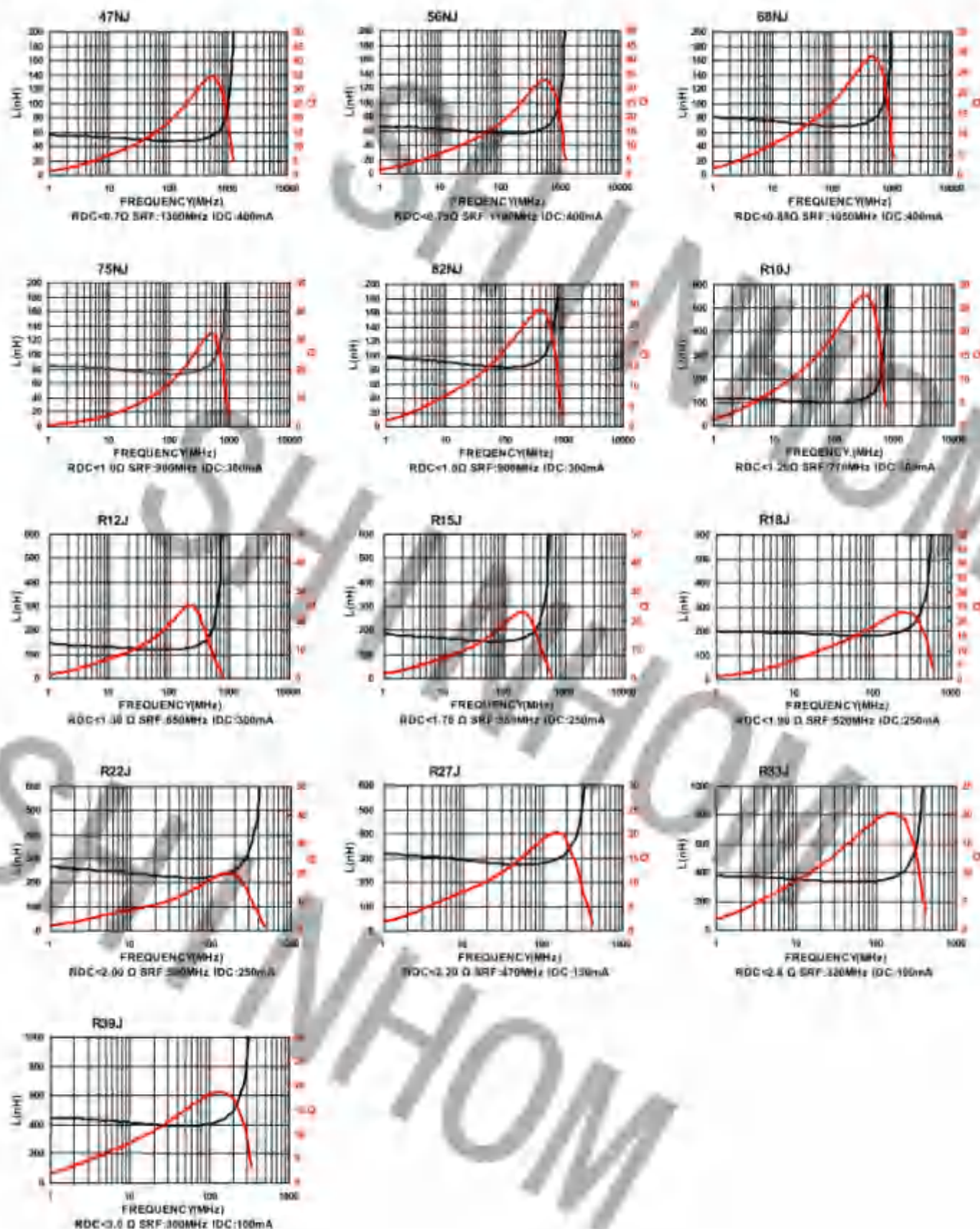
Test Instruments : Agilent E4991A Material/Impedance Analyzer



Test Instruments : Agilent E4991A Material/Impedance Analyzer



Test Instruments : Agilent E4991A Material/Impedance Analyzer



SURFACE-MOUNT MULTI-LAYER CERAMIC CHIP INDUCTORS

AIML-0805C SERIES



FEATURES:

- Multilayer monolithic construction yields high reliability
- High self-resonant frequency
- Excellent solderability and heat resistance for either flow or reflow soldering

COMMON APPLICATIONS:

- High frequency circuits of telecommunication.
- Bluetooth
- Mobile phones such as GSM, CDMA, PDC, etc.
- Other High frequency circuits in general

ELECTRICAL CHARACTERISTICS:

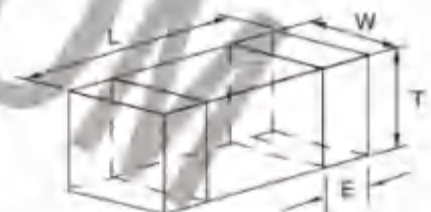
Part Number	L(mH) ±10%	Q Min	L/Q Tset Freq (MHz)	SRF (MHz) Min	DCR (Ω) Max	DCR (mΩ) Max
AIML0805C-1N5S	1.5 ± 0.3	8	100	6000	0.10	600
AIML0805C-1N8S	1.8 ± 0.3	8	100	6000	0.10	600
AIML0805C-2N2S	2.2 ± 0.3	8	100	6000	0.10	600
AIML0805C-2N7S	2.7 ± 0.3	8	100	6000	0.10	600
AIML0805C-3N3S	3.3 ± 0.3	8	100	6000	0.13	600
AIML0805C-3N9S	3.9 ± 0.3	8	100	5400	0.15	600
AIML0805C-4N7S	4.7 ± 0.3	8	100	4500	0.20	400
AIML0805C-5N6S	5.6 ± 0.3	8	100	4000	0.23	400
AIML0805C-6N8J	6.8 ± 5%	8	100	3650	0.25	400
AIML0805C-8N0J	8.2 ± 5%	8	100	3000	0.28	400
AIML0805C-10NJ	10 ± 5%	8	100	2500	0.30	300
AIML0805C-12NJ	12 ± 5%	8	100	2150	0.35	300
AIML0805C-15NJ	15 ± 5%	8	100	2000	0.40	300
AIML0805C-18NJ	18 ± 5%	8	100	1750	0.45	300
AIML0805C-22NJ	22 ± 5%	8	100	1700	0.50	300
AIML0805C-27NJ	27 ± 5%	8	100	1550	0.55	300
AIML0805C-33NJ	33 ± 5%	8	100	1350	0.60	300
AIML0805C-39NJ	39 ± 5%	8	100	1300	0.70	300
AIML0805C-47NJ	47 ± 5%	8	100	1200	0.80	300
AIML0805C-56NJ	56 ± 5%	8	100	1150	0.80	300
AIML0805C-68NJ	68 ± 5%	8	100	1000	0.85	300
AIML0805C-82NJ	82 ± 5%	8	100	850	0.90	300
AIML0805C-R10J	100 ± 5%	8	100	600	1.00	300
AIML0805C-R12J	120 ± 5%	8	50	500	1.20	300
AIML0805C-R15K	150 ± 10%	8	50	500	1.50	300
AIML0805C-R18K	180 ± 10%	8	50	400	1.80	300
AIML0805C-R22K	220 ± 10%	8	50	350	1.80	300
AIML0805C-R27K	270 ± 10%	8	50	350	1.80	300
AIML0805C-R33K	330 ± 10%	8	50	300	2.00	300
AIML0805C-R39K	390 ± 10%	8	50	250	2.00	300
AIML0805C-R47K	470 ± 10%	8	50	200	2.00	300

TECHNICAL INFORMATION:

- Testing (Equivalents acceptable)
Inductance & Q-HP4195A+HP41951
DCR-VOAC-7412
SRF-HP8720C
- Solderability: 90% of the terminal
Electrode shall be covered
Preheat @ 200°C ± 5°C for 160 seconds
Solder: H63AA Eutectic Solder
Flux: Rosin, Dip for 5 seconds ± 1 second
- Thermal Shock: Inductance shall be
Within ± 5% of initial value
and Q shall be within ± 30% of initial value
When temperature is -40°C and +85°C for 30
Min. for each 100 cycles
- Operating Temperature: -25°C to +85°C
- Storage Temperature: -40°C to +85°C

PHYSICAL CHARACTERISTICS:

Dimensions (mm)



L	2.0 ± 0.2
W	1.2 ± 0.2
T	0.9 ± 0.2
E	0.5 ± 0.3

SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

AISC0402 SERIES

FEATURES:

- Multilayer monolithic construction yields high reliability
- High self-resonant frequency
- Excellent solderability and heat resistance for either flow or reflow soldering

COMMON APPLICATIONS:

- High frequency circuits of telecommunication.
- Bluetooth
- Mobile phones such as GSM, CDMA, PDC, etc.
- Other High frequency circuits in general



ELECTRICAL CHARACTERISTICS:

Part Number	L(nH)	Tolerance (%)	Q Min	SRF (GHz) Min	DCR (Ω) Max	IDC (mA) Max
AISC0402-1N0□	1.0 @ 250MHz	10	13 @ 250MHz	10.0	0.045	1360
AISC0402-2N2□	2.2 @ 250MHz	10.5	18 @ 250MHz	6.00	0.07	960
AISC0402-2N7□	2.7 @ 250MHz	10.5	15 @ 250MHz	6.00	0.12	640
AISC0402-3N3□	3.3 @ 250MHz	10.5	20 @ 250MHz	6.00	0.060	840
AISC0402-3N9□	3.9 @ 250MHz	10.5	20 @ 250MHz	6.00	0.066	840
AISC0402-4N7□	4.7 @ 250MHz	10.5,2	18 @ 250MHz	4.50	0.2	640
AISC0402-5N6□	5.6 @ 250MHz	10.5,2	20 @ 250MHz	4.80	0.083	760
AISC0402-6N8□	6.8 @ 250MHz	10.5,2	23 @ 250MHz	4.80	0.26	680
AISC0402-8N2□	8.2 @ 250MHz	10.5,2	25 @ 250MHz	4.40	0.1	680
AISC0402-10N□	10 @ 250MHz	10.5,2	25 @ 250MHz	3.90	0.2	480
AISC0402-12N□	12 @ 250MHz	10.5,2	25 @ 250MHz	3.80	0.12	640
AISC0402-15N□	15 @ 250MHz	10.5,2	25 @ 250MHz	3.23	0.3	560
AISC0402-18N□	18 @ 250MHz	10.5,2	25 @ 250MHz	3.10	0.23	420
AISC0402-22N□	22 @ 250MHz	10.5,2	25 @ 250MHz	2.80	0.3	400
AISC0402-27N□	27 @ 250MHz	10.5,2	24 @ 250MHz	2.48	0.52	280
AISC0402-33N□	33 @ 250MHz	10.5,2	24 @ 250MHz	2.35	0.65	250
AISC0402-39N□	39 @ 250MHz	10.5,2	25 @ 250MHz	2.10	0.75	200
AISC0402-47N□	47 @ 250MHz	10.5,2	25 @ 250MHz	2.10	0.83	150
AISC0402-56N□	56 @ 250MHz	10.5,2	25 @ 250MHz	1.76	0.97	100
AISC0402-68N□	68 @ 250MHz	10.5,2	25 @ 250MHz	1.62	1.12	100
AISC0402-82N□	82 @ 250MHz	10.5,2	25 @ 250MHz	1.26	1.7	50
AISC0402-R10□	100 @ 250MHz	13.5,2	25 @ 250MHz	1.16	2	30
AISC0402-R12□	120 @ 250MHz	10.5,2	25 @ 250MHz	1.10	2.2	30

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

TECHNICAL INFORMATION:

• Testing: (Equivalent acceptable)

Inductance: HP4191A

Q: HP4291A

SRF: HP8753B

DCR: measured @ 25 °C

• Operating Temperature

Ceramic: -55 °C to +125 °C

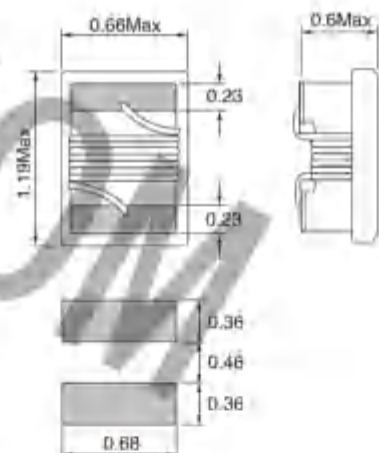
• Pad metalization: Tungsten-nickel with gold flash

• Solder methods: Wave, Reflow, Vapor Phase

• Solderability: Max 260 °C for 10 seconds

PHYSICAL CHARACTERISTICS:

Dimensions:(mm)



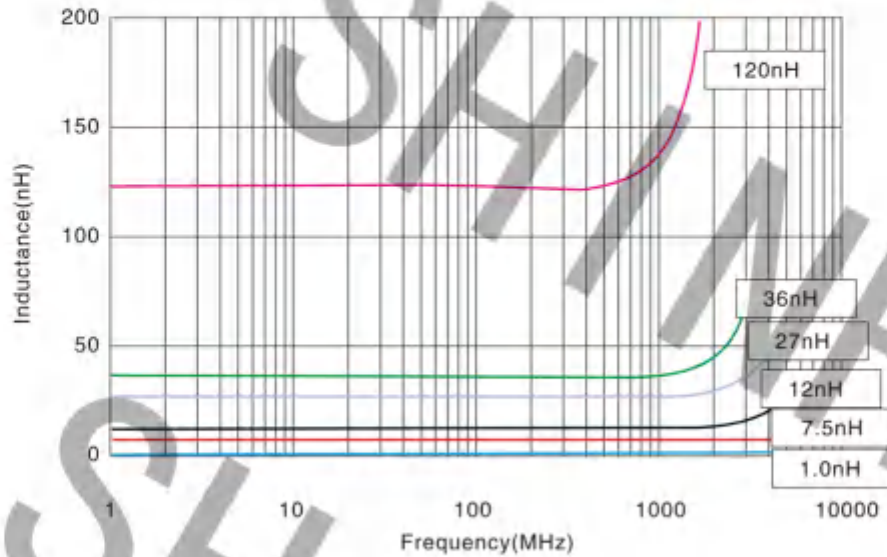
PCB LAYOUT

Winding

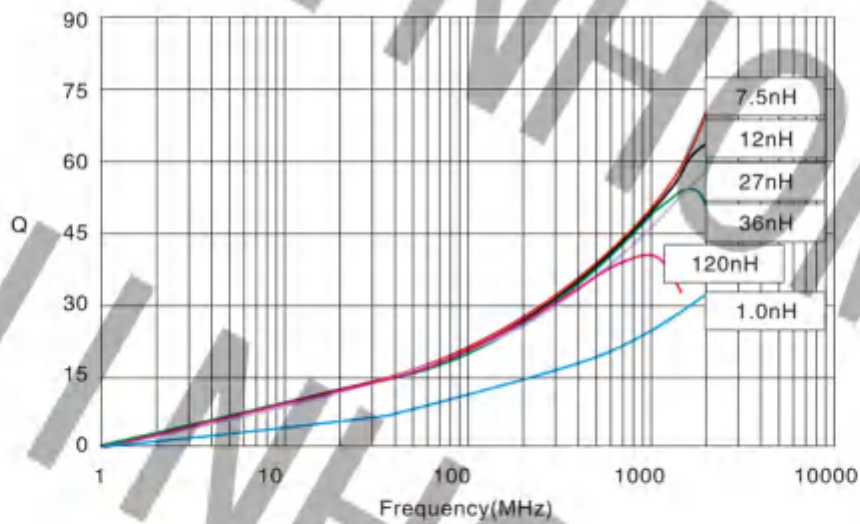


SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

Inductance Vs Frequency



Q Vs Frequency



SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

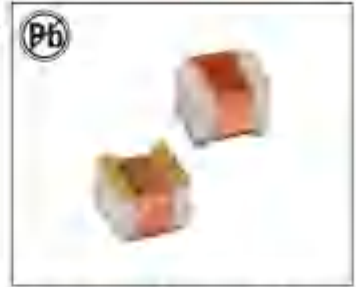
AISC0603 SERIES

FEATURES:

- Multilayer monolithic construction yields high reliability
- High self-resonant frequency
- Excellent solderability and heat resistance for either flow or reflow soldering

COMMON APPLICATIONS:

- High frequency circuits of telecommunication
- Bluetooth
- Mobile phones such as GSM, CDMA, PDC, etc.
- Other High frequency circuits in general



ELECTRICAL CHARACTERISTICS:

Part Number	L(nH)	Tolerance (%)	Q Min	SRF (GHz) Min	DCR (Ω) Max	IDC (mA) Max
AISC0603-1N6□	1.6@250MHz	10	19@250MHz	12.5	0.040	700
AISC0603-1N8□	1.8@250MHz	10	16@250MHz	12.5	0.045	700
AISC0603-2N2□	2.2@250MHz	10	12@250MHz	10	0.090	700
AISC0603-3N3□	3.3@250MHz	10	20@250MHz	5.9	0.075	700
AISC0603-3N6□	3.6@250MHz	10.5	22@250MHz	5.9	0.075	700
AISC0603-3N9□	3.9@250MHz	10.5	22@250MHz	5.9	0.080	700
AISC0603-4N3□	4.3@250MHz	10.5	22@250MHz	5.9	0.075	700
AISC0603-4N7□	4.7@250MHz	10.5	20@250MHz	5.8	0.110	700
AISC0603-5N1□	5.1@250MHz	10.5	20@250MHz	5.7	0.120	700
AISC0603-5N6□	5.6@250MHz	10	18@250MHz	5.7	0.200	700
AISC0603-6N8□	6.8@250MHz	10.5	27@250MHz	5.6	0.110	700
AISC0603-7N5□	7.5@250MHz	10.5	23@250MHz	5.6	0.110	700
AISC0603-8N2□	8.2@250MHz	10	28@250MHz	4.7	0.120	700
AISC0603-9N5□	9.5@250MHz	10	26@250MHz	5.3	0.150	700
AISC0603-10N□	10@250MHz	10	31@250MHz	4.8	0.130	700
AISC0603-12N□	12@250MHz	10	35@250MHz	4	0.170	700
AISC0603-15N□	15@250MHz	10	30@250MHz	4	0.150	700
AISC0603-18N□	18@250MHz	10	35@250MHz	3.1	0.170	700
AISC0603-22N□	22@250MHz	10	38@250MHz	3	0.190	700
AISC0603-27N□	27@250MHz	10	36@250MHz	2.8	0.220	600
AISC0603-33N□	33@250MHz	10	36@250MHz	2.3	0.220	600
AISC0603-36N□	36@250MHz	10	36@250MHz	2.08	0.250	600
AISC0603-39N□	39@250MHz	10	40@250MHz	2.2	0.250	600
AISC0603-43N□	43@250MHz	10	36@250MHz	2	0.280	600
AISC0603-47N□	47@250MHz	10	35@250MHz	2	0.280	600
AISC0603-56N□	56@200MHz	10	36@200MHz	1.9	0.280	600
AISC0603-68N□	68@200MHz	10	36@200MHz	1.7	0.340	600
AISC0603-75N□	75@150MHz	10	30@150MHz	1.4	0.600	400
AISC0603-82N□	82@150MHz	10	31@150MHz	1.7	0.580	400
AISC0603-R10□	100@150MHz	10	30@150MHz	1.4	0.630	400
AISC0603-R12□	120@150MHz	10	32@150MHz	1.3	0.750	300
AISC0603-R15□	150@150MHz	10	28@150MHz	0.99	0.800	280
AISC0603-R18□	180@100MHz	10	25@100MHz	0.99	1.450	250
AISC0603-R20□	200@100MHz	10	25@100MHz	0.9	1.550	200
AISC0603-R22□	220@100MHz	10	25@100MHz	0.9	2.100	200
AISC0603-R27□	270@100MHz	10	24@100MHz	0.9	2.300	170
AISC0603-R33□	330@100MHz	10	25@100MHz	0.9	3.030	100
AISC0603-R39□	390@100MHz	10	25@100MHz	0.8	4.250	100

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

TECHNICAL INFORMATION:

• Testing: (Equivalent acceptable)
Inductance: HP4191A

Q: HP4291A

SRF: HP8753B

DCR: measured @ 25°C

• Operating Temperature
Ceramic: -55°C to +125°C

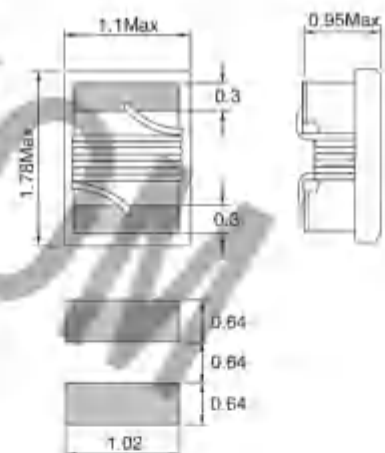
• Pad metalization: Tungsten-nickel
with gold flash

• Solder methods: Wave, Reflow,
Vapor Phase

• Solderability: Max 260°C for 10 seconds

PHYSICAL CHARACTERISTICS:

Dimensions:(mm)



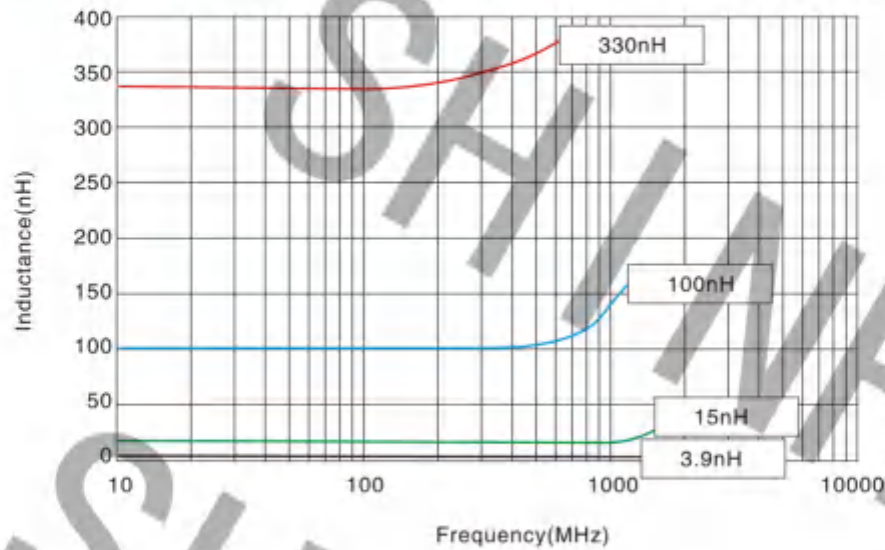
PCB LAYOUT

Winding

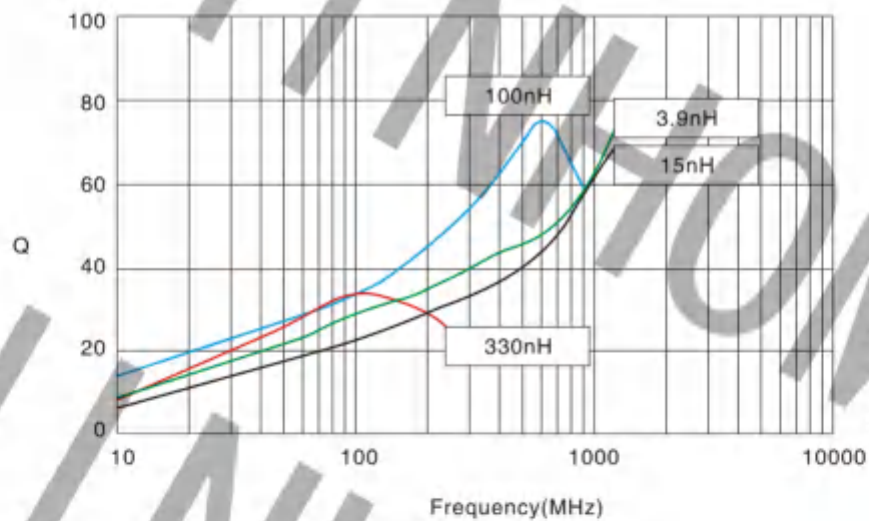


SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

Inductance vs Frequency



Q vs Frequency



SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

AISC0805 SERIES

FEATURES:

- Multilayer monolithic construction yields high reliability
- High self-resonant frequency
- Excellent solderability and heat resistance for either flow or reflow soldering

COMMON APPLICATIONS:

- High frequency circuits of telecommunication
- Bluetooth
- Mobile phones such as GSM, CDMA, PDC, etc.
- Other High frequency circuits in general



ELECTRICAL CHARACTERISTICS:

Part Number	L(nH)	Tolerance (%)	Q Min	SRF (GHz) Min	DCR (Ω) Max	IDC (mA) Max
AISC0805-2N2□	2.2@250MHz	10	50@1500MHz	8.50	0.030	800
AISC0805-2N7□	2.7@250MHz	10.5	50@1500MHz	8.00	0.045	800
AISC0805-3N3□	3.3@250MHz	10	35@1500MHz	7.90	0.090	600
AISC0805-4N7□	4.7@250MHz	10	40@1000MHz	6.00	0.150	600
AISC0805-5N6□	5.6@250MHz	10.5	50@1000MHz	5.50	0.085	600
AISC0805-6N8□	6.8@250MHz	10.5	50@1000MHz	5.50	0.110	600
AISC0805-8N2□	8.2@250MHz	10.5	35@1000MHz	4.70	0.200	600
AISC0805-10N□	10@250MHz	10.5,2	30@1000MHz	4.20	0.150	600
AISC0805-12N□	12@250MHz	10.5,2	30@500MHz	4.00	0.150	600
AISC0805-15N□	15@250MHz	10.5,2	45@500MHz	3.40	0.170	600
AISC0805-18N□	18@250MHz	10.5,2	55@500MHz	3.30	0.200	600
AISC0805-22N□	22@250MHz	10.5,2	55@500MHz	2.60	0.220	500
AISC0805-27N□	27@250MHz	10.5,2	55@500MHz	2.50	0.250	500
AISC0805-33N□	33@250MHz	10.5,2	55@500MHz	2.05	0.270	500
AISC0805-39N□	39@250MHz	10.5,2	55@500MHz	2.00	0.290	500
AISC0805-47N□	47@200MHz	10.5,2	55@500MHz	1.95	0.310	500
AISC0805-56N□	56@200MHz	10.5,2	55@500MHz	1.55	0.340	500
AISC0805-68N□	68@200MHz	10.5,2	55@500MHz	1.45	0.380	400
AISC0805-75N□	75@200MHz	10.5,2	55@500MHz	1.40	0.400	400
AISC0805-82N□	82@150MHz	10.5,2	55@500MHz	1.30	0.420	400
AISC0805-R10□	100@150MHz	10.5,2	50@500MHz	1.20	0.460	400
AISC0805-R12□	120@150MHz	10.5,2	45@250MHz	1.10	0.510	400
AISC0805-R15□	150@100MHz	10.5,2	45@250MHz	0.92	0.560	400
AISC0805-R18□	180@100MHz	10.5,2	45@250MHz	0.87	0.640	400
AISC0805-R22□	220@100MHz	10.5,2	40@250MHz	0.85	1.050	400
AISC0805-R27□	270@100MHz	10.5,2	40@250MHz	0.65	1.100	350
AISC0805-R33□	330@100MHz	10.5	40@250MHz	0.60	1.400	310
AISC0805-R39□	390@100MHz	10.5	40@250MHz	0.56	1.500	290
AISC0805-R47□	470@50MHz	10.5	33@100MHz	0.48	2.100	250
AISC0805-R56□	560@25MHz	10.5	23@50MHz	0.34	1.600	230
AISC0805-R68□	680@25MHz	10.5	23@50MHz	0.30	2.100	190
AISC0805-R75□	750@25MHz	10.5	23@50MHz	0.28	2.120	180
AISC0805-R82□	820@25MHz	10.5	23@50MHz	0.25	2.140	180
AISC0805-R91□	910@25MHz	10.5	20@50MHz	0.22	2.280	160
AISC0805-1R0□	1000@25MHz	10.5	20@50MHz	0.20	2.400	170
AISC0805-1R2□	1200@7.9MHz	10.5	18@50MHz	0.18	2.550	170
AISC0805-1R5□	1500@7.9MHz	10.5	18@50MHz	0.17	2.000	160
AISC0805-1R8□	1800@7.9MHz	10.5	18@50MHz	0.14	3.800	150
AISC0805-2R2□	2200@7.3MHz	10.5	18@7.3MHz	0.05	4.200	150

TECHNICAL INFORMATION:

• Testing: (Equivalent acceptable)

Inductance: HP4191A

Q: HP4291A

SRF: HP8753B

QDC: measured @ 25°C

• Operating Temperature
Ceramic: -55°C to +125°C

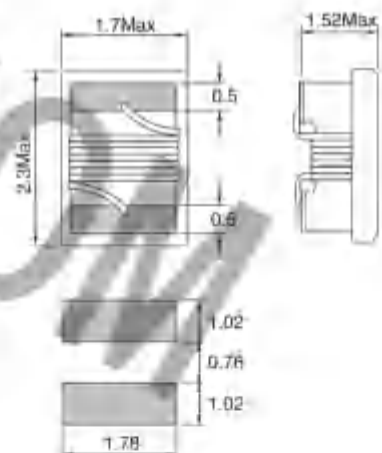
• Pad metalization: Tungsten-nickel
with gold flash

• Solder methods: Waves, Reflow,
Vapor Phase

• Solderability: Max 260°C for 10 seconds

PHYSICAL CHARACTERISTICS:

Dimensions:(mm)



PCB LAYOUT

Winding

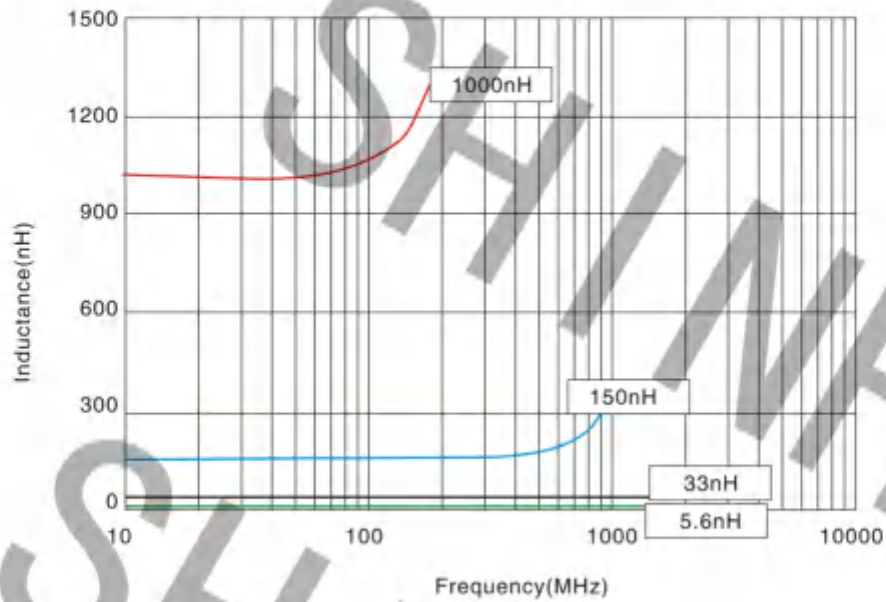


□ G= ±2%, J= ±5%, K= ±10%,

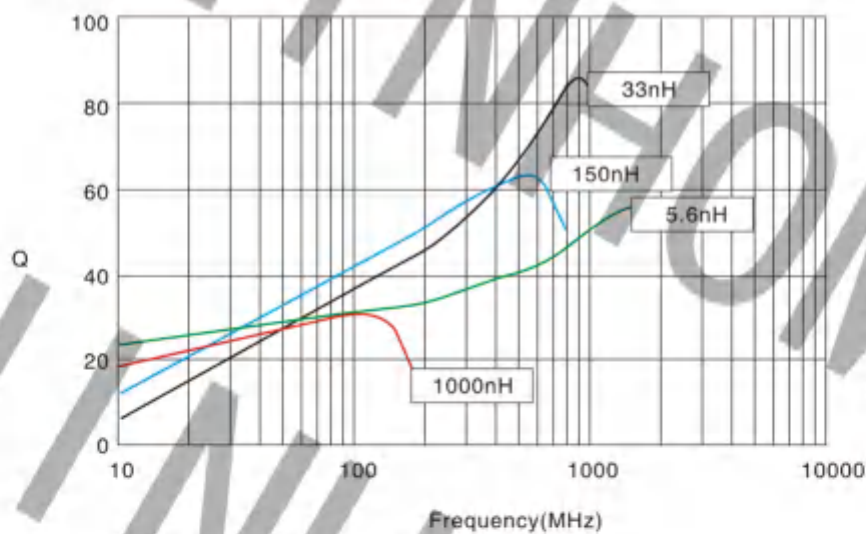
M= ±20%, N= ±30%

SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

Inductance vs Frequency



Q vs Frequency



SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

AISC1008 SERIES

FEATURES:

- Multilayer monolithic construction yields high reliability
- High self-resonant frequency
- Excellent solderability and heat resistance for either flow or reflow soldering

COMMON APPLICATIONS:

- High frequency circuits of telecommunication
- Bluetooth
- Mobile phones such as GSM, CDMA, PDC, etc.
- Other High frequency circuits in general



ELECTRICAL CHARACTERISTICS:

Part Number	Ln(H)	Tolerance (%)	Q Min	SRF (GHz) Min	DCR (Ω) Max	IDC (mA) Max
AISC1008-3N9□	3.9@50MHz	±0.5	50@1500MHz	6.00	0.035	1000
AISC1008-4N7□	4.7@50MHz	±0.5	50@1500MHz	6.00	0.045	1000
AISC1008-5N6□	5.6@50MHz	±0.5	30@1000MHz	6.00	0.180	1000
AISC1008-8N2□	8.2@50MHz	±0.5	50@1000MHz	5.00	0.050	1000
AISC1008-10N□	10@50MHz	±0.5,2	50@500MHz	4.10	0.080	1000
AISC1008-12N□	12@50MHz	±0.5,2	50@300MHz	3.30	0.090	1000
AISC1008-15N□	15@50MHz	±0.5,2	45@500MHz	2.50	0.150	1000
AISC1008-18N□	18@50MHz	±0.5,2	50@350MHz	2.50	0.110	1000
AISC1008-22N□	22@50MHz	±0.5,2	55@350MHz	2.40	0.120	1000
AISC1008-27N□	27@50MHz	±0.5,2	55@350MHz	1.60	0.130	1000
AISC1008-33N□	33@50MHz	±0.5,2	60@350MHz	1.60	0.140	1000
AISC1008-39N□	39@50MHz	±0.5,2	80@350MHz	1.70	0.150	1000
AISC1008-47N□	47@50MHz	±0.5,2	65@350MHz	1.50	0.160	1000
AISC1008-56N□	56@50MHz	±0.5,2	95@300MHz	1.10	0.180	1000
AISC1008-68N□	68@50MHz	±0.5,2	85@350MHz	1.00	0.200	1000
AISC1008-82N□	82@50MHz	±0.5,2	80@350MHz	1.00	0.220	1000
AISC1008-R10□	100@25MHz	±0.5,2	60@350MHz	1.00	0.560	650
AISC1008-R12□	120@25MHz	±0.5,2	60@350MHz	0.95	0.630	600
AISC1008-R15□	150@25MHz	±0.5	45@100MHz	0.60	0.700	580
AISC1008-R18□	180@25MHz	±0.5	45@100MHz	0.54	0.770	520
AISC1008-R22□	220@25MHz	±0.5	45@100MHz	0.62	0.840	500
AISC1008-R27□	270@25MHz	±0.5	45@100MHz	0.60	0.910	500
AISC1008-R33□	330@25MHz	±0.5	45@100MHz	0.50	1.050	450
AISC1008-R39□	390@25MHz	±0.5	45@100MHz	0.48	1.120	470
AISC1008-R47□	470@25MHz	±0.5	45@100MHz	0.45	1.190	470
AISC1008-R56□	560@25MHz	±0.5	45@100MHz	0.415	1.330	400
AISC1008-R68□	680@25MHz	±0.5	45@100MHz	0.375	1.470	400
AISC1008-R82□	820@25MHz	±0.5	45@100MHz	0.25	1.610	400
AISC1008-1R0□	1000@7.9MHz	±0.5	35@50MHz	0.21	1.750	370
AISC1008-1R2□	1200@7.9MHz	±0.5	35@50MHz	0.20	2.000	310
AISC1008-1R5□	1500@7.9MHz	±0.5	28@50MHz	0.18	2.300	230
AISC1008-1R8□	1800@7.9MHz	±0.5	28@50MHz	0.16	2.600	200
AISC1008-2R2□	2200@7.9MHz	±0.5	20@50MHz	0.09	2.900	220
AISC1008-2R7□	2700@7.9MHz	±0.5	22@25MHz	0.08	3.200	200
AISC1008-3R3□	3300@7.9MHz	±0.5	22@25MHz	0.07	3.400	200
AISC1008-3R8□	3900@7.9MHz	±0.5	16@25MHz	0.06	3.600	200
AISC1008-4R7□	4700@7.9MHz	±0.5	13@25MHz	0.06	4.000	200
AISC1008-5R6□	5600@7.9MHz	±0.5	18@7.9MHz	0.06	7.600	240
AISC1008-6R8□	6800@7.9MHz	±0.5	18@7.9MHz	0.05	8.200	200
AISC1008-8R2□	8200@7.9MHz	±0.5	18@7.9MHz	0.04	8.200	170
AISC1008-100□	10000@7.9MHz	±0.5	20@7.9MHz	0.04	8.100	180

TECHNICAL INFORMATION:

• Testing: (Equivalent acceptable)

Inductance: HP4191A

Q: HP4291A

SRF: HP8753B

DCR: measured @ 25°C

• Operating Temperature
Ceramic: -55°C to +125°C

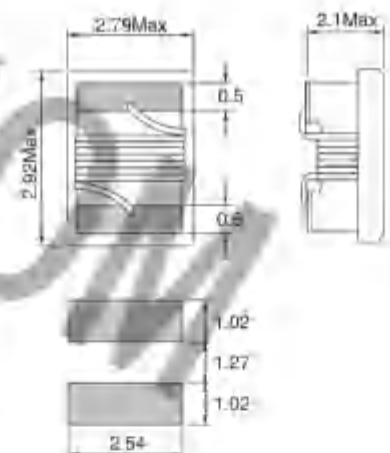
• Pad metalization: Tungsten-nickel
with gold flash

• Solder methods: Waves, Reflow,
Vapor Phase

• Solderability: Max 260°C for 10 seconds

PHYSICAL CHARACTERISTICS:

Dimensions:(mm)



PCB LAYOUT

Winding

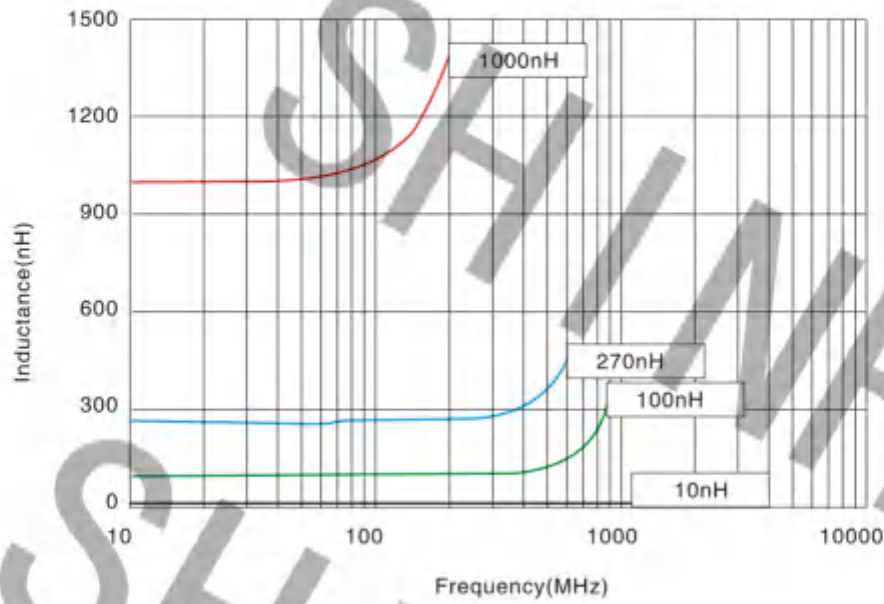


□ G= ±2%, J= ±5%, K= ±10%,

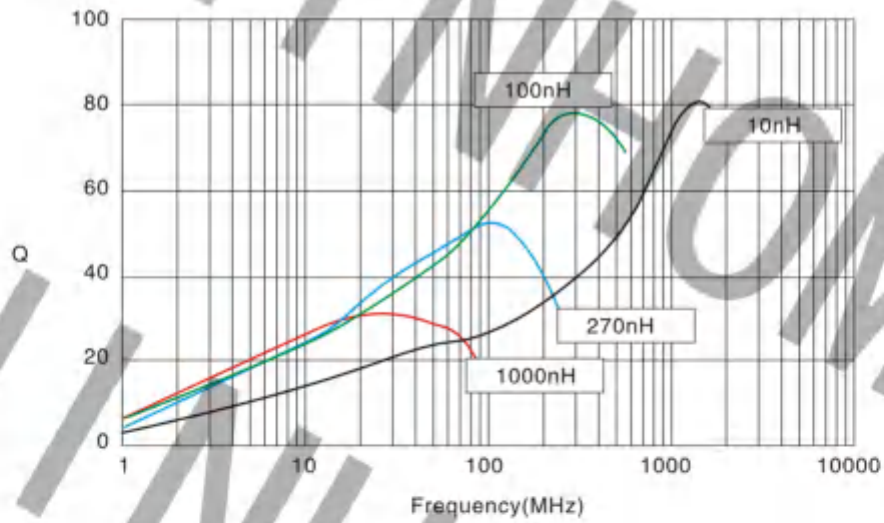
M= ±20%, N= ±30%

SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

Inductance vs Frequency



Q vs Frequency



SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

AISC1210 SERIES

FEATURES:

- Multilayer monolithic construction yields high reliability
- High self-resonant frequency
- Excellent solderability and heat resistance for either flow or reflow soldering

COMMON APPLICATIONS:

- High frequency circuits of telecommunication
- Bluetooth
- Mobile phones such as GSM, CDMA, PDC, etc.
- Other High frequency circuits in general



ELECTRICAL CHARACTERISTICS:

Part Number	L(nH)	Tolerance (%)	Q Min	SRF (GHz) Min	DCR (Ω) Max	IDC (mA) Max
AISC1210-3N9□	3.9@100MHz	±10	30@300MHz	6.00	0.050	1000
AISC1210-4N7□	4.7@100MHz	±0.5	30@300MHz	5.60	0.035	1000
AISC1210-8N2□	8.2@100MHz	±10	30@300MHz	5.50	0.070	1000
AISC1210-10N□	10@100MHz	±0.5,2	40@300MHz	4.00	0.090	1000
AISC1210-12N□	12@100MHz	±0.5	40@300MHz	3.20	0.080	1000
AISC1210-15N□	15@100MHz	±0.5	40@300MHz	3.20	0.100	1000
AISC1210-18N□	18@100MHz	±0.5,2	50@300MHz	2.80	0.100	1000
AISC1210-22N□	22@100MHz	±0.5	50@300MHz	2.00	0.100	1000
AISC1210-27N□	27@100MHz	±0.5,2	50@300MHz	1.80	0.110	1000
AISC1210-33N□	33@100MHz	±0.5,2	50@300MHz	1.60	0.110	1000
AISC1210-39N□	39@100MHz	±0.5,2	55@300MHz	1.60	0.120	1000
AISC1210-47N□	47@100MHz	±0.5,2	55@300MHz	1.70	0.130	1000
AISC1210-56N□	56@100MHz	±0.5,2	55@300MHz	1.45	0.140	1000
AISC1210-68N□	68@100MHz	±0.5,2	55@300MHz	1.20	0.160	900
AISC1210-82N□	82@100MHz	±0.5,2	56@300MHz	1.00	0.200	900
AISC1210-R10□	100@100MHz	±0.5,2	55@300MHz	0.80	0.210	850
AISC1210-R12□	120@100MHz	±0.5,2	60@300MHz	0.80	0.210	800
AISC1210-R15□	150@100MHz	±0.5,2	60@300MHz	0.78	0.250	700
AISC1210-R18□	180@50MHz	±0.5,2	60@300MHz	0.76	0.300	700
AISC1210-R22□	220@50MHz	±0.5,2	60@300MHz	0.65	0.320	670
AISC1210-R27□	270@50MHz	±0.5,2	55@300MHz	0.62	0.340	630
AISC1210-R33□	330@50MHz	±0.5,2	45@150MHz	0.60	0.380	590
AISC1210-R39□	390@50MHz	±0.5,2	45@150MHz	0.51	0.580	530
AISC1210-R47□	470@50MHz	±0.5,2	45@150MHz	0.50	0.800	490
AISC1210-R56□	560@35MHz	±0.5	45@150MHz	0.42	1.100	460
AISC1210-R68□	680@35MHz	±0.5,2	45@150MHz	0.40	1.200	430
AISC1210-R75□	750@25MHz	±0.5,2	45@150MHz	0.58	1.70	400
AISC1210-R82□	820@35MHz	±0.5,2	45@150MHz	0.37	1.820	400
AISC1210-1R0□	1000@30MHz	±0.5,2	45@150MHz	0.34	1.850	350
AISC1210-1R2□	1200@35MHz	±0.5	35@150MHz	0.22	1.870	300
AISC1210-1R5□	1500@7.9MHz	±0.5	30@50MHz	0.76	1.950	310
AISC1210-1R8□	1800@7.9MHz	±0.5	30@50MHz	0.16	2.250	310
AISC1210-2R2□	2200@7.9MHz	±0.5	30@50MHz	0.11	2.410	310
AISC1210-2R7□	2700@7.9MHz	±0.5	25@25MHz	0.10	2.650	300
AISC1210-3R3□	3300@7.9MHz	±0.5	20@25MHz	0.09	3.730	300
AISC1210-3R9□	3900@7.9MHz	±0.5	20@25MHz	0.08	5.500	290
AISC1210-4R7□	4700@7.9MHz	±0.5	16@25MHz	0.06	4.600	280
AISC1210-5R6□	5600@7.9MHz	±0.5	20@7.9MHz	0.06	5.000	250
AISC1210-6R8□	6800@7.9MHz	±0.5	20@7.9MHz	0.06	6.000	230
AISC1210-8R2□	8200@7.9MHz	±0.5	20@7.9MHz	0.05	6.600	170
AISC1210-100□	10000@7.9MHz	±0.5	22@7.9MHz	0.02	6.800	200

TECHNICAL INFORMATION:

Testing: (Equivalent acceptable)
Inductance: HP4191A

Q: HP4291A

SRF: HP8753B

DCR: measured @ 25°C

Operating Temperature
Ceramic: -55°C to +125°C

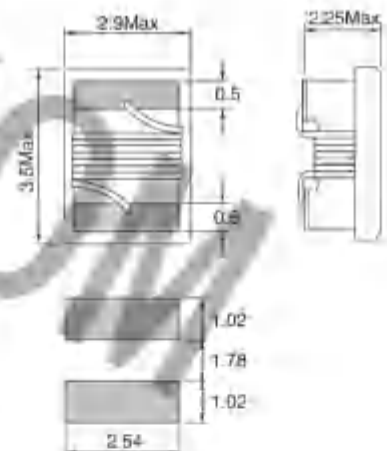
Pad metalization: Tungsten-nickel
with gold flash

Solder methods: Waves, Reflow,
Vapor Phase

Solderability: Max 260°C for 10 seconds

PHYSICAL CHARACTERISTICS:

Dimensions:(mm)



PCB LAYOUT

Winding

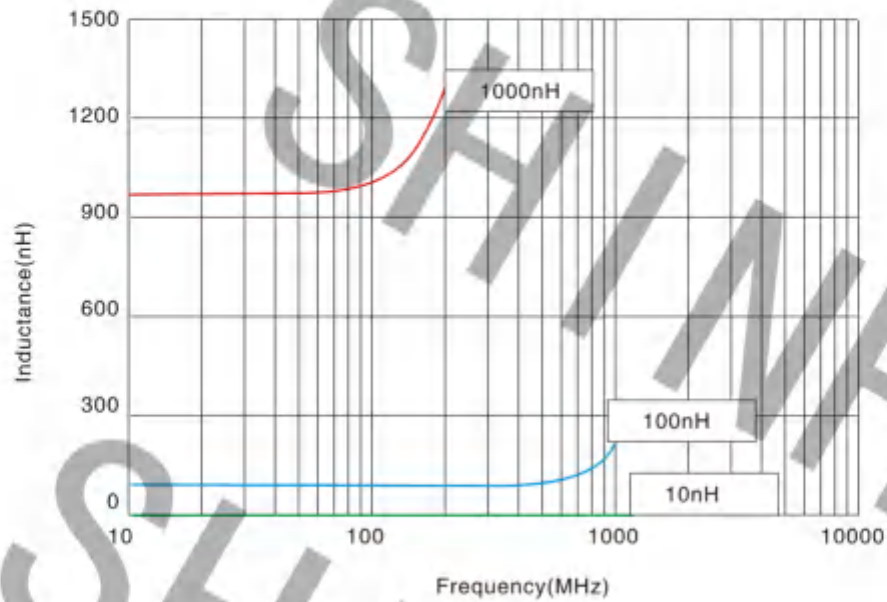


□ G= ±2%, J= ±5%, K= ±10%,

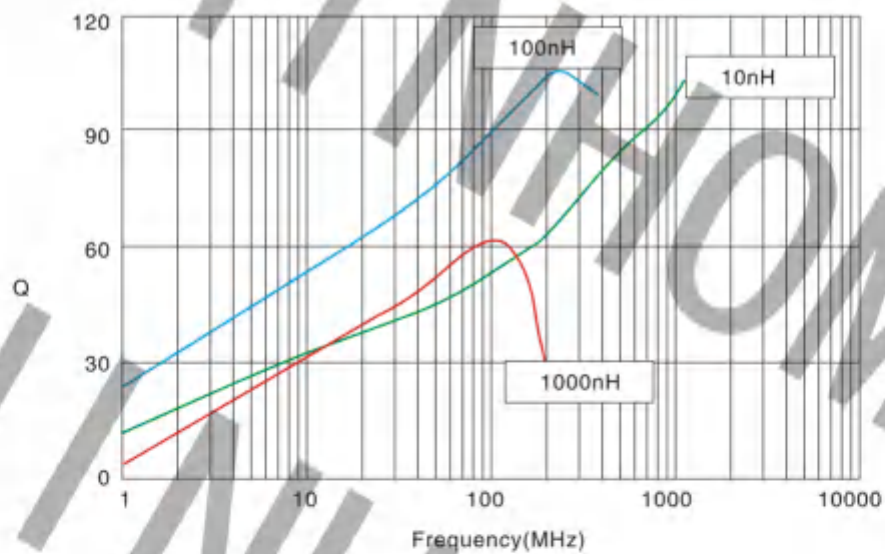
M= ±20%, N= ±30%

SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

Inductance vs Frequency



Q vs Frequency



SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

AISC0402C SERIES

FEATURES:

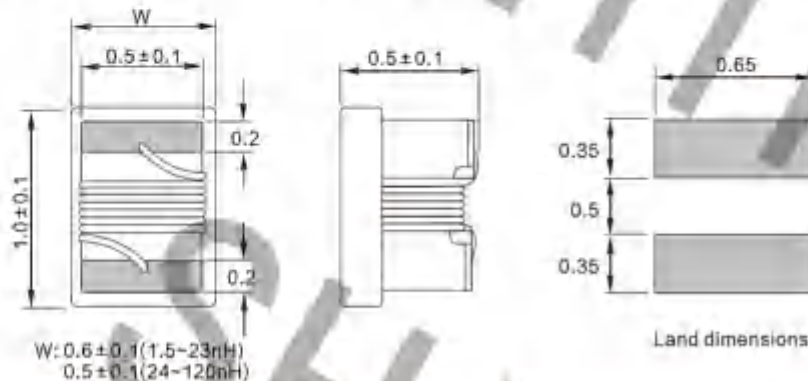
- Multilayer monolithic construction yields high reliability
- High self-resonant frequency
- Excellent solderability and heat resistance for either flow or reflow soldering

COMMON APPLICATIONS:

- High frequency circuits of telecommunication.
- Bluetooth
- Mobile phones such as GSM, CDMA, PDC, etc.
- Other High frequency circuits in general



PHYSICAL CHARACTERISTICS:



WINDING:

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance		Q Min	DCR (Ω)Max	SRF (GHz)Min	Rated current (mA)
	Nominal value (nH)	Tolerance				
AISC0402C1N5B	1.5	B: ± 0.1 nH	10	0.03	18.0	1000
AISC0402C1N5C	1.5	C: ± 0.2 nH	10	0.03	18.0	1000
AISC0402C1N5D	1.5	D: ± 0.5 nH	10	0.03	18.0	1000
AISC0402C1N6C	1.6	C: ± 0.2 nH	10	0.07	17.0	750
AISC0402C1N6D	1.6	D: ± 0.5 nH	10	0.07	17.0	750
AISC0402C1N7C	1.7	C: ± 0.2 nH	10	0.10	17.0	640
AISC0402C1N7D	1.7	D: ± 0.5 nH	10	0.10	17.0	640
AISC0402C1N8C	1.8	C: ± 0.2 nH	10	0.16	16.0	460
AISC0402C1N8D	1.8	D: ± 0.5 nH	10	0.16	16.0	460
AISC0402C2N4B	2.4	B: ± 0.1 nH	20	0.05	15.0	850
AISC0402C2N4C	2.4	C: ± 0.2 nH	20	0.05	15.0	850
AISC0402C2N4D	2.4	D: ± 0.5 nH	20	0.05	15.0	850
AISC0402C2N5B	2.5	B: ± 0.1 nH	20	0.05	15.0	850
AISC0402C2N5C	2.5	C: ± 0.2 nH	20	0.05	15.0	850
AISC0402C2N5D	2.5	D: ± 0.5 nH	20	0.05	15.0	850
AISC0402C2N6B	2.6	B: ± 0.1 nH	20	0.05	15.0	850
AISC0402C2N6C	2.6	C: ± 0.2 nH	20	0.05	15.0	850
AISC0402C2N6D	2.6	D: ± 0.5 nH	20	0.05	15.0	850
AISC0402C2N7B	2.7	B: ± 0.1 nH	20	0.05	15.0	850
AISC0402C2N7C	2.7	C: ± 0.2 nH	20	0.05	15.0	850
AISC0402C2N7D	2.7	D: ± 0.5 nH	20	0.05	15.0	850
AISC0402C2N8B	2.8	B: ± 0.1 nH	20	0.05	15.0	850
AISC0402C2N8C	2.8	C: ± 0.2 nH	20	0.05	15.0	850

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance		Q Min	DCR (Ω)Max	SRF (GHz)Min	Rated current (mA)
	Nominal value (nH)	Tolerance				
AISC0402C2N8D	2.8	D: ± 0.5 nH	20	0.05	15.0	850
AISC0402C2N9B	2.9	B: ± 0.1 nH	20	0.07	15.0	750
AISC0402C2N9C	2.9	C: ± 0.2 nH	20	0.07	15.0	750
AISC0402C2N9D	2.9	D: ± 0.5 nH	20	0.07	15.0	750
AISC0402C3N0B	3.0	B: ± 0.1 nH	20	0.07	15.0	750
AISC0402C3N0C	3.0	C: ± 0.2 nH	20	0.07	15.0	750
AISC0402C3N0D	3.0	D: ± 0.5 nH	20	0.07	15.0	750
AISC0402C3N1B	3.1	B: ± 0.1 nH	20	0.13	14.0	570
AISC0402C3N1C	3.1	C: ± 0.2 nH	20	0.13	14.0	570
AISC0402C3N1D	3.1	D: ± 0.5 nH	20	0.13	14.0	570
AISC0402C3N2B	3.2	B: ± 0.1 nH	15	0.17	14.0	500
AISC0402C3N2C	3.2	C: ± 0.2 nH	15	0.17	14.0	500
AISC0402C3N2D	3.2	D: ± 0.5 nH	15	0.17	14.0	500
AISC0402C3N9B	3.9	B: ± 0.1 nH	25	0.07	10.0	750
AISC0402C3N9C	3.9	C: ± 0.2 nH	25	0.07	10.0	750
AISC0402C3N9D	3.9	D: ± 0.5 nH	25	0.07	10.0	750
AISC0402C4N1B	4.1	B: ± 0.1 nH	25	0.07	10.0	750
AISC0402C4N1C	4.1	C: ± 0.2 nH	25	0.07	10.0	750
AISC0402C4N1D	4.1	D: ± 0.5 nH	25	0.07	10.0	750
AISC0402C4N3B	4.3	B: ± 0.1 nH	25	0.07	10.0	750
AISC0402C4N3C	4.3	C: ± 0.2 nH	25	0.07	10.0	750
AISC0402C4N3D	4.3	D: ± 0.5 nH	25	0.07	10.0	750
AISC0402C4N4B	4.4	B: ± 0.1 nH	25	0.07	8.0	750
AISC0402C4N4C	4.4	C: ± 0.2 nH	25	0.07	8.0	750
AISC0402C4N4D	4.4	D: ± 0.5 nH	25	0.07	8.0	750
AISC0402C4N5B	4.5	B: ± 0.1 nH	25	0.07	8.0	750
AISC0402C4N5C	4.5	C: ± 0.2 nH	25	0.07	8.0	750
AISC0402C4N5D	4.5	D: ± 0.5 nH	25	0.07	8.0	750
AISC0402C4N6B	4.6	B: ± 0.1 nH	25	0.07	8.0	750
AISC0402C4N6C	4.6	C: ± 0.2 nH	25	0.07	8.0	750
AISC0402C4N6D	4.6	D: ± 0.5 nH	25	0.07	8.0	750
AISC0402C4N7B	4.7	B: ± 0.1 nH	25	0.07	8.0	750
AISC0402C4N7C	4.7	C: ± 0.2 nH	25	0.07	8.0	750
AISC0402C4N7D	4.7	D: ± 0.5 nH	25	0.07	8.0	750
AISC0402C4N8B	4.8	B: ± 0.1 nH	25	0.07	8.0	750
AISC0402C4N8C	4.8	C: ± 0.2 nH	25	0.07	8.0	750
AISC0402C4N8D	4.8	D: ± 0.5 nH	25	0.07	8.0	750
AISC0402C4N9B	4.9	B: ± 0.1 nH	25	0.12	8.0	600
AISC0402C4N9C	4.9	C: ± 0.2 nH	25	0.12	8.0	600
AISC0402C4N9D	4.9	D: ± 0.5 nH	25	0.12	8.0	600
AISC0402C5N0B	5.0	B: ± 0.1 nH	25	0.12	8.0	600

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance		Q Min	DCR (Ω)Max	SRF (GHz)Min	Rated current (mA)
	Nominal value (nH)	Tolerance				
AISC0402C5N0C	5.0	C: ± 0.2 nH	25	0.12	8.0	600
AISC0402C5N0D	5.0	D: ± 0.5 nH	25	0.12	8.0	600
AISC0402C5N1B	5.1	B: ± 0.1 nH	25	0.12	8.0	600
AISC0402C5N1C	5.1	C: ± 0.2 nH	25	0.12	8.0	600
AISC0402C5N1D	5.1	D: ± 0.5 nH	25	0.12	8.0	600
AISC0402C5N8B	5.8	B: ± 0.1 nH	25	0.09	8.0	700
AISC0402C5N8C	5.8	C: ± 0.2 nH	25	0.09	8.0	700
AISC0402C5N8D	5.8	D: ± 0.5 nH	25	0.09	8.0	700
AISC0402C6N2B	6.2	B: ± 0.1 nH	25	0.09	8.0	700
AISC0402C6N2C	6.2	C: ± 0.2 nH	25	0.09	8.0	700
AISC0402C6N2D	6.2	D: ± 0.5 nH	25	0.09	8.0	700
AISC0402C6N3B	6.3	B: ± 0.1 nH	25	0.09	8.0	700
AISC0402C6N3C	6.3	C: ± 0.2 nH	25	0.09	8.0	700
AISC0402C6N3D	6.3	D: ± 0.5 nH	25	0.09	8.0	700
AISC0402C6N4B	6.4	B: ± 0.1 nH	25	0.09	8.0	700
AISC0402C6N4C	6.4	C: ± 0.2 nH	25	0.09	8.0	700
AISC0402C6N4D	6.4	D: ± 0.5 nH	25	0.09	8.0	700
AISC0402C6N5B	6.5	B: ± 0.1 nH	25	0.09	8.0	700
AISC0402C6N5C	6.5	C: ± 0.2 nH	25	0.09	8.0	700
AISC0402C6N5D	6.5	D: ± 0.5 nH	25	0.09	8.0	700
AISC0402C6N6B	6.6	B: ± 0.1 nH	25	0.09	8.0	700
AISC0402C6N6C	6.6	C: ± 0.2 nH	25	0.09	8.0	700
AISC0402C6N6D	6.6	D: ± 0.5 nH	25	0.09	8.0	700
AISC0402C6N7B	6.7	B: ± 0.1 nH	25	0.09	8.0	700
AISC0402C6N7C	6.7	C: ± 0.2 nH	25	0.09	8.0	700
AISC0402C6N7D	6.7	D: ± 0.5 nH	25	0.09	8.0	700
AISC0402C6N8G	6.8	G: $\pm 2\%$	25	0.09	8.0	700
AISC0402C6N8H	6.8	H: $\pm 3\%$	25	0.09	8.0	700
AISC0402C6N8J	6.8	J: $\pm 5\%$	25	0.09	8.0	700
AISC0402C6N9G	6.9	G: $\pm 2\%$	25	0.13	6.0	570
AISC0402C6N9H	6.9	H: $\pm 3\%$	25	0.13	6.0	570
AISC0402C6N9J	6.9	J: $\pm 5\%$	25	0.13	6.0	570
AISC0402C7N0G	7.0	G: $\pm 2\%$	25	0.13	6.0	570
AISC0402C7N0H	7.0	H: $\pm 3\%$	25	0.13	6.0	570
AISC0402C7N0J	7.0	J: $\pm 5\%$	25	0.13	6.0	570
AISC0402C7N1G	7.1	G: $\pm 2\%$	25	0.13	6.0	570
AISC0402C7N1H	7.1	H: $\pm 3\%$	25	0.13	6.0	570
AISC0402C7N1J	7.1	J: $\pm 5\%$	25	0.13	6.0	570
AISC0402C7N2G	7.2	G: $\pm 2\%$	25	0.13	6.0	570
AISC0402C7N2H	7.2	H: $\pm 3\%$	25	0.13	6.0	570
AISC0402C7N2J	7.2	J: $\pm 5\%$	25	0.13	6.0	570

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance		Q Min	DCR (Ω)Max	SRF (GHz)Min	Rated current (mA)
	Nominal value (nH)	Tolerance				
AISC0402C7N3G	7.3	G: $\pm 2\%$	25	0.13	6.0	570
AISC0402C7N3H	7.3	H: $\pm 3\%$	25	0.13	6.0	570
AISC0402C7N3J	7.3	J: $\pm 5\%$	25	0.13	6.0	570
AISC0402C7N5G	7.5	G: $\pm 2\%$	25	0.13	6.0	570
AISC0402C7N5H	7.5	H: $\pm 3\%$	25	0.13	6.0	570
AISC0402C7N5J	7.5	J: $\pm 5\%$	25	0.13	6.0	570
AISC0402C8N2G	8.2	G: $\pm 2\%$	25	0.14	5.5	540
AISC0402C8N2H	8.2	H: $\pm 3\%$	25	0.14	5.5	540
AISC0402C8N2J	8.2	J: $\pm 5\%$	25	0.14	5.5	540
AISC0402C8N6G	8.6	G: $\pm 2\%$	25	0.14	5.5	540
AISC0402C8N6H	8.6	H: $\pm 3\%$	25	0.14	5.5	540
AISC0402C8N6J	8.6	J: $\pm 5\%$	25	0.14	5.5	540
AISC0402C8N7G	8.7	G: $\pm 2\%$	25	0.14	5.5	540
AISC0402C8N7H	8.7	H: $\pm 3\%$	25	0.14	5.5	540
AISC0402C8N7J	8.7	J: $\pm 5\%$	25	0.14	5.5	540
AISC0402C8N8G	8.8	G: $\pm 2\%$	25	0.14	5.5	540
AISC0402C8N8H	8.8	H: $\pm 3\%$	25	0.14	5.5	540
AISC0402C8N8J	8.8	J: $\pm 5\%$	25	0.14	5.5	540
AISC0402C8N9G	8.9	G: $\pm 2\%$	25	0.14	5.5	540
AISC0402C8N9H	8.9	H: $\pm 3\%$	25	0.14	5.5	540
AISC0402C8N9J	8.9	J: $\pm 5\%$	25	0.14	5.5	540
AISC0402C9N0G	9.0	G: $\pm 2\%$	25	0.14	5.5	540
AISC0402C9N0H	9.0	H: $\pm 3\%$	25	0.14	5.5	540
AISC0402C9N0J	9.0	J: $\pm 5\%$	25	0.14	5.5	540
AISC0402C9N1G	9.1	G: $\pm 2\%$	25	0.14	5.5	540
AISC0402C9N1H	9.1	H: $\pm 3\%$	25	0.14	5.5	540
AISC0402C9N1J	9.1	J: $\pm 5\%$	25	0.14	5.5	540
AISC0402C9N2G	9.2	G: $\pm 2\%$	25	0.14	5.5	540
AISC0402C9N2H	9.2	H: $\pm 3\%$	25	0.14	5.5	540
AISC0402C9N2J	9.2	J: $\pm 5\%$	25	0.14	5.5	540
AISC0402C9N3G	9.3	G: $\pm 2\%$	25	0.14	5.5	540
AISC0402C9N3H	9.3	H: $\pm 3\%$	25	0.14	5.5	540
AISC0402C9N3J	9.3	J: $\pm 5\%$	25	0.14	5.5	540
AISC0402C9N4G	9.4	G: $\pm 2\%$	25	0.14	5.5	540
AISC0402C9N4H	9.4	H: $\pm 3\%$	25	0.14	5.5	540
AISC0402C9N4J	9.4	J: $\pm 5\%$	25	0.14	5.5	540
AISC0402C9N5G	9.5	G: $\pm 2\%$	25	0.14	5.5	540
AISC0402C9N5H	9.5	H: $\pm 3\%$	25	0.14	5.5	540
AISC0402C9N5J	9.5	J: $\pm 5\%$	25	0.14	5.5	540
AISC0402C9N6G	9.6	G: $\pm 2\%$	25	0.14	5.5	540
AISC0402C9N6H	9.6	H: $\pm 3\%$	25	0.14	5.5	540

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance		Q Min	DCR (Ω)Max	SRF (GHz)Min	Rated current (mA)
	Nominal value (nH)	Tolerance				
AISC0402C9N6J	9.6	J: $\pm 5\%$	25	0.14	5.5	540
AISC0402C9N7G	9.7	G: $\pm 2\%$	25	0.14	5.5	540
AISC0402C9N7H	9.7	H: $\pm 3\%$	25	0.14	5.5	540
AISC0402C9N7J	9.7	J: $\pm 5\%$	25	0.14	5.5	540
AISC0402C9N8G	9.8	G: $\pm 2\%$	25	0.14	5.5	540
AISC0402C9N8H	9.8	H: $\pm 3\%$	25	0.14	5.5	540
AISC0402C9N8J	9.8	J: $\pm 5\%$	25	0.14	5.5	540
AISC0402C9N9G	9.9	G: $\pm 2\%$	25	0.14	5.5	540
AISC0402C9N9H	9.9	H: $\pm 3\%$	25	0.14	5.5	540
AISC0402C9N9J	9.9	J: $\pm 5\%$	25	0.14	5.5	540
AISC0402C10NG	10	G: $\pm 2\%$	25	0.17	5.5	500
AISC0402C10NH	10	H: $\pm 3\%$	25	0.17	5.5	500
AISC0402C10NJ	10	J: $\pm 5\%$	25	0.17	5.5	500
AISC0402C11NG	11	G: $\pm 2\%$	30	0.14	5.5	500
AISC0402C11NH	11	H: $\pm 3\%$	30	0.14	5.5	500
AISC0402C11NJ	11	J: $\pm 5\%$	30	0.14	5.5	500
AISC0402C12NG	12	G: $\pm 2\%$	30	0.14	5.5	500
AISC0402C12NH	12	H: $\pm 3\%$	30	0.14	5.5	500
AISC0402C12NJ	12	J: $\pm 5\%$	30	0.14	5.5	500
AISC0402C13NG	13	G: $\pm 2\%$	25	0.21	5.0	430
AISC0402C13NH	13	H: $\pm 3\%$	25	0.21	5.0	430
AISC0402C13NJ	13	J: $\pm 5\%$	25	0.21	5.0	430
AISC0402C15NG	15	G: $\pm 2\%$	30	0.16	5.0	460
AISC0402C15NH	15	H: $\pm 3\%$	30	0.16	5.0	460
AISC0402C15NJ	15	J: $\pm 5\%$	30	0.16	5.0	460
AISC0402C16NG	16	G: $\pm 2\%$	25	0.24	4.5	370
AISC0402C16NH	16	H: $\pm 3\%$	25	0.24	4.5	370
AISC0402C16NJ	16	J: $\pm 5\%$	25	0.24	4.5	370
AISC0402C18NG	18	G: $\pm 2\%$	25	0.27	4.5	370
AISC0402C18NH	18	H: $\pm 3\%$	25	0.27	4.5	370
AISC0402C18NJ	18	J: $\pm 5\%$	25	0.27	4.5	370
AISC0402C19NG	19	G: $\pm 2\%$	25	0.27	4.5	370
AISC0402C19NH	19	H: $\pm 3\%$	25	0.27	4.5	370
AISC0402C19NJ	19	J: $\pm 5\%$	25	0.27	4.5	370
AISC0402C20NG	20	G: $\pm 2\%$	25	0.27	4.0	370
AISC0402C20NH	20	H: $\pm 3\%$	25	0.27	4.0	370
AISC0402C20NJ	20	J: $\pm 5\%$	25	0.27	4.0	370
AISC0402C22NG	22	G: $\pm 2\%$	25	0.30	4.0	310
AISC0402C22NH	22	H: $\pm 3\%$	25	0.30	4.0	310
AISC0402C22NJ	22	J: $\pm 5\%$	25	0.30	4.0	310
AISC0402C23NG	23	G: $\pm 2\%$	25	0.30	3.8	310

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance		Q Min	DCR (Ω)Max	SRF (GHz)Min	Rated current (mA)
	Nominal value (nH)	Tolerance				
AISC0402C23NH	23	H: $\pm 3\%$	25	0.30	3.8	310
AISC0402C23NJ	23	J: $\pm 5\%$	25	0.30	3.8	310
AISC0402C24NG	24	G: $\pm 2\%$	25	0.52	3.5	280
AISC0402C24NH	24	H: $\pm 3\%$	25	0.52	3.5	280
AISC0402C24NJ	24	J: $\pm 5\%$	25	0.52	3.5	280
AISC0402C27NG	27	G: $\pm 2\%$	25	0.52	3.5	280
AISC0402C27NH	27	H: $\pm 3\%$	25	0.52	3.5	280
AISC0402C27NJ	27	J: $\pm 5\%$	25	0.52	3.5	280
AISC0402C30NG	30	G: $\pm 2\%$	25	0.58	3.3	270
AISC0402C30NH	30	H: $\pm 3\%$	25	0.58	3.3	270
AISC0402C30NJ	30	J: $\pm 5\%$	25	0.58	3.3	270
AISC0402C33NG	33	G: $\pm 2\%$	25	0.63	3.2	260
AISC0402C33NH	33	H: $\pm 3\%$	25	0.63	3.2	260
AISC0402C33NJ	33	J: $\pm 5\%$	25	0.63	3.2	260
AISC0402C36NG	36	G: $\pm 2\%$	25	0.63	3.1	260
AISC0402C36NH	36	H: $\pm 3\%$	25	0.63	3.1	260
AISC0402C36NJ	36	J: $\pm 5\%$	25	0.63	3.1	260
AISC0402C39NG	39	G: $\pm 2\%$	25	0.70	3.0	250
AISC0402C39NH	39	H: $\pm 3\%$	25	0.70	3.0	250
AISC0402C39NJ	39	J: $\pm 5\%$	25	0.70	3.0	250
AISC0402C40NG	40	G: $\pm 2\%$	25	0.70	3.0	250
AISC0402C40NH	40	H: $\pm 3\%$	25	0.70	3.0	250
AISC0402C40NJ	40	J: $\pm 5\%$	25	0.70	3.0	250
AISC0402C43NG	43	G: $\pm 2\%$	25	0.70	3.0	250
AISC0402C43NH	43	H: $\pm 3\%$	25	0.70	3.0	250
AISC0402C43NJ	43	J: $\pm 5\%$	25	0.70	3.0	250
AISC0402C47NG	47	G: $\pm 2\%$	25	1.08	2.9	210
AISC0402C47NH	47	H: $\pm 3\%$	25	1.08	2.9	210
AISC0402C47NJ	47	J: $\pm 5\%$	25	1.08	2.9	210
AISC0402C51NG	51	G: $\pm 2\%$	25	1.08	2.85	210
AISC0402C51NH	51	H: $\pm 3\%$	25	1.08	2.85	210
AISC0402C51NJ	51	J: $\pm 5\%$	25	1.08	2.85	210
AISC0402C56NG	56	G: $\pm 2\%$	25	1.17	2.8	200
AISC0402C56NH	56	H: $\pm 3\%$	25	1.17	2.8	200
AISC0402C56NJ	56	J: $\pm 5\%$	25	1.17	2.8	200
AISC0402C62NG	62	G: $\pm 2\%$	20	1.82	2.6	145
AISC0402C62NH	62	H: $\pm 3\%$	20	1.82	2.6	145
AISC0402C62NJ	62	J: $\pm 5\%$	20	1.82	2.6	145
AISC0402C68NG	68	G: $\pm 2\%$	20	1.96	2.5	140
AISC0402C68NJ	68	J: $\pm 5\%$	20	1.96	2.5	140
AISC0402C72NG	72	G: $\pm 2\%$	20	2.10	2.5	135

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance		Q Min	DCR (Ω)Max	SRF (GHz)Min	Rated current (mA)
	Nominal value (nH)	Tolerance				
AISC0402C72NJ	72	J: $\pm 5\%$	20	2.10	2.5	135
AISC0402C75NG	75	G: $\pm 2\%$	20	2.10	2.4	135
AISC0402C75NJ	75	J: $\pm 5\%$	20	2.10	2.4	135
AISC0402C82NG	82	G: $\pm 2\%$	20	2.24	2.3	130
AISC0402C82NJ	82	J: $\pm 5\%$	20	2.24	2.3	130
AISC0402C91NG	91	G: $\pm 2\%$	20	2.38	2.1	125
AISC0402C91NJ	91	J: $\pm 5\%$	20	2.38	2.1	125
AISC0402CR10J	100	J: $\pm 5\%$	20	2.52	1.5	120
AISC0402CR12J	120	J: $\pm 5\%$	20	2.66	1.0	110

- Testing: HP4991A(Equivalent acceptable)
- Measuring fixture: Keysight 16197A
- Test frequency: Inductance: @100MHz
Q: @250MHz(1.5nH-43nH)
@200MHz(47nH-68nH)
@150MHz(72nH-120nH)
- Operating Temperature: -55°C to 125°C
- Storage Temperature: -55°C to 125°C
- Solderability: Max 260°C for 10 seconds

SURFACE-MOUNT WIRE WOUND FERRITE CHIP INDUCTORS

AISC0603F SERIES

FEATURES:

- Miniature size, suitable for SMT
- Low DC resistance, high current and high inductance and high reliability

APPLICATIONS:

- Low DC resistance, high current and high inductance and high reliability

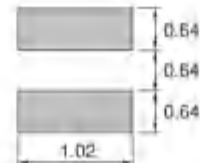
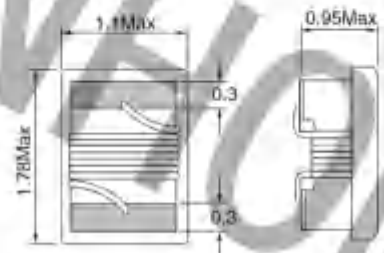


ELECTRICAL CHARACTERISTICS:

PHYSICAL CHARACTERISTICS:

Part Number	L(nH)	Tolerance (%)	Q Min	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AISC0603F-R10□	100@7.9MHz	10.5	12@7.9MHz	1150	0.12	1000
AISC0603F-R12□	120@7.9MHz	10.5	12@7.9MHz	1100	0.16	900
AISC0603F-R15□	150@7.9MHz	10.5	12@7.9MHz	1050	0.15	700
AISC0603F-R18□	180@7.9MHz	10.5	12@7.9MHz	950	0.15	600
AISC0603F-R22□	220@7.9MHz	10.5	12@7.9MHz	900	0.16	500
AISC0603F-R27□	270@7.9MHz	10.5	12@7.9MHz	775	0.30	420
AISC0603F-R33□	330@7.9MHz	10.5	12@7.9MHz	725	0.32	400
AISC0603F-R39□	390@7.9MHz	10.5	12@7.9MHz	620	0.51	380
AISC0603F-R47□	470@7.9MHz	10.5	12@7.9MHz	540	0.62	350
AISC0603F-R56□	560@7.9MHz	10.5	12@7.9MHz	500	0.65	330
AISC0603F-R68□	680@7.9MHz	10.5	12@7.9MHz	500	1.00	1000
AISC0603F-R82□	820@7.9MHz	10.5	12@7.9MHz	500	1.30	1000
AISC0603F-1R0□	1000@7.9MH	10.5	12@7.9MHz	400	1.50	1000
AISC0603F-1R2□	1200@7.9MH	10.5	12@7.9MHz	380	1.70	320
AISC0603F-1R5□	1500@7.9MH	10.5	12@7.9MHz	300	1.90	310
AISC0603F-1R8□	1800@7.9MH	10.5	12@7.9MHz	180	2.20	300
AISC0603F-2R2□	2200@7.9MH	10.5	12@7.9MHz	180	2.30	280
AISC0603F-2R7□	2700@7.9MH	10.5	12@7.9MHz	150	2.60	250
AISC0603F-3R3□	3300@7.9MH	10.5	12@7.9MHz	150	2.90	230
AISC0603F-3R9□	3900@7.9MH	10.5	12@7.9MHz	120	3.20	210
AISC0603F-4R7□	4700@7.9MH	10.5	12@7.9MHz	100	4.00	200

Dimensions (mm)



PCB LAYOUT

Winding



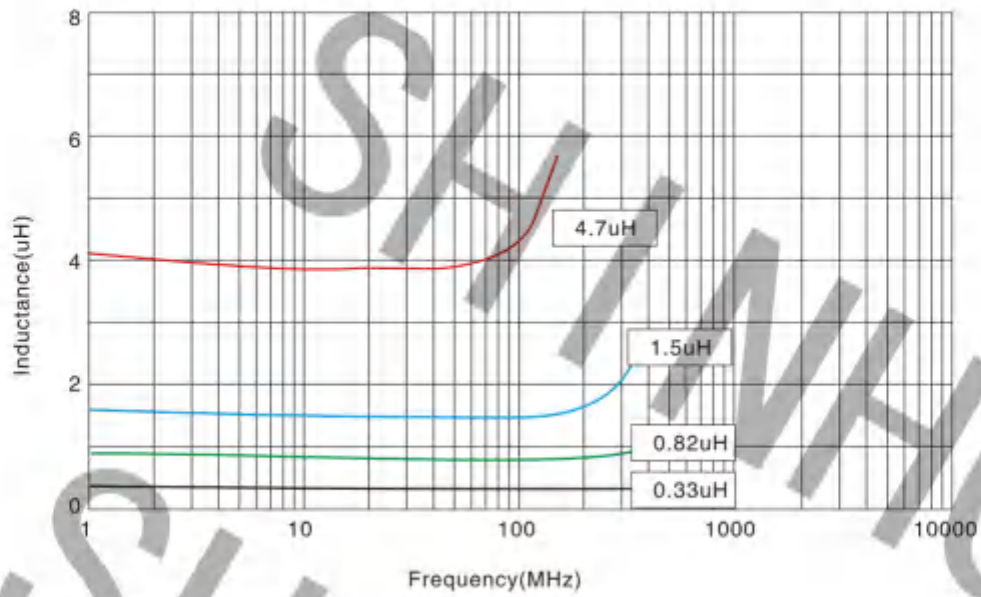
□ G=±2%, J=±5%, K=±10%, M=±20%, N=±30%

NOTES:

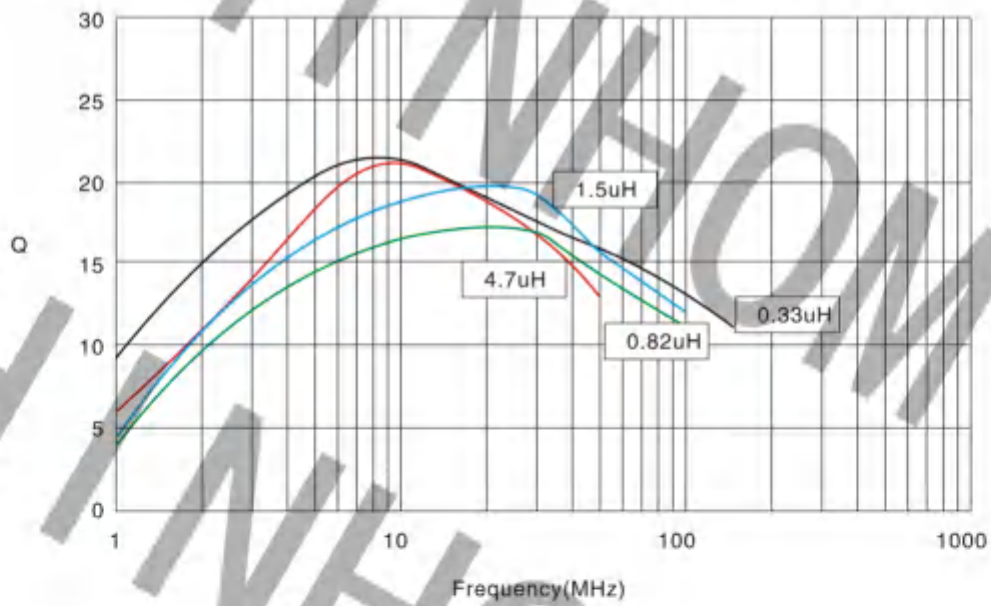
- Testing: (Equivalent acceptable) @ 25°C
- Operating Temperature: -40°C to +125°C
- Solder methods: Wave, Reflow, Vapor Phase
- Solderability: Max 260°C for 10 seconds

SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

Inductance vs Frequency



Q vs Frequency



SURFACE-MOUNT WIRE WOUND FERRITE CHIP INDUCTORS

AISC0805F SERIES

FEATURES:

- Miniature size, suitable for SMT
- Low DC resistance, high current and high inductance and high reliability

APPLICATIONS:

- Low DC resistance, high current and high inductance and high reliability

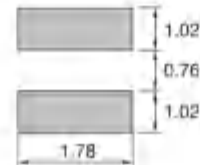
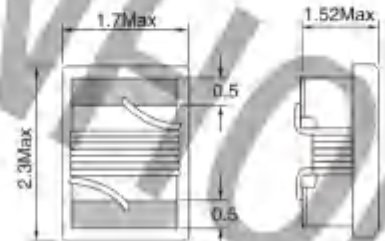


ELECTRICAL CHARACTERISTICS:

PHYSICAL CHARACTERISTICS:

Part Number	L(μH)	Tolerance (%)	Q Min	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AISC0805F-1R0□	1.0@7.96MHz	±10.5	12@7.96MHz	360	1.00	430
AISC0805F-1R2□	1.2@7.96MHz	±10.5	12@7.96MHz	350	1.15	410
AISC0805F-1R5□	1.5@7.96MHz	±10.5	12@7.96MHz	300	1.20	400
AISC0805F-1R8□	1.8@7.96MHz	±10.5	12@7.96MHz	200	1.35	380
AISC0805F-2R2□	2.2@7.96MHz	±10.5	12@7.96MHz	170	1.50	350
AISC0805F-2R7□	2.7@7.96MHz	±10.5	12@7.96MHz	100	1.70	320
AISC0805F-3R3□	3.3@7.96MHz	±10.5	12@7.96MHz	90	1.80	300
AISC0805F-3R9□	3.9@7.96MHz	±10.5	12@7.96MHz	90	1.95	280
AISC0805F-4R7□	4.7@7.96MHz	±10.5	12@7.96MHz	85	2.05	250
AISC0805F-5R6□	5.6@7.96MHz	±10.5	12@7.96MHz	70	2.30	240
AISC0805F-6R8□	6.8@7.96MHz	±10.5	12@7.96MHz	55	2.60	220
AISC0805F-7R5□	7.5@7.96MHz	±10.5	12@7.96MHz	55	2.80	210
AISC0805F-8R2□	8.2@7.96MHz	±10.5	12@7.96MHz	50	3.00	180
AISC0805F-100□	10@2.52MHz	±10.5	10@2.52MHz	30	3.20	150
AISC0805F-120□	12@2.52MHz	±10.5	10@2.52MHz	17	3.50	110
AISC0805F-150□	15@2.52MHz	±10.5	10@2.52MHz	15	4.20	100
AISC0805F-180□	18@2.52MHz	±10.5	10@2.52MHz	15	4.50	85
AISC0805F-220□	22@2.52MHz	±10.5	10@2.52MHz	14	6.00	50

Dimensions:(mm)



PCB LAYOUT

Winding



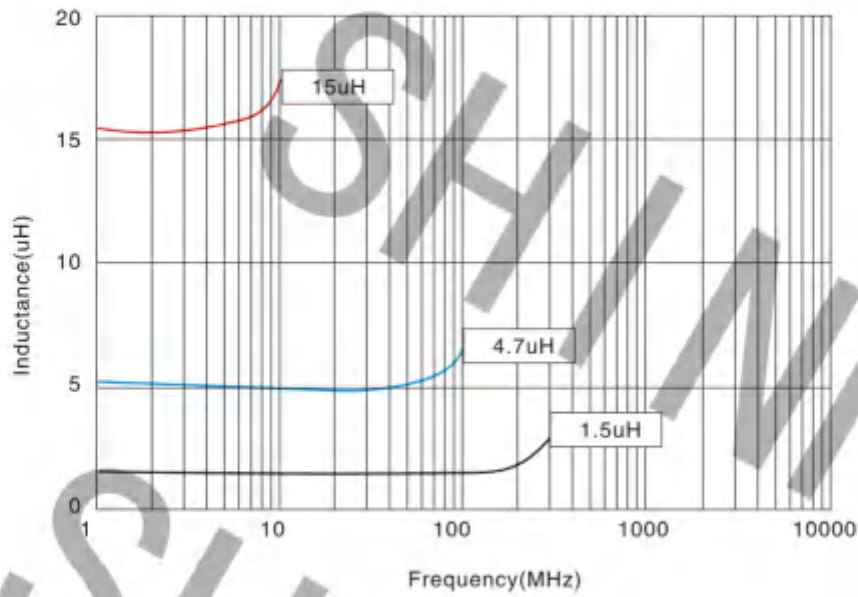
□ G=±2%, J=±5%, K=±10%, M=±20%, N=±30%

NOTES:

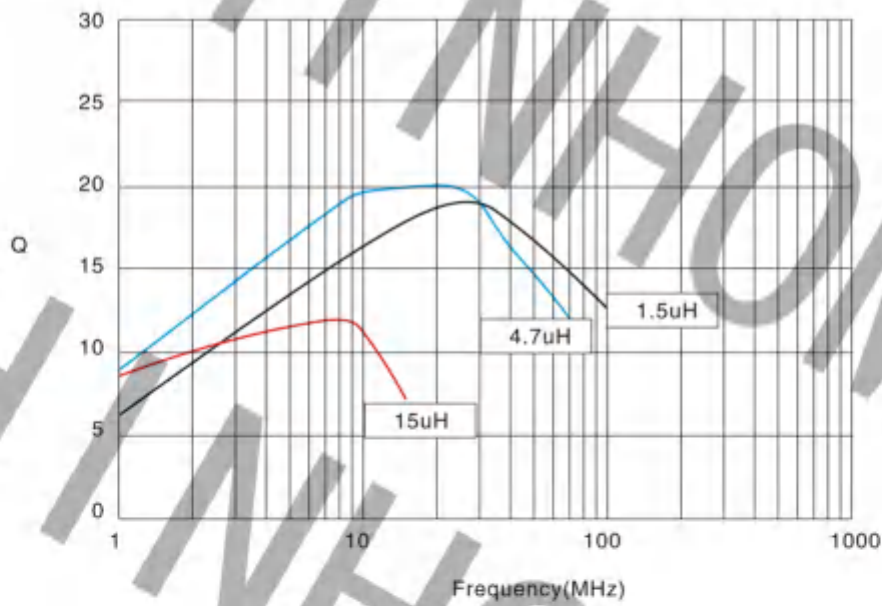
- Testing: (Equivalent acceptable)@ 25℃ Inductance,Q: HP4191A, SRF:HP8753B
- Operating Temperature: -40℃ to +125℃
- Solder methods: Wave, Reflow,Vapor Phase
- Solderability: Max 260℃ for 10 seconds

SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

Inductance vs Frequency



Q vs Frequency



SURFACE-MOUNT WIRE WOUND FERRITE CHIP INDUCTORS

AISC1008F SERIES

FEATURES:

- Miniature size, suitable for SMT
- Low DC resistance, high current and high inductance and high reliability

APPLICATIONS:

- Low DC resistance, high current and high inductance and high reliability



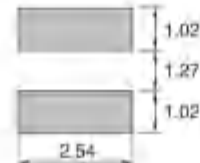
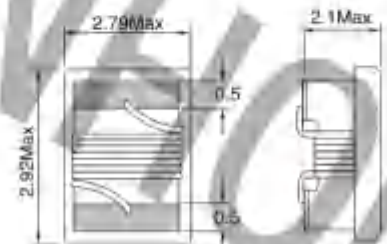
ELECTRICAL CHARACTERISTICS:

PHYSICAL CHARACTERISTICS:

Part Number	L(μH)	Tolerance (%)	Q Min	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AISC1008F-1R0□	1.0@25.2MHz	±10.5	18@25.2MHz	300	0.55	580
AISC1008F-1R2□	1.2@7.96MHz	±10.5	18@7.96MHz	250	0.75	550
AISC1008F-1R5□	1.5@7.96MHz	±10.5	18@7.96MHz	230	0.85	400
AISC1008F-1R8□	1.8@7.96MHz	±10.5	18@7.96MHz	188	0.95	320
AISC1008F-2R2□	2.2@7.96MHz	±10.5	18@7.96MHz	150	1.30	315
AISC1008F-2R7□	2.7@7.96MHz	±10.5	18@7.96MHz	100	1.40	300
AISC1008F-3R3□	3.3@7.96MHz	±10.5	18@7.96MHz	80	1.50	280
AISC1008F-3R9□	3.9@7.96MHz	±10.5	18@7.96MHz	60	1.55	250
AISC1008F-4R7□	4.7@7.96MHz	±10.5	18@7.96MHz	50	1.75	210
AISC1008F-6R8□	6.8@7.96MHz	±10.5	15@7.96MHz	40	1.90	190
AISC1008F-8R8□	8.8@7.96MHz	±10.5	15@7.96MHz	35	2.00	175
AISC1008F-7R5□	7.5@7.96MHz	±10.5	15@7.96MHz	30	2.10	170
AISC1008F-8R2□	8.2@7.96MHz	±10.5	15@7.96MHz	25	2.30	160
AISC1008F-100□	10@2.52MHz	±10.5	12@2.52MHz	25	2.50	155
AISC1008F-120□	12@2.52MHz	±10.5	12@2.52MHz	20	2.60	145
AISC1008F-150□	15@2.52MHz	±10.5	12@2.52MHz	20	2.70	130
AISC1008F-180□	18@2.52MHz	±10.5	12@2.52MHz	20	3.00	130
AISC1008F-220□	22@2.52MHz	±10.5	12@2.52MHz	18	3.90	105
AISC1008F-270□	27@2.52MHz	±10.5	12@2.52MHz	10	4.00	100
AISC1008F-330□	33@2.52MHz	±10.5	10@2.52MHz	8	4.80	85
AISC1008F-390□	39@2.52MHz	±10.5	10@2.52MHz	7	5.00	80
AISC1008F-470□	47@2.52MHz	±10.5	10@2.52MHz	7	5.70	60
AISC1008F-560□	56@2.52MHz	±10.5	10@2.52MHz	6.5	6.00	55
AISC1008F-680□	68@2.52MHz	±10.5	10@2.52MHz	6.5	6.70	50
AISC1008F-820□	82@2.52MHz	±10.5	10@2.52MHz	6.5	7.50	45
AISC1008F-101□	100@0.796MHz	±10.5	8@0.796MHz	4.5	11.0	40
AISC1008F-121□	120@0.796MHz	±10.5	8@0.796MHz	3.0	13.0	30
AISC1008F-151□	150@0.796MHz	±10.5	8@0.796MHz	3.0	13.0	25
AISC1008F-221□	220@0.796MHz	±10	8@0.796MHz	2.5	18.0	20

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

Dimensions:(mm)



PCB LAYOUT

Winding

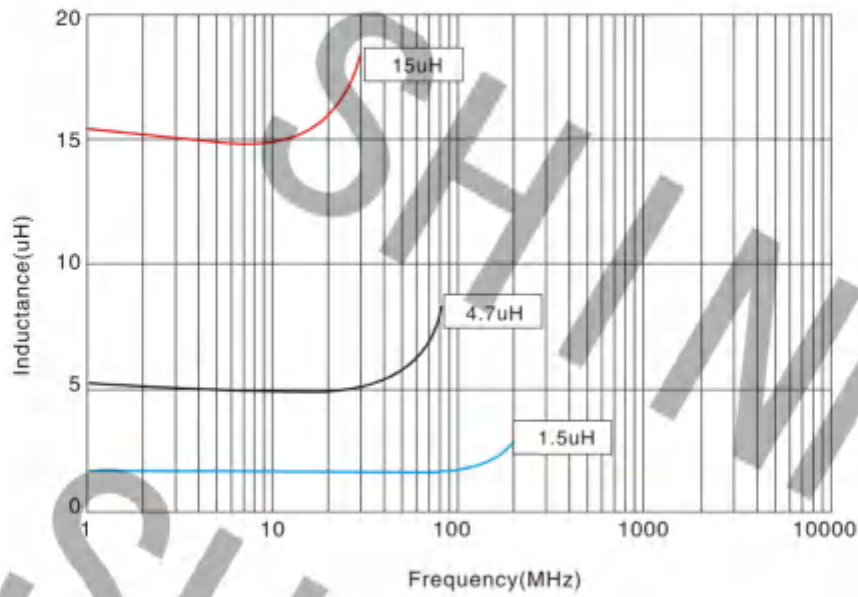


NOTES:

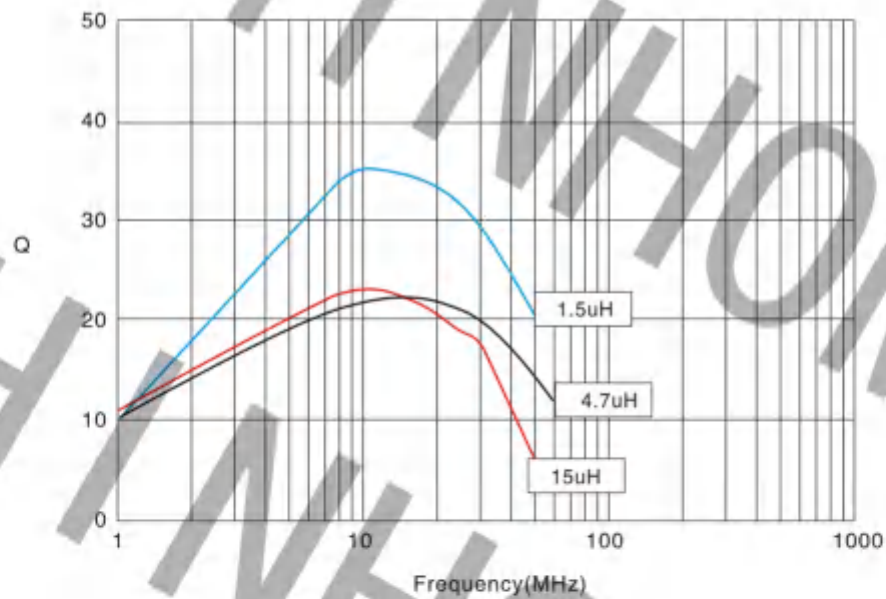
- Testing: (Equivalent acceptable)@ 25°C Inductance,Q: HP4191A, SRF:HP8753B
- Operating Temperature: -40°C to +125°C
- Solder methods: Wave, Reflow,Vapor Phase
- Solderability: Max 260°C for 10 seconds

SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

Inductance vs Frequency



Q vs Frequency



SURFACE-MOUNT WIRE WOUND FERRITE CHIP INDUCTORS

AISC1206F SERIES

FEATURES:

- Miniature size, suitable for SMT
- Low DC resistance, high current and high inductance and high reliability

APPLICATIONS:

- Low DC resistance high current and high inductance and high reliability

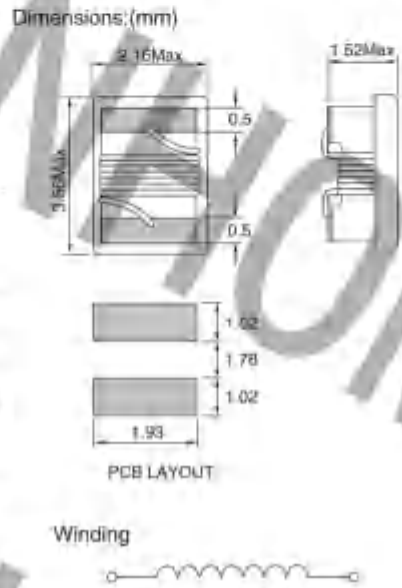


ELECTRICAL CHARACTERISTICS:

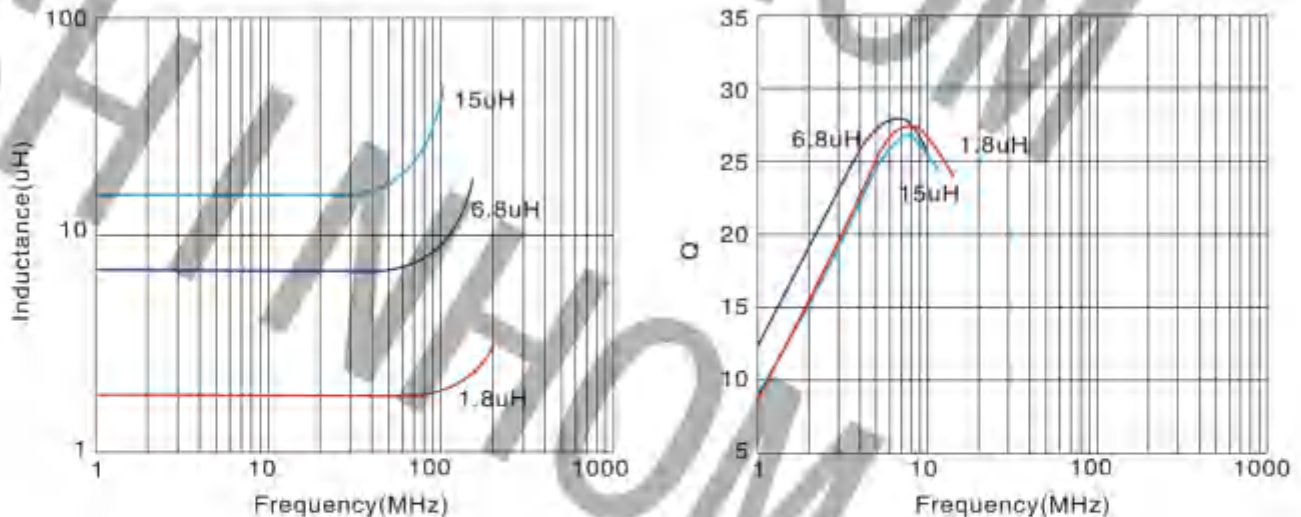
Part Number	L(uH)	Tolerance (%)	Q Min	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AISC1206F-1R5□	1.5@7.96MHz	20,10,5	25@7.96MHz	260	1.2	320
AISC1206F-1R8□	1.8@7.96MHz	20,10,5	25@7.96MHz	250	1.2	320
AISC1206F-2R2□	2.2@7.96MHz	20,10,5	25@7.96MHz	240	1.3	300
AISC1206F-2R7□	2.7@7.96MHz	20,10,5	25@7.96MHz	230	1.4	300
AISC1206F-3R3□	3.3@7.96MHz	20,10,5	25@7.96MHz	200	1.5	280
AISC1206F-3R9□	3.9@7.96MHz	20,10,5	25@7.96MHz	190	1.9	280
AISC1206F-4R7□	4.7@7.96MHz	20,10,5	25@7.96MHz	170	2.2	280
AISC1206F-5R6□	5.6@7.96MHz	20,10,5	25@7.96MHz	160	2.4	260
AISC1206F-6R8□	6.8@7.96MHz	20,10,5	25@7.96MHz	150	2.8	240
AISC1206F-8R2□	8.2@7.96MHz	20,10,5	25@7.96MHz	130	3.1	220
AISC1206F-100□	10@7.96MHz	20,10,5	25@7.96MHz	120	4.0	200
AISC1206F-120□	12@2.52MHz	20,10,5	18@2.52MHz	110	4.8	200
AISC1206F-150□	15@2.52MHz	20,10,5	16@2.52MHz	90	6.2	150
AISC1206F-180□	18@2.52MHz	20,10,5	16@2.52MHz	80	9.0	130

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

PHYSICAL CHARACTERISTICS:



TYPICAL CURVE:



- Testing: (Equivalent acceptable)@ 25°C
- Operating Temperature: -40°C to +125°C
- Solder methods: Wave, Reflow, Vapor Phase
- Solderability: Max 260°C for 10 seconds

SURFACE-MOUNT WIRE WOUND FERRITE CHIP INDUCTORS

AISC1210F SERIES

FEATURES:

- Miniature size, suitable for SMT
- Low DC resistance, high current and high inductance and high reliability

APPLICATIONS:

- Low DC resistance, high current and high inductance and high reliability

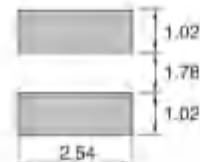
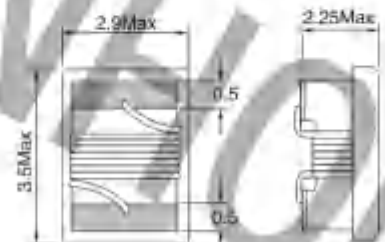


ELECTRICAL CHARACTERISTICS:

PHYSICAL CHARACTERISTICS:

Part Number	L(uH)	Tolerance (%)	Q Min	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AISC1210F-1R0□	1.0@7.96MHz	±0.5	20@7.96MHz	220	0.3	450
AISC1210F-1R2□	1.2@7.96MHz	±0.5	20@7.96MHz	210	0.3	450
AISC1210F-1R5□	1.5@7.96MHz	±0.5	20@7.96MHz	200	0.4	450
AISC1210F-1R8□	1.8@7.96MHz	±0.5	20@7.96MHz	195	0.5	450
AISC1210F-2R2□	2.2@7.96MHz	±0.5	20@7.96MHz	175	0.6	450
AISC1210F-2R7□	2.7@7.96MHz	±0.5	20@7.96MHz	120	0.7	420
AISC1210F-3R3□	3.3@7.96MHz	±0.5	20@7.96MHz	80	1.1	380
AISC1210F-3R9□	3.9@7.96MHz	±0.5	20@7.96MHz	75	1.2	360
AISC1210F-4R7□	4.7@7.96MHz	±0.5	18@7.96MHz	60	1.3	350
AISC1210F-5R6□	5.6@7.96MHz	±0.5	15@7.96MHz	50	2.0	320
AISC1210F-6R8□	6.8@7.96MHz	±0.5	18@7.96MHz	35	1.5	310
AISC1210F-8R2□	8.2@7.96MHz	±0.5	16@7.96MHz	35	1.8	305
AISC1210F-10□	10@2.52MHz	±0.5	15@2.52MHz	30	1.0	300
AISC1210F-12□	12@2.52MHz	±0.5	15@2.52MHz	25	1.2	265
AISC1210F-15□	15@2.52MHz	±0.5	15@2.52MHz	22	2.0	225
AISC1210F-18□	18@2.52MHz	±0.5	15@2.52MHz	22	2.1	210
AISC1210F-22□	22@2.52MHz	±0.5	15@2.52MHz	20	2.4	200
AISC1210F-27□	27@2.52MHz	±0.5	15@2.52MHz	18	2.7	180
AISC1210F-33□	33@2.52MHz	±0.5	15@2.52MHz	15	2.9	160
AISC1210F-39□	39@2.52MHz	±0.5	15@2.52MHz	16	4.7	150
AISC1210F-47□	47@2.52MHz	±0.5	15@2.52MHz	10	5.2	140
AISC1210F-56□	56@2.52MHz	±0.5	15@2.52MHz	8	5.6	125
AISC1210F-68□	68@2.52MHz	±0.5	12@2.52MHz	5	4.7	110
AISC1210F-82□	82@2.52MHz	±0.5	12@2.52MHz	5	5.6	100
AISC1210F-101□	100@0.796MHz	±0.5	10@0.796MHz	5	6.8	95
AISC1210F-121□	120@0.796MHz	±0.5	10@0.796MHz	4	7.9	85
AISC1210F-151□	150@0.796MHz	±0.5	10@0.796MHz	4.0	9.0	80
AISC1210F-181□	180@0.796MHz	±0.5	8@0.796MHz	3.0	14.5	70
AISC1210F-221□	220@0.796MHz	±0.5	8@0.796MHz	2.6	16.5	65
AISC1210F-271□	270@0.796MHz	±0.5	8@0.796MHz	2.5	18.0	60
AISC1210F-331□	330@0.796MHz	±0.5	8@0.796MHz	2.3	19.0	55
AISC1210F-391□	390@0.796MHz	±0.5	8@0.796MHz	2.2	21.5	45
AISC1210F-471□	470@0.796MHz	±0.5	8@0.796MHz	2.0	22.5	40
AISC1210F-561□	500@0.796MHz	±0.5	6@0.796MHz	1.5	25.0	30

Dimensions:(mm)



PCB LAYOUT

Winding



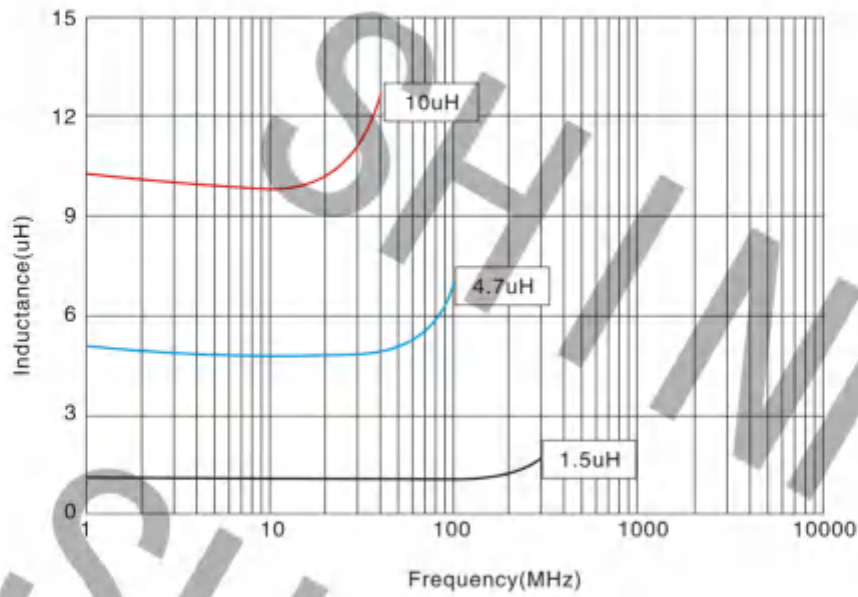
□ G=±2%, J=±5%, K=±10%,
M=±20%, N=±30%

NOTES

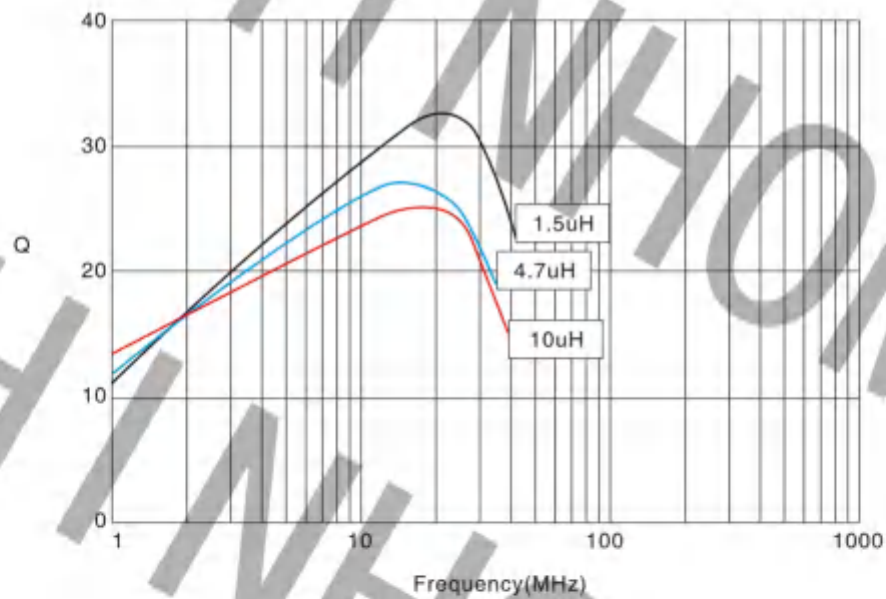
- Testing: (Equivalent acceptable) @ 25°C
- Operating Temperature: -40°C to +125°C
- Solder methods: Wave, Reflow, Vapor Phase
- Solderability: Max 260°C for 10 seconds

SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

Inductance vs Frequency



Q vs Frequency



SURFACE-MOUNT WIRE WOUND FERRITE CHIP INDUCTORS

AISC1812F SERIES

FEATURES:

- Miniature size, suitable for SMT
- Low DC resistance, high current and high inductance and high reliability

APPLICATIONS:

- Low DC resistance, high current and high inductance and high reliability

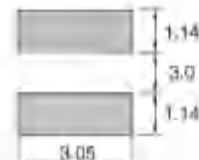


ELECTRICAL CHARACTERISTICS:

PHYSICAL CHARACTERISTICS:

Part Number	L(uH)	Tolerance (%)	Q Min	SFR (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AISC1812F-1R0□	1.0@7.96MHz	±0.5	25@7.96MHz	200	0.22	1000
AISC1812F-1R2□	1.2@7.96MHz	±0.5	25@7.96MHz	200	0.35	1000
AISC1812F-1R5□	1.5@7.96MHz	±0.5	25@7.96MHz	180	0.32	1000
AISC1812F-1R8□	1.8@7.96MHz	±0.5	25@7.96MHz	160	0.35	950
AISC1812F-2R2□	2.2@7.96MHz	±0.5	25@7.96MHz	150	0.37	900
AISC1812F-2R7□	2.7@7.96MHz	±0.5	25@7.96MHz	145	0.37	850
AISC1812F-3R3□	3.3@7.96MHz	±0.5	25@7.96MHz	140	0.48	800
AISC1812F-3R9□	3.9@7.96MHz	±0.5	25@7.96MHz	135	0.60	750
AISC1812F-4R7□	4.7@7.96MHz	±0.5	25@7.96MHz	120	1.00	700
AISC1812F-5R8□	5.8@7.96MHz	±0.5	25@7.96MHz	110	0.55	650
AISC1812F-6R8□	6.8@7.96MHz	±0.5	25@7.96MHz	80	0.80	600
AISC1812F-8R2□	8.2@7.96MHz	±0.5	20@7.96MHz	70	0.85	600
AISC1812F-100□	10@2.52MHz	±0.5	20@2.52MHz	60	1.0	550
AISC1812F-120□	12@2.52MHz	±0.5	20@2.52MHz	55	1.1	550
AISC1812F-150□	15@2.52MHz	±0.5	18@2.52MHz	35	1.2	500
AISC1812F-180□	18@2.52MHz	±0.5	18@2.52MHz	29	1.2	500
AISC1812F-220□	22@2.52MHz	±0.5	18@2.52MHz	20	1.3	450
AISC1812F-270□	27@2.52MHz	±0.5	18@2.52MHz	20	1.5	400
AISC1812F-330□	33@2.52MHz	±0.5	18@2.52MHz	18	1.7	350
AISC1812F-390□	39@2.52MHz	±0.5	18@2.52MHz	14	1.8	350
AISC1812F-470□	47@2.52MHz	±0.5	16@2.52MHz	10	2.0	300
AISC1812F-560□	56@2.52MHz	±0.5	15@2.52MHz	10	2.2	280
AISC1812F-680□	68@2.52MHz	±0.5	12@2.52MHz	5.4	2.4	260
AISC1812F-820□	82@2.52MHz	±0.5	12@2.52MHz	5.2	2.8	240
AISC1812F-101□	100@796KHz	±0.5	12@796KHz	4.0	3.0	220
AISC1812F-121□	120@796KHz	±0.5	10@796KHz	3.3	3.3	220
AISC1812F-151□	150@796KHz	±0.5	10@796KHz	3.0	3.7	200
AISC1812F-181□	180@796KHz	±0.5	10@796KHz	3.0	4.5	200
AISC1812F-221□	220@796KHz	±0.5	10@796KHz	2.5	8.0	170
AISC1812F-271□	270@796KHz	±0.5	10@796KHz	2.2	8.5	150
AISC1812F-331□	330@796KHz	±0.5	10@796KHz	2.0	9.0	150
AISC1812F-391□	390@796KHz	±0.5	10@796KHz	1.8	9.3	130
AISC1812F-471□	470@796KHz	±0.5	8@796KHz	1.6	12.0	120
AISC1812F-561□	560@796KHz	±0.5	8@796KHz	1.5	14.5	110
AISC1812F-681□	680@796KHz	±0.5	8@796KHz	1.5	14.0	100
AISC1812F-751□	750@796KHz	±0.5	8@796KHz	1.6	14.5	95
AISC1812F-821□	820@796KHz	±0.5	8@796KHz	1.5	15.0	95
AISC1812F-102□	1000@252KHz	±0.5	6@252KHz	1.4	10.5	90

Dimensions:(mm)



PCB LAYOUT

Winding



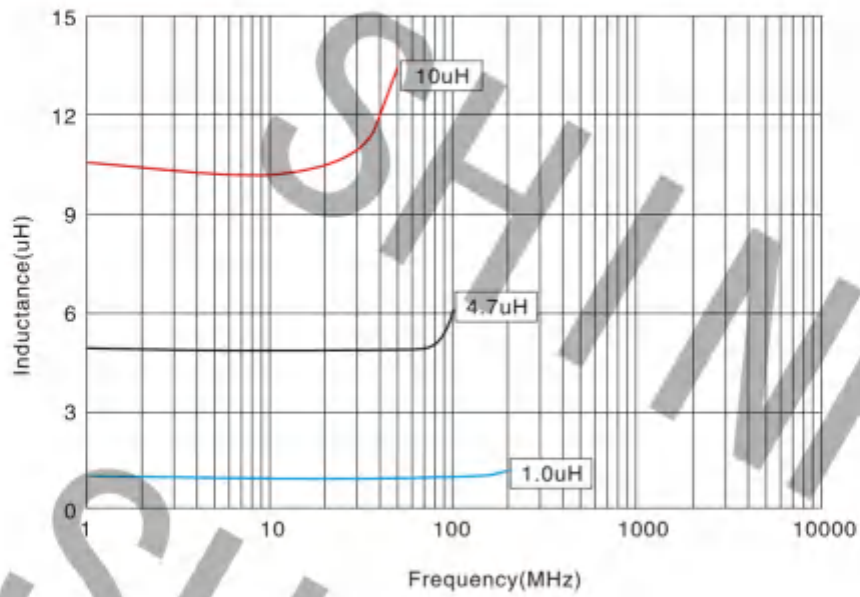
□ G= ± 2%, J= ± 5%, K= ± 10%,
M= ± 20%, N= ± 30%.

NOTES

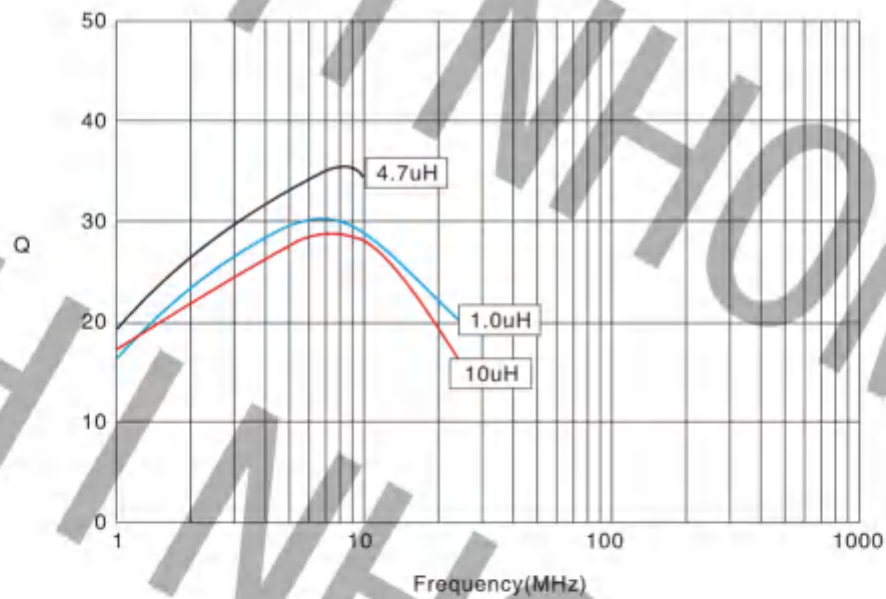
- Testing: (Equivalent acceptable) @ 25°C
- Operating Temperature: -40°C to +125°C
- Solder methods: Wave, Reflow, Vapor Phase
- Solderability: Max 260°C for 10 seconds

SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

Inductance vs Frequency



Q vs Frequency



SURFACE-MOUNT WOUND MOLDED CHIP INDUCTORS

AISM1008 SERIES



FEATURES:

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

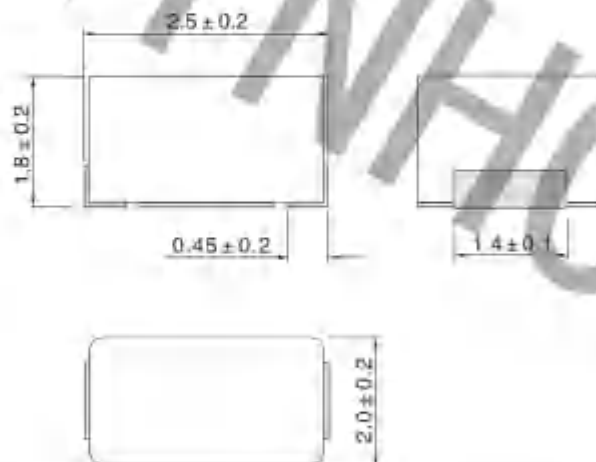
APPLICATIONS:

- Communication
- Equipment
- Instrument
- Video & audio

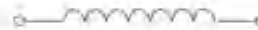
ELECTRICAL CHARACTERISTICS:

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

PHYSICAL CHARACTERISTICS



Winding



- Testing: (Equivalent acceptable)
- Inductance: HP4285A
- RDC: QuadTech 1880 Milliohmometer
- Q: HP4342A
- SRF: HP4291A
- Operating temperature: -25°C to +85°C
- Storage Temperature: -40°C to +85°C
- Resistance to soldering heat: 260°C for 10 seconds
- Marking: Inductance & Tolerance

Note: All specifications subject to change without notice.

SURFACE MOUNT WOUND MOLDED CHIP INDUCTORS

AIMS1210 SERIES

FEATURES:

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

APPLICATIONS:

- Communication
- Equipment
- Instrument
- Video & audio

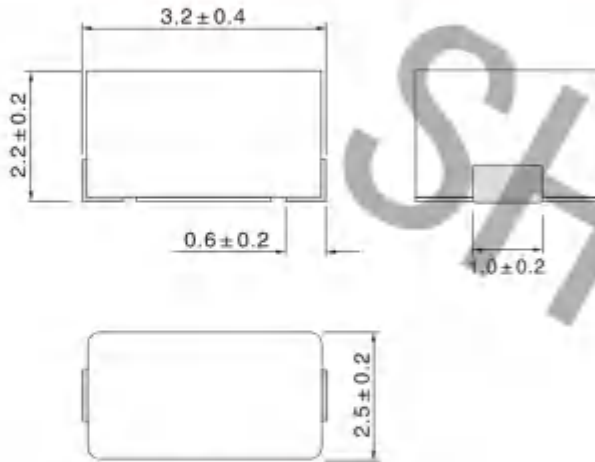


ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (μH)	Inductance Tolerance (%)	Q min.	Test Frequency LQ (MHz)	Self-resonant Frequency (MHz) min.	DC resistance (Ω) max.	Rated current (mA) max.
AIMS1210-R10 □	0.1	±20, ±10%	28	100	700	0.44	450
AIMS1210-R12 □	0.12	±20, ±10%	30	25.2	500	0.35	450
AIMS1210-R15 □	0.15	±20, ±10%	30	25.2	450	0.25	450
AIMS1210-R18 □	0.18	±20, ±10%	30	25.2	400	0.28	450
AIMS1210-R22 □	0.22	±20, ±10%	30	25.2	350	0.32	450
AIMS1210-R27 □	0.27	±20, ±10%	30	25.2	320	0.36	450
AIMS1210-R33 □	0.33	±20, ±10%	30	25.2	300	0.4	450
AIMS1210-R39 □	0.39	±20, ±10%	30	25.2	250	0.45	450
AIMS1210-R47 □	0.47	±20, ±10%	30	25.2	220	0.5	450
AIMS1210-R56 □	0.56	±20, ±10%	30	25.2	180	0.55	450
AIMS1210-R68 □	0.68	±20, ±10%	30	25.2	160	0.6	450
AIMS1210-R82 □	0.82	±20, ±10%	30	25.2	140	0.65	450
AIMS1210-1R0 □	1	±10%, ±5%	30	7.96	120	0.7	400
AIMS1210-1R2 □	1.2	±10%, ±5%	30	7.96	100	0.75	390
AIMS1210-1R5 □	1.5	±10%, ±5%	30	7.96	85	0.85	370
AIMS1210-1R8 □	1.8	±10%, ±5%	30	7.96	80	0.9	350
AIMS1210-2R2 □	2.2	±10%, ±5%	30	7.96	75	1	320
AIMS1210-2R7 □	2.7	±10%, ±5%	30	7.96	70	1.1	290
AIMS1210-3R3 □	3.3	±10%, ±5%	30	7.96	60	1.2	260
AIMS1210-3R9 □	3.9	±10%, ±5%	30	7.96	55	1.3	250
AIMS1210-4R7 □	4.7	±10%, ±5%	30	7.96	50	1.5	220
AIMS1210-5R6 □	5.6	±10%, ±5%	30	7.96	45	1.6	200
AIMS1210-6R8 □	6.8	±10%, ±5%	30	7.96	40	1.8	180
AIMS1210-8R2 □	8.2	±10%, ±5%	30	7.96	35	2	170
AIMS1210-100 □	10	±10%, ±5%	30	2.52	30	2.1	150
AIMS1210-120 □	12	±10%, ±5%	30	2.52	28	2.5	140
AIMS1210-150 □	15	±10%, ±5%	30	2.52	26	2.8	130
AIMS1210-180 □	18	±10%, ±5%	30	2.52	24	3.3	120
AIMS1210-220 □	22	±10%, ±5%	30	2.52	22	3.7	110
AIMS1210-270 □	27	±10%, ±5%	30	2.52	20	5	80
AIMS1210-330 □	33	±10%, ±5%	30	2.52	17	5.6	70
AIMS1210-390 □	39	±10%, ±5%	30	2.52	16	6.4	65
AIMS1210-470 □	47	±10%, ±5%	30	2.52	15	7	60
AIMS1210-560 □	56	±10%, ±5%	30	2.52	13	8	55
AIMS1210-680 □	68	±10%, ±5%	30	2.52	12	9	50
AIMS1210-820 □	82	±10%, ±5%	30	2.52	11	10	45
AIMS1210-101 □	100	±10%, ±5%	20	0.796	10	10	40
AIMS1210-121 □	120	±10%, ±5%	20	0.796	10	11	70
AIMS1210-151 □	150	±10%, ±5%	20	0.796	8	15	65
AIMS1210-181 □	180	±10%, ±5%	20	0.796	7	17	60
AIMS1210-221 □	220	±10%, ±5%	20	0.796	7	21	50

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

PHYSICAL CHARACTERISTICS

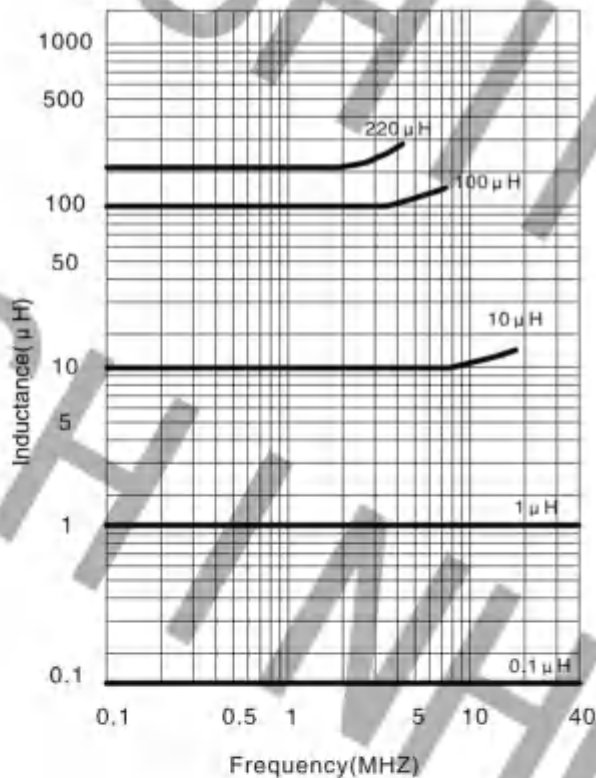


Winding

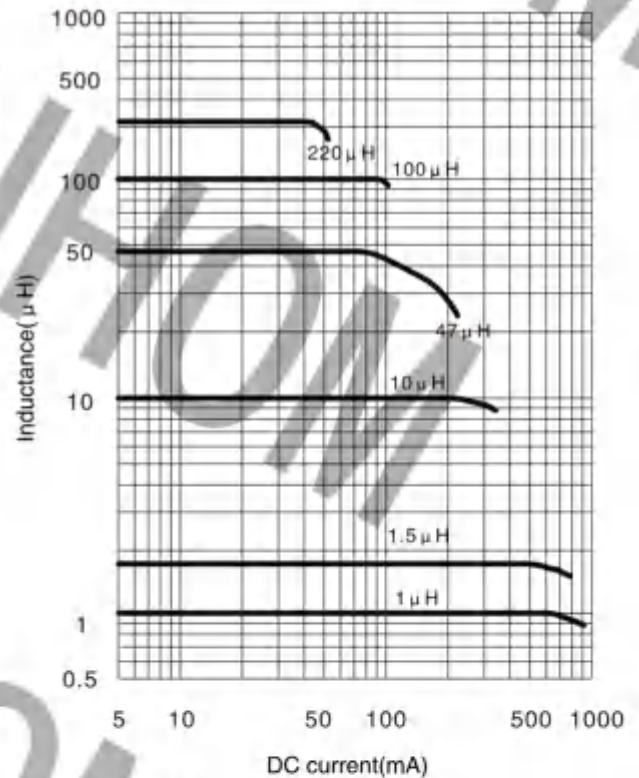


- Testing: (Equivalent acceptable)
- Inductance: HP4285A
- RDC: QuadTech 1880 Milliohmeter
- Q: HP4342A
- SRF: HP4291A
- Operating temperature: -25°C to $+85^{\circ}\text{C}$
- Storage Temperature: -40°C to $+85^{\circ}\text{C}$
- Resistance to soldering heat: 260°C for 10 seconds
- Marking: Inductance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

INDUCTANCE VS FREQUENCY CURVE



IMPEDANCE VS FREQUENCY CURVE



SURFACE MOUNT WOUND MOLDED CHIP INDUCTORS

AIMS1812 SERIES

FEATURES:

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

APPLICATIONS:

- Communication
- Equipment
- Instrument
- Video & audio

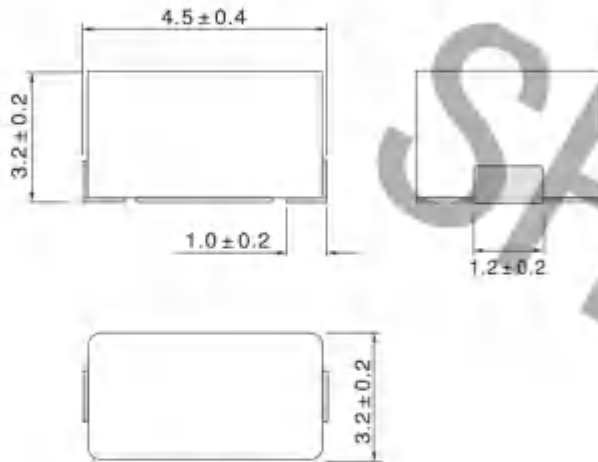


ELECTRICAL CHARACTERISTICS:

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

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

PHYSICAL CHARACTERISTICS

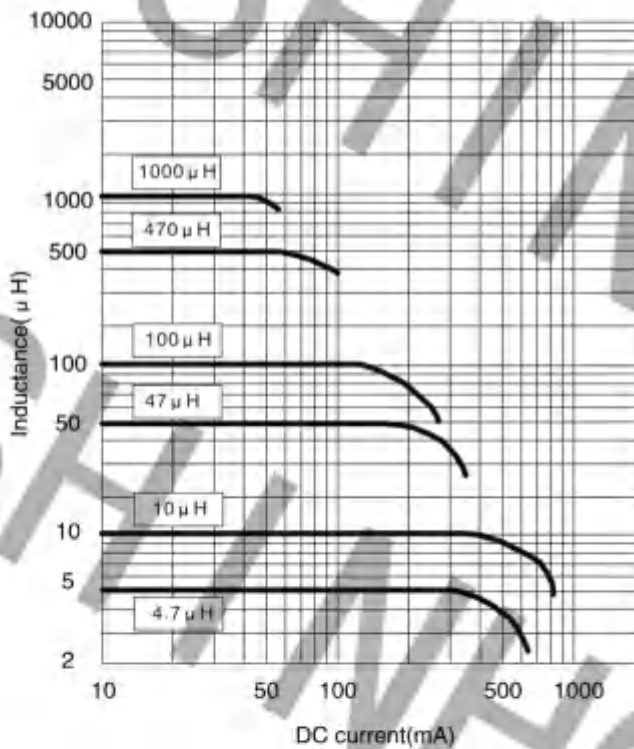


Winding

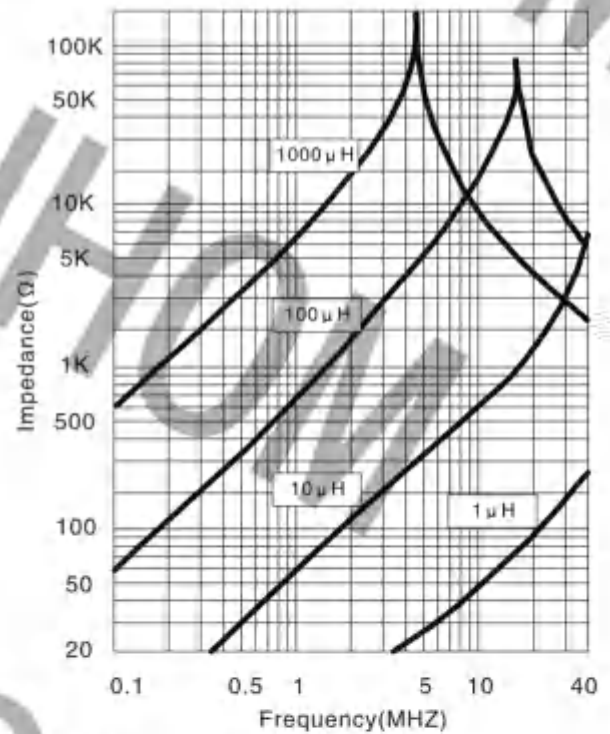


- Testing: (Equivalent acceptable)
- Inductance: HP4285A
- RDC: QuadTech 1880 Milliohm meter
- Q: HP4342A
- SRF: HP4291A
- Operating temperature: -25°C to $+85^{\circ}\text{C}$
- Storage Temperature: -40°C to $+85^{\circ}\text{C}$
- Resistance to soldering heat: 260°C for 10 seconds
- Marking: Inductance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

DC BISE CURVE



IMPEDANCE VS FREQUENCY CURVE





SURFACE-MOUNT WOUND MOLDED CHIP INDUCTORS

AISM-2220 SERIES

FEATURES:

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

OPTIONS:

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

COMMON APPLICATIONS:

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

ELECTRICAL CHARACTERISTICS:

Part Number	L μH	Q Min	SRF MHz Min	DCR Ω Max	IDC Max mA	Test Freq MHz
AISM-2220-1R0K	1.00	10	95	0.030	1800	7.96
AISM-2220-1R2K	1.20	10	20	0.035	1700	7.96
AISM-2220-1R5K	1.50	10	35	0.04	1600	7.96
AISM-2220-1R8K	1.80	10	47	0.05	1400	7.96
AISM-2220-2R2K	2.20	10	42	0.06	1300	7.96
AISM-2220-2R7K	2.70	10	37	0.07	1200	7.96
AISM-2220-3R3K	3.30	10	34	0.08	1120	7.96
AISM-2220-3R9K	3.90	10	32	0.09	1020	7.96
AISM-2220-4R7K	4.70	10	28	0.11	960	7.96
AISM-2220-5R6K	5.60	10	25	0.13	880	7.96
AISM-2220-6R8K	6.80	10	24	0.15	810	7.96
AISM-2220-8R2K	8.20	10	22	0.18	740	7.96
AISM-2220-10K	10.00	10	19	0.21	680	7.96
AISM-2220-12K	12.00	10	17	0.25	630	7.96
AISM-2220-15K	15.00	10	16	0.30	580	7.96
AISM-2220-18K	18.00	10	14	0.36	500	7.96
AISM-2220-22K	22.00	10	13	0.43	480	7.96
AISM-2220-27K	27.00	10	11.5	0.52	440	7.96
AISM-2220-33K	33.00	10	10.5	0.62	400	7.96
AISM-2220-39K	39.00	10	9.5	0.72	370	7.96
AISM-2220-47K	47.00	10	8.5	0.83	340	7.96
AISM-2220-56K	56.00	10	7.8	1.0	310	7.96
AISM-2220-68K	68.00	10	7.0	1.2	290	7.96
AISM-2220-82K	82.00	10	6.4	1.4	270	7.96
AISM-2220-101K	100	20	6.0	1.6	250	0.796
AISM-2220-121K	120	20	5.4	1.8	230	0.796
AISM-2220-151K	150	20	4.9	2.2	210	0.796
AISM-2220-181K	180	20	4.4	2.8	190	0.796
AISM-2220-221K	220	20	3.9	3.6	170	0.796
AISM-2220-271K	270	20	3.6	4.3	155	0.796
AISM-2220-331K	330	20	3.2	4.9	140	0.796
AISM-2220-391K	390	20	2.9	5.8	130	0.796
AISM-2220-471K	470	20	2.6	7.0	120	0.796
AISM-2220-561K	560	20	2.4	8.5	110	0.796
AISM-2220-681K	680	20	2.2	10	100	0.796
AISM-2220-821K	820	20	2.0	13	90	0.796
AISM-2220-1R0J	1000	30	1.8	15	85	0.252
AISM-2220-1R2J	1200	30	1.5	17	75	0.252
AISM-2220-1R5J	1500	30	1.4	20	70	0.252
AISM-2220-1R8J	1800	30	1.3	23	60	0.252
AISM-2220-2R2J	2200	30	1.2	26	55	0.252
AISM-2220-2R7J	2700	30	1.1	33	45	0.252
AISM-2220-3R3J	3300	30	1.0	40	40	0.252
AISM-2220-3R9J	3900	30	1.0	50	38	0.252
AISM-2220-4R7J	4700	30	0.9	60	36	0.252
AISM-2220-5R6J	5600	30	0.8	75	33	0.252
AISM-2220-6R8J	6800	30	0.7	90	30	0.252
AISM-2220-8R2J	8200	30	0.6	125	28	0.252
AISM-2220-100J	10000	30	0.5	150	25	0.0796

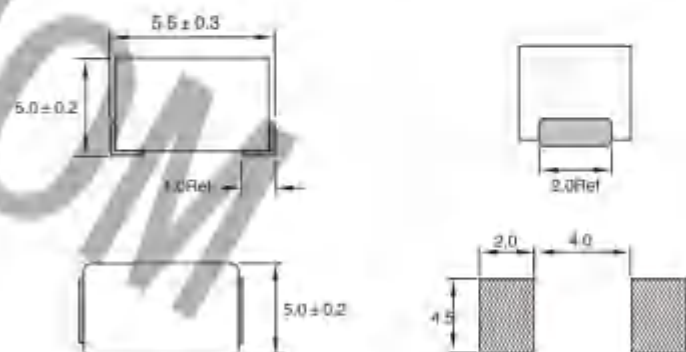
Note: 1. J ± 5%, K = ± 10%, M = ± 20%.

TECHNICAL INFORMATION:

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

Note: All specifications subject to change without notice.

PHYSICAL CHARACTERISTICS:



Dimensions: (mm)

HIGH CURRENT SURFACE MOUNT WOUND MOLDED CHIP INDUCTORS

AIMS1210C SERIES



FEATURES:

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

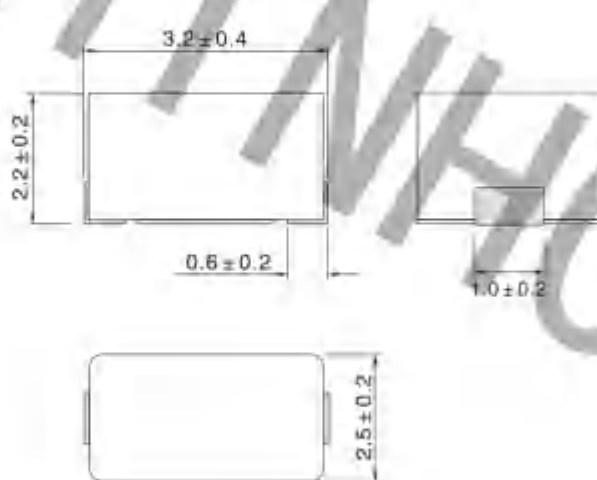
APPLICATIONS:

- Communication
- Equipment
- Instrument
- Video & audio

ELECTRICAL CHARACTERISTICS:

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

PHYSICAL CHARACTERISTICS

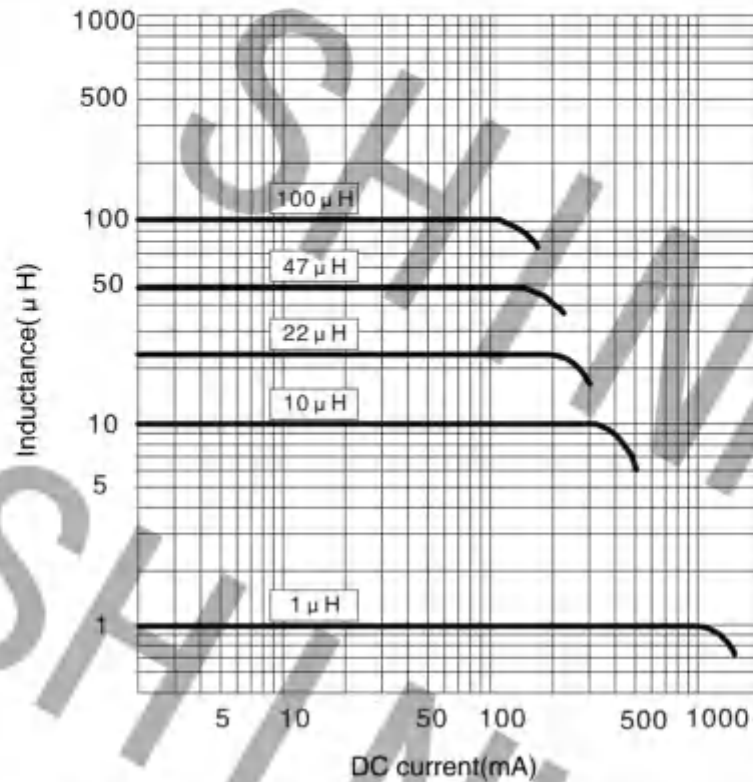


Winding

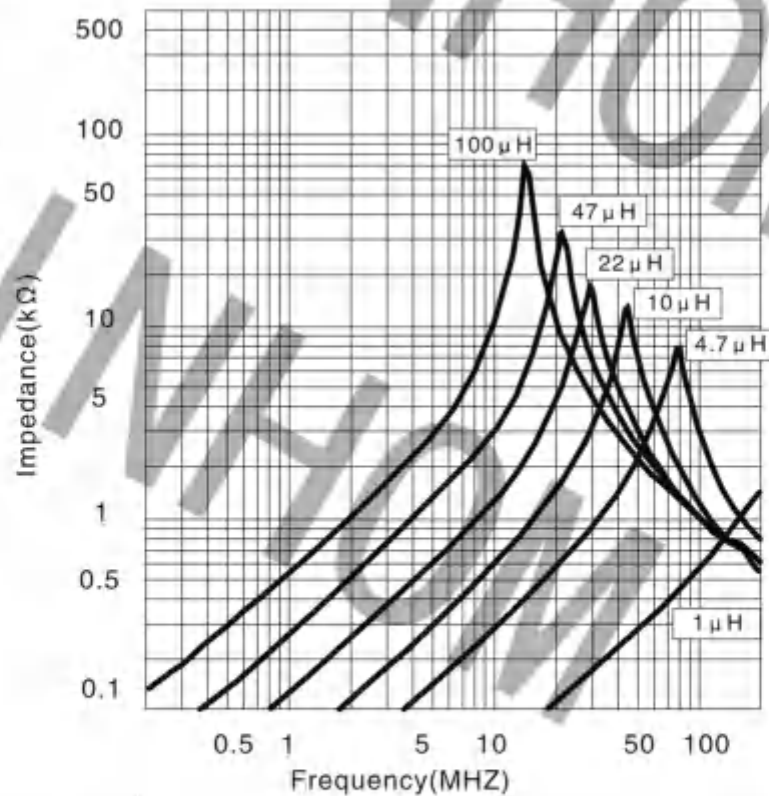


- Testing: (Equivalent acceptable)
- Inductance: HP4285A
- RDC: QuadTech 1680 Milliohmmer
- Q: HP4342A
- SRF: HP4291A
- Operating temperature: -25°C to +85°C
- Storage Temperature: -40°C to +85°C
- Resistance to soldering heat: 260°C for 10 seconds
- Marking: Inductance & Tolerance

DC BISE CURVE



IMPEDANCE VS FREQUENCY CURVE



HIGH CURRENT SURFACE MOUNT WOUND MOLDED CHIP INDUCTORS **AIMS1812C SERIES**



FEATURES:

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

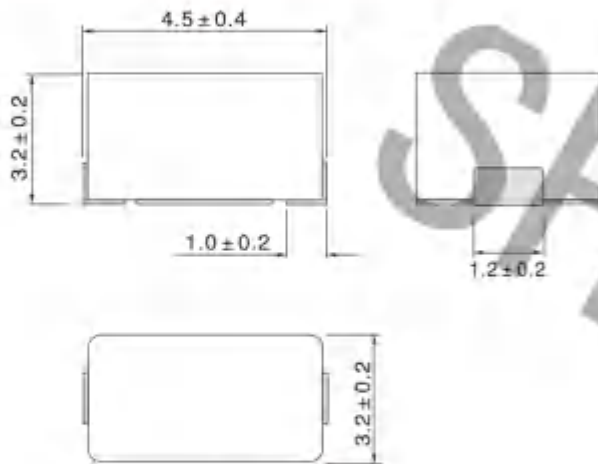
APPLICATIONS:

- Communication
- Equipment
- Instrument
- Video & audio

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (μH)	Inductance Tolerance (%)	Q min.	Test Frequency LQ (MHz)	Self-resonant Frequency (MHz) min.	DC resistance (Ω) max.	Rated current (mA) max.
AIMS1812C-1R0K	1.0	±10%	10	7.96	180	0.11	1050
AIMS1812C-1R2K	1.2	±10%	10	7.96	160	0.12	1000
AIMS1812C-1R5K	1.5	±10%	10	7.96	130	0.15	950
AIMS1812C-1R8K	1.8	±10%	10	7.96	100	0.16	900
AIMS1812C-2R2K	2.2	±10%	10	7.96	80	0.18	850
AIMS1812C-2R7K	2.7	±10%	10	7.96	60	0.20	800
AIMS1812C-3R3K	3.3	±10%	10	7.96	45	0.22	750
AIMS1812C-3R9K	3.9	±10%	10	7.96	40	0.24	700
AIMS1812C-4R7K	4.7	±10%	10	7.96	35	0.27	650
AIMS1812C-5R6K	5.6	±10%	10	7.96	30	0.30	650
AIMS1812C-6R8K	6.8	±10%	10	7.96	28	0.35	600
AIMS1812C-8R2K	8.2	±10%	10	7.96	25	0.40	600
AIMS1812C-100K	10	±10%	10	2.52	22	0.50	550
AIMS1812C-120K	12	±10%	10	2.52	21	0.60	500
AIMS1812C-150K	15	±10%	10	2.52	20	0.70	450
AIMS1812C-180K	18	±10%	10	2.52	19	0.80	400
AIMS1812C-220K	22	±10%	10	2.52	18	0.9	370
AIMS1812C-270K	27	±10%	10	2.52	16	1.2	330
AIMS1812C-330K	33	±10%	10	2.52	14	1.4	300
AIMS1812C-390K	39	±10%	10	2.52	12	1.6	280
AIMS1812C-470K	47	±10%	10	2.52	11.5	1.9	260
AIMS1812C-560K	56	±10%	10	2.52	11	2.2	240
AIMS1812C-680K	68	±10%	10	2.52	10	2.6	220
AIMS1812C-820K	82	±10%	10	2.52	9	3.5	200
AIMS1812C-101K	100	±10%	20	0.796	8	4.0	180
AIMS1812C-121K	120	±10%	20	0.796	7.5	4.5	160
AIMS1812C-151K	150	±10%	20	0.796	7	6.5	140
AIMS1812C-181K	180	±10%	20	0.796	6.5	7.5	120
AIMS1812C-221K	220	±10%	20	0.796	5.5	9.0	120
AIMS1812C-271K	270	±10%	20	0.796	5	11	100
AIMS1812C-331K	330	±10%	20	0.796	4	13	90

PHYSICAL CHARACTERISTICS

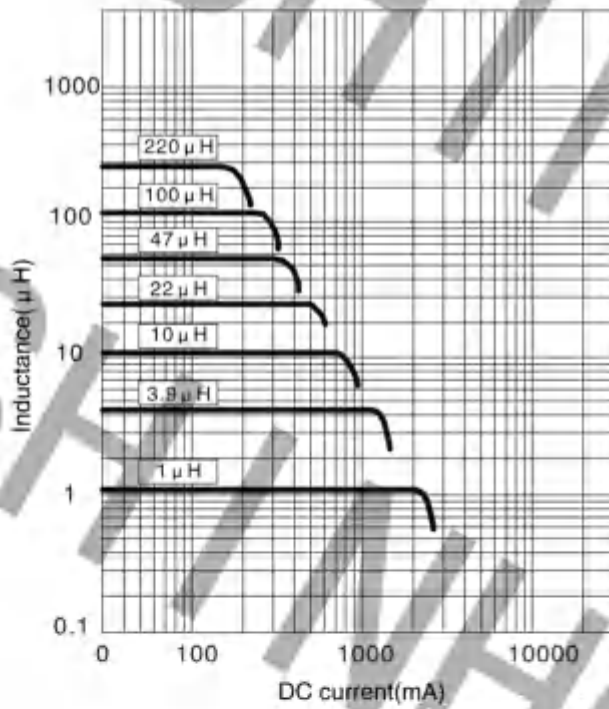


Winding

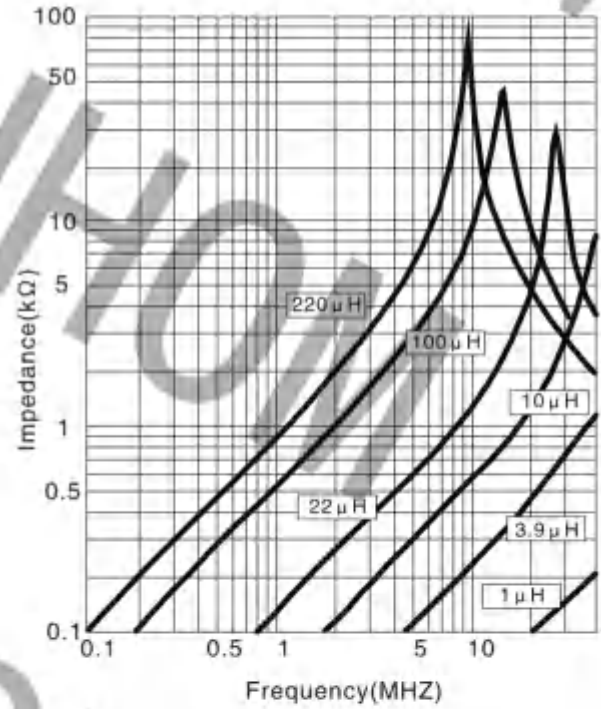


- Testing: (Equivalent acceptable)
- Inductance: HP4285A
- RDC: QuadTech 1880 Milliohm meter
- Q: HP4342A
- SRF: HP4291A
- Operating temperature: -25°C to $+85^{\circ}\text{C}$
- Storage Temperature: -40°C to $+85^{\circ}\text{C}$
- Resistance to soldering heat: 260°C for 10 seconds
- Marking: Inductance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

DC BISE CURVE



IMPEDANCE VS FREQUENCY CURVE



SMD INDUCTORS

B6010 SERIES

FEATURES:

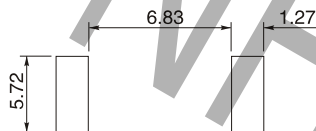
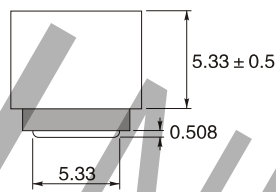
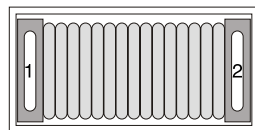
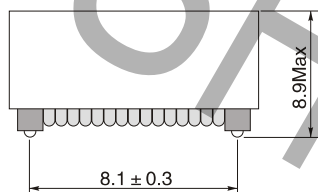
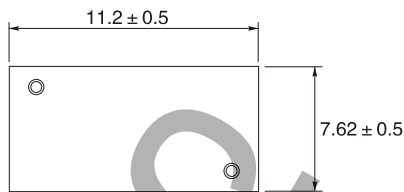
- Over 45 standard inductive values covering a range of 1.0 μ H to 6.8 mH with rated currents of up to 1.8 A
- Uses a nonconductive, high-volume resistivity, low-loss ferrite material
- Storage temperature range: -55°C to +130°C
- Operating temperature range: -40°C to +130°C
- Square-shaped encapsulation cover and flat top make this component highly suitable for automated pick and place assembly



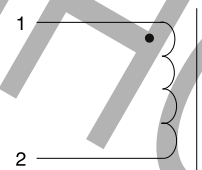
PHYSICAL CHARACTERISTICS:

WINDING:

Dimensions(mm)



LAND PATTERN



ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (μ H) @1KHz	DCR Max. (Ω).	AC Rated current(A)	DC Saturation current(A) 5%L drop	DC Saturation current(A) 10%L drop
B6010-1R0M	1.0	0.012	1.8	16.2	18.2
B6010-1R2M	1.2	0.013	1.8	15.3	17.1
B6010-1R5M	1.5	0.014	1.8	14.4	16.2
B6010-1R8M	1.8	0.015	1.8	9.0	13.5
B6010-2R2M	2.2	0.022	1.4	8.6	10.8
B6010-2R7M	2.7	0.032	1.2	8.1	9.9
B6010-3R3M	3.3	0.034	1.2	7.7	8.1
B6010-3R9M	3.9	0.065	0.70	6.5	7.2
B6010-4R7M	4.7	0.068	0.70	5.5	6.5
B6010-5R6M	5.6	0.073	0.70	5.2	6.2
B6010-6R8M	6.8	0.077	0.70	5.0	6.0
B6010-8R2M	8.2	0.081	0.70	4.8	5.9

Tolerance for values from 1uH to 10uH are $\pm$ 20%, All other values are $\pm$ 10%

Tolerance code: M= $\pm$ 20%, K= $\pm$ 10%

ELECTRICAL CHARACTERISTICS:@25°C

Part Number	Inductance (μH) @1KHz	DCR Max. (Ω).	AC Rated current(A)	DC Saturation current(A) 5%L drop	DC Saturation current(A) 10%L drop
B6010-100M	10.0	0.103	0.70	4.7	5.4
B6010-120K	12.0	0.107	0.70	4.4	4.8
B6010-150K	15.0	0.112	0.70	4.1	4.5
B6010-180K	18.0	0.125	0.70	3.8	4.3
B6010-220K	22.0	0.167	0.60	3.0	3.2
B6010-270K	27.0	0.218	0.50	2.6	2.9
B6010-330K	33.0	0.308	0.30	2.4	2.7
B6010-390K	39.0	0.340	0.30	2.3	2.5
B6010-470K	47.0	0.370	0.30	2.1	2.3
B6010-560	56.0	0.409	0.30	1.9	2.2
B6010-680K	68.0	0.449	0.30	1.8	2.0
B6010-820K	82.0	0.488	0.30	1.7	1.9
B6010-101K	100.0	0.961	0.20	1.6	1.8
B6010-121K	120.0	1.03	0.20	1.4	1.7
B6010-151K	150.0	1.08	0.20	1.4	1.6
B6010-181K	180.0	1.19	0.20	1.3	1.4
B6010-221K	220.0	1.25	0.20	1.2	1.4
B6010-271K	270.0	1.56	0.15	1.1	1.3
B6010-331K	330.0	1.80	0.15	1.0	1.2
B6010-391K	390.0	2.62	0.12	0.9	1.1
B6010-471K	470.0	2.88	0.12	0.81	0.90
B6010-561K	560.0	3.83	0.10	0.72	0.81
B6010-681K	680.0	4.20	0.10	0.58	0.70
B6010-821K	820.0	4.53	0.10	0.54	0.63
B6010-102K	1000.0	4.79	0.10	0.52	0.61
B6010-122K	1200.0	6.34	0.075	0.49	0.56
B6010-152K	1500.0	7.30	0.075	0.46	0.49
B6010-182K	1800.0	11.22	0.06	0.43	0.47
B6010-222K	2200.0	12.41	0.06	0.38	0.43
B6010-272K	2700.0	16.10	0.06	0.28	0.31
B6010-332K	3300.0	18.35	0.06	0.26	0.29
B6010-392K	3900.0	24.82	0.06	0.25	0.28
B6010-472K	4700.0	25.48	0.03	0.23	0.26
B6010-562K	5600.0	31.83	0.03	0.21	0.23
B6010-682K	6800.0	36.90	0.03	0.19	0.21

Tolerance for values from 1uH to 10uH are ± 20%, All other values are ± 10%
Tolerance code: M= ± 20%, K= ± 10%

Note:

- Testing: (Equivalent acceptable)
Inductance..... HP4284A, 1.0KHz / 0.1Vdc@25°C
RDC..... QuadTech 1880 Milliohm meter
- Operating temperature.....-40°C to +130°C
- Storage Temperature.....-55°C to +130°C
- Packaging.....Available in bulk and/or 450 piece tape and reel.



SMD INDUCTORS

B6011 SERIES

FEATURES:

- Flame retardant encapsulant (UL 94 V-0)
- Completely encapsulated winding provides superior environmental protection and moisture resistance
- High current unit in surface mount package printed with model, inductance value and date code
- Compatible with infrared or conventional reflow soldering methods
- Pick and place compatible

COMMON APPLICATIONS:

- Excellent power line noise filters
- Filters for switching regulated power supplies, DC/DC converters
- SCR and triac controls
- RFI suppression

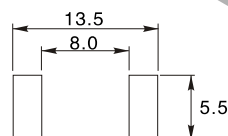
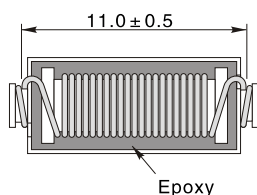
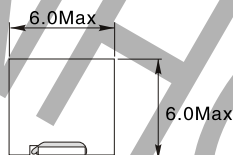
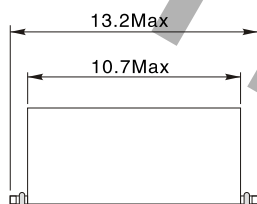
ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) @0Adc	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat(A)	DCR Max. (Ω).	Part Number	Inductance L0(μH) @0Adc	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat(A)	DCR Max. (Ω).
B6011-1R0Y	1.0	8.6	4.1	0.013	B6011-390Y	39.0	1.19	0.8	0.315
B6011-1R2Y	1.2	7.6	3.8	0.018	B6011-470Y	47.0	1.07	0.74	0.362
B6011-1R5Y	1.5	6.9	3.5	0.02	B6011-560Y	56.0	0.95	0.68	0.397
B6011-1R8Y	1.8	6.5	3.2	0.021	B6011-680Y	68.0	0.87	0.62	0.446
B6011-2R2Y	2.2	5.7	2.9	0.029	B6011-820Y	82.0	0.8	0.56	0.604
B6011-2R7Y	2.7	5.1	2.6	0.034	B6011-101Y	100.0	0.73	0.5	0.672
B6011-3R3Y	3.3	4.6	2.4	0.038	B6011-121Y	120.0	0.66	0.45	0.735
B6011-3R9Y	3.9	4.3	2.2	0.042	B6011-151Y	150.0	0.58	0.4	0.998
B6011-4R7Y	4.7	4.0	2.0	0.047	B6011-181Y	180.0	0.5	0.35	1.37
B6011-5R6Y	5.6	3.8	1.9	0.051	B6011-221Y	220.0	0.46	0.32	1.58
B6011-6R8Y	6.8	3.5	1.7	0.058	B6011-271Y	270.0	0.41	0.3	1.77
B6011-8R2Y	8.2	3.3	1.5	0.063	B6011-331Y	330.0	0.37	0.28	2.51
B6011-100Y	10.0	3.1	1.4	0.071	B6011-391Y	390.0	0.34	0.26	2.73
B6011-120Y	12.0	2.7	1.3	0.079	B6011-471Y	470.0	0.32	0.24	3.36
B6011-150Y	15.0	2.3	1.2	0.089	B6011-561Y	560.0	0.3	0.23	3.75
B6011-180Y	18.0	1.9	1.1	0.119	B6011-681Y	680.0	0.28	0.2	4.31
B6011-220Y	22.0	1.7	1.02	0.152	B6011-821Y	820.0	0.26	0.17	6.04
B6011-270Y	27.0	1.6	0.95	0.179	B6011-102Y	1000.0	0.24	0.15	6.9
B6011-330Y	33.0	1.3	0.88	0.222	B6011-152Y	1500.0	0.075	0.46	7.3

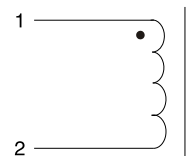
PHYSICAL CHARACTERISTICS:

WINDING:

DIMENSIONS(MM)



LAND PATTERNS



- Testing: (Equivalent acceptable)
Inductance: HP4284A, 1.0KHz / 1Vdc@25°C
RDC: QuadTech 1880 Milliohm meter
- Inductance Tolerance: ± 15 %
- Isat Max: Determined when superimposed DC current is decreased 5% against its initial value
- Operating temperature: -25°C to +105°C (Including temp. rise 40°C)
- Storage Temperature: -40°C to +85°C
- Resistance to soldering heat: 260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance



SMD INDUCTORS B6012 SERIES

FEATURES:

- Flame retardant encapsulant (UL 94 V-0)
- Completely encapsulated winding provides superior environmental protection and moisture resistance
- High current unit in surface mount package printed with model, inductance value and date code
- Compatible with infrared or conventional reflow soldering methods
- Pick and place compatible

COMMON APPLICATIONS:

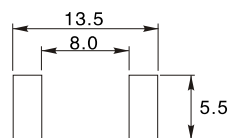
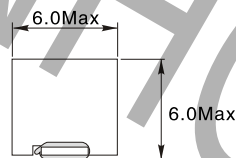
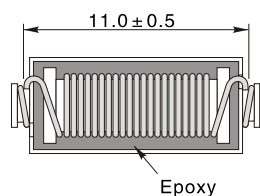
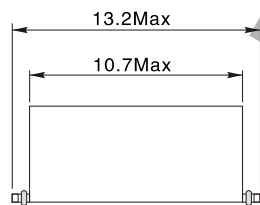
- Excellent power line noise filters
- Filters for switching regulated power supplies, DC/DC converters
- SCR and triac controls
- RFI suppression

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) @0A _{dc}	Heat rating current DC Amps I _{rms} (A)	Saturation current DC Amps I _{sat} (A)	DCR Max. (Ω).	Part Number	Inductance L0(μH) @0A _{dc}	Heat rating current DC Amps I _{rms} (A)	Saturation current DC Amps I _{sat} (A)	DCR Max. (Ω).
B6012-1R0M	1.0	1.8	16.2	0.012	B6012-101K	100.0	0.2	1.6	0.961
B6012-1R2M	1.2	1.8	15.3	0.013	B6012-121K	120.0	0.2	1.4	1.03
B6012-1R5M	1.5	1.8	14.4	0.014	B6012-151K	150.0	0.2	1.4	1.08
B6012-1R8M	1.8	1.8	9.0	0.015	B6012-181K	180.0	0.2	1.3	1.19
B6012-2R2M	2.2	1.4	8.6	0.022	B6012-221K	220.0	0.2	1.2	1.25
B6012-2R7M	2.7	1.2	8.1	0.032	B6012-271K	270.0	0.15	1.1	1.56
B6012-2R2M	3.3	1.2	7.7	0.034	B6012-331K	330.0	0.15	1.0	1.80
B6012-3R9M	3.9	0.7	6.5	0.065	B6012-391K	390.0	0.12	0.9	2.62
B6012-4R7M	4.7	.7	5.5	0.068	B6012-471K	470.0	0.12	0.81	2.88
B6012-5R6M	5.6	0.7	5.2	0.073	B6012-561K	560.0	0.1	0.72	3.83
B6012-6R8M	6.8	0.7	5.0	0.077	B6012-681K	680.0	0.1	0.58	4.20
B6012-8R2M	8.2	0.7	4.8	0.081	B6012-821K	820.0	0.1	0.54	4.53
B6012-100M	10.0	0.7	4.7	0.103	B6012-102K	1000.0	0.1	0.52	4.79
B6012-120K	12.0	0.7	4.4	0.107	B6012-122K	1200.0	0.075	0.49	6.34
B6012-150K	15.0	0.7	4.1	0.112	B6012-152K	1500.0	0.075	0.46	7.30
B6012-180K	18.0	0.7	3.8	0.125	B6012-182K	1800.0	0.06	0.43	11.22
B6012-220K	22.0	0.6	3.0	0.167	B6012-222K	2200.0	0.06	0.38	12.41
B6012-270K	27.0	0.5	2.6	0.218	B6012-272K	2700.0	0.06	0.28	16.10
B6012-330K	33.0	0.3	2.4	0.308	B6012-332K	3300.0	0.06	0.26	18.35
B6012-390K	39.0	0.3	2.3	0.340	B6012-392K	3900.0	0.06	0.25	24.82
B6012-470K	47.0	0.3	2.1	0.370	B6012-472K	4700.0	0.03	0.23	25.48
B6012-560K	56.0	0.3	1.9	0.409	B6012-562K	5600.0	0.03	0.21	31.83
B6012-680K	68.0	0.3	1.8	0.449	B6012-682K	6800.0	0.03	0.19	36.90
B6012-820K	82.0	0.3	1.7	0.488					

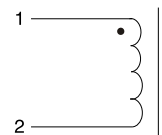
PHYSICAL CHARACTERISTICS:

DIMENSIONS(MM)



LAND PATTERNS

WINDING:



- Testing: (Equivalent acceptable)
Inductance: HP4284A, 10KHz / 0.1V_{dc}@25°C
RDC: QuadTech 1880 Milliohm meter
- Inductance Tolerance: ±20%(1μH to 10μH)
±10%(12μH to 6.8mH)
- I_{sat} Max: Determined when superimposed DC current is decreased 5% against its initial value
- Operating temperature: -25°C to +105°C (Including temp. rise 40°C)
- Storage Temperature: -40°C to +85°C
- Resistance to soldering heat: 260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance



SMD INDUCTORS

B8020 SERIES

FEATURES:

- Flame retardant encapsulant (UL 94 V-0)
- Completely encapsulated winding provides superior environmental protection and moisture resistance
- High current unit in surface mount package printed with model, inductance value and date code
- Compatible with infrared or conventional reflow soldering methods
- Pick and place compatible

COMMON APPLICATIONS:

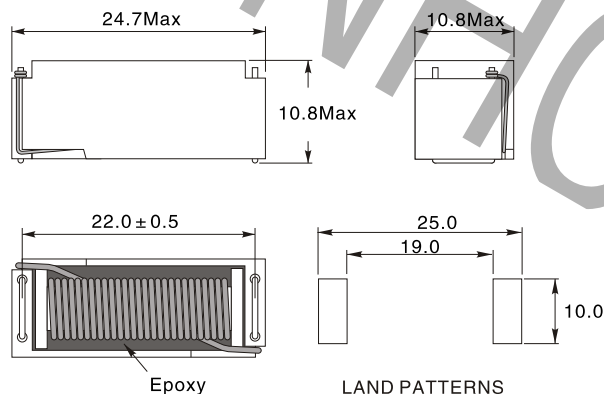
- Excellent power line noise filters
- Filters for switching regulated power supplies, DC/DC converters
- SCR and triac controls
- RFI suppression

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) @0Adc	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat(A)	DCR Max. (Ω)	Part Number	Inductance L0(μH) @0Adc	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat(A)	DCR Max. (Ω)
B8020-3R9K	3.9	4.0	15.5	.007	B8020-681K	680	1.0	1.05	.548
B8020-4R7K	4.7	4.0	13.9	.008	B8020-821K	820	0.8	.97	.655
B8020-5R6K	5.6	4.0	12.6	.011	B8020-102K	1000	0.8	.87	.844
B8020-6R8K	6.8	4.0	11.6	.011	B8020-122K	1200	0.6	.79	1.04
B8020-8R2K	8.2	4.0	9.89	.013	B8020-152K	1500	0.6	.70	1.18
B8020-100K	10	4.0	8.70	.017	B8020-182K	1800	0.6	.64	1.56
B8020-120K	12	4.0	8.21	.019	B8020-222K	2200	0.5	.58	2.00
B8020-150K	15	4.0	7.34	.022	B8020-272K	2700	0.4	.53	2.06
B8020-180K	18	4.0	6.64	.023	B8020-332K	3300	0.4	.47	2.53
B8020-220K	22	4.0	6.07	.026	B8020-392K	3900	0.4	.43	2.75
B8020-270K	27	4.0	5.36	.027	B8020-472K	4700	0.4	.39	3.19
B8020-330K	33	4.0	4.82	.032	B8020-562K	5600	0.315	.359	3.92
B8020-390K	39	4.0	4.36	.033	B8020-682K	6800	0.250	.322	5.69
B8020-470K	47	4.0	3.98	.035	B8020-822K	8200	0.250	.293	6.32
B8020-560K	56	3.2	3.66	.037	B8020-103K	10000	0.250	.266	7.30
B8020-680K	68	2.5	3.31	.047	B8020-123K	12000	0.200	.241	9.21
B8020-820K	82	2.0	3.10	.060	B8020-153K	15000	0.200	.214	10.50
B8020-101K	100	1.6	2.79	.090	B8020-183K	18000	0.158	.198	14.80
B8020-121K	120	1.6	5.54	.113	B8020-223K	22000	0.125	.180	21.8
B8020-151K	150	1.6	2.22	.129	B8020-273K	27000	0.125	.162	22.7
B8020-181K	180	1.6	1.98	.150	B8020-333K	33000	0.125	.146	25.7
B8020-221K	220	1.6	1.89	.162	B8020-393K	39000	0.100	.135	31.8
B8020-271K	270	1.6	1.63	.208	B8020-473K	47000	0.100	.122	36.1
B8020-331K	330	1.6	1.51	.212	B8020-563K	56000	0.100	.112	40.9
B8020-391K	390	1.6	1.39	.281	B8020-683K	68000	0.082	.101	57.3
B8020-471K	470	1.2	1.24	.380	B8020-823K	82000	0.065	.090	79.3
B8020-561K	560	1.0	1.17	.420	B8020-104K	100000	0.065	.081	89.7

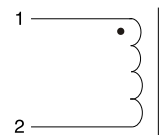
PHYSICAL CHARACTERISTICS:

DIMENSIONS(MM)

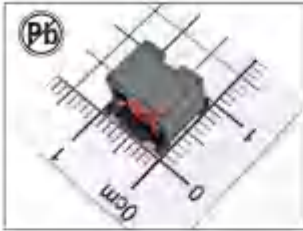


LAND PATTERNS

WINDING:



- Testing: (Equivalent acceptable)
Inductance: HP4284A, 1.0KHz / 0.1Vdc @25°C
RDC: QuadTech 1880 Milliohm meter
- Inductance Tolerance: $\pm 10\%$
- Isat Max: Determined when superimposed DC current is decreased 10% against its initial value
- Operating temperature: -25°C to +105°C (Including temp. rise 40°C)
- Storage Temperature: -40°C to +85°C
- Resistance to soldering heat: 260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance



HIGH CURRENT POWER INDUCTORS

CEP 104 SERIES

FEATURES:

- Compact size using flat wire, and SMD type
- Low radiation noise by magnetically shielded construction
- High current
- Low resistance

COMMON APPLICATIONS:

- High efficiency DC/DC converters
- Single and polyphase buck converters
- Filter for audio applications
- Optimized for high current boost applications

ELECTRICAL CHARACTERISTICS:

Part No.	Inductance @ 100KHz (μ H) $\pm$ 20%	DCR (m Ω) Max.	DC saturation current			Temperature rise 40°C current (A) Max.
			Ld Drop 10% Max.	Ld Drop 20% Max.	Ld Drop 30% Max.	
CEP104-0R8	0.8	4.0	24.9	25.2	25.5	16.3
CEP104-1R0	1.0	4.0	16.5	17.0	17.5	16.3
CEP104-1R2	1.2	6.0	20.5	21.0	21.3	15.0
CEP104-1R3	1.3	4.0	12.9	16.8	17.2	16.3
CEP104-1R5	1.5	4.0	13.5	14.0	14.5	16.3
CEP104-1R8	1.8	6.0	13.3	13.8	14.3	15.0
CEP104-2R0	2.0	9.0	15.3	15.8	16.2	11.5
CEP104-2R2	2.2	4.0	8.9	9.6	10.0	16.3
CEP104-2R5	2.5	7.5	11.4	11.8	12.1	12.0
CEP104-3R2	3.2	6.0	7.3	6.0	6.5	15.0
CEP104-4R0	4.0	9.0	6.3	6.5	6.8	11.5
CEP104-4R3	4.3	7.5	6.4	6.6	7.0	12.0
CEP104-5R7	5.7	9.0	5.4	5.8	6.0	11.5

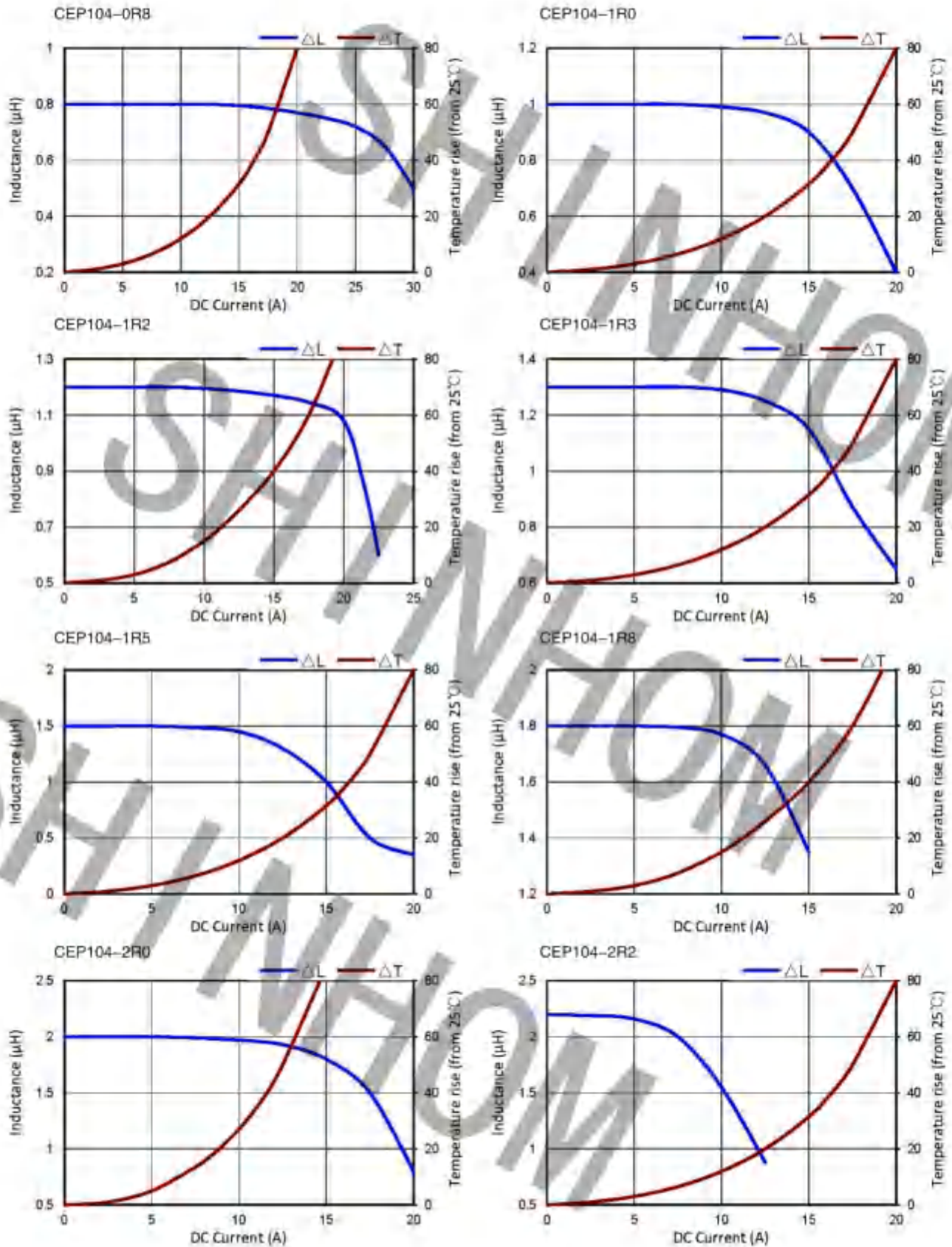
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)

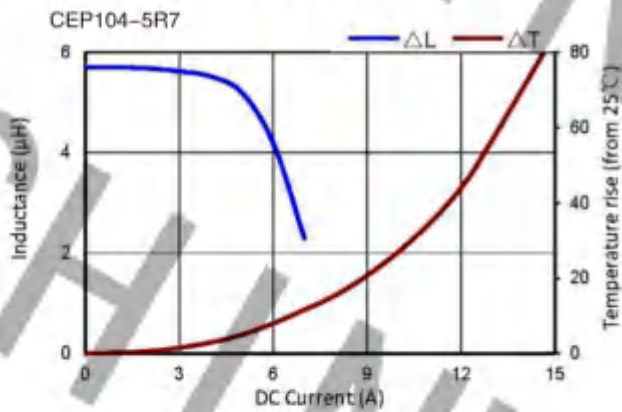
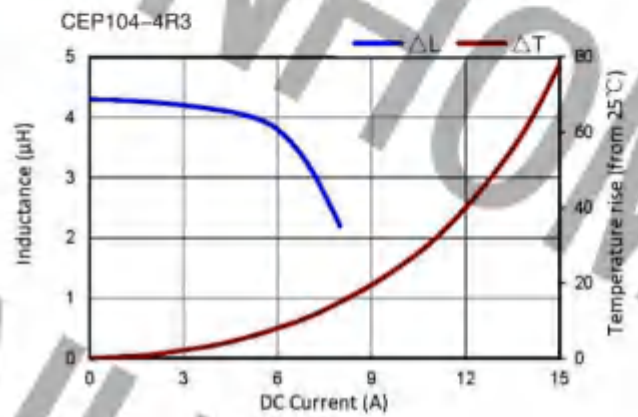
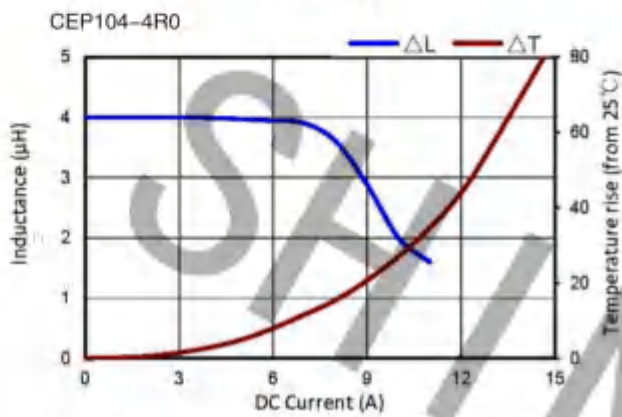
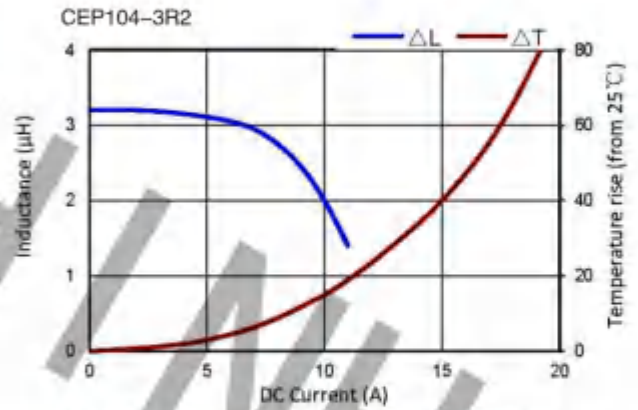
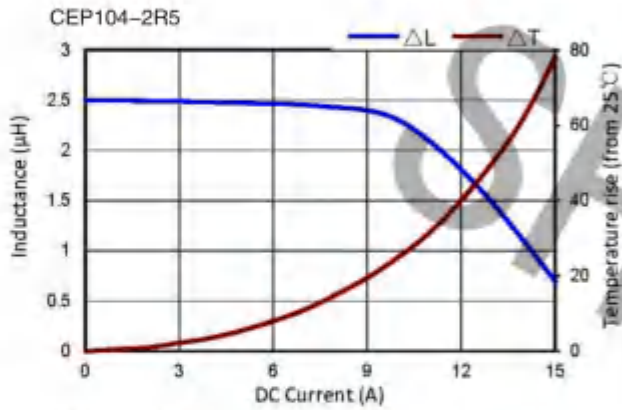


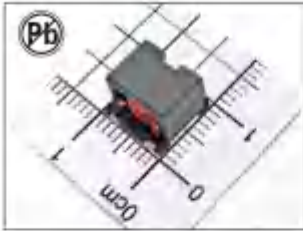
- Test Frequency : 100KHz / 0.25V
- Testing Instrument : LHP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be vented in the end application.
- Operating Temperature & Storage Temperature: -40°C ~ +105°C.
- All specifications subject to change without notice.

ELECTRICAL CHARACTERISTIC CURVE:



ELECTRICAL CHARACTERISTIC CURVE:





HIGH CURRENT POWER INDUCTORS

CEP 105 SERIES

FEATURES:

- Compact size using flat wire, and SMD type
- Low radiation noise by magnetically shielded construction
- High current
- Low resistance

COMMON APPLICATIONS:

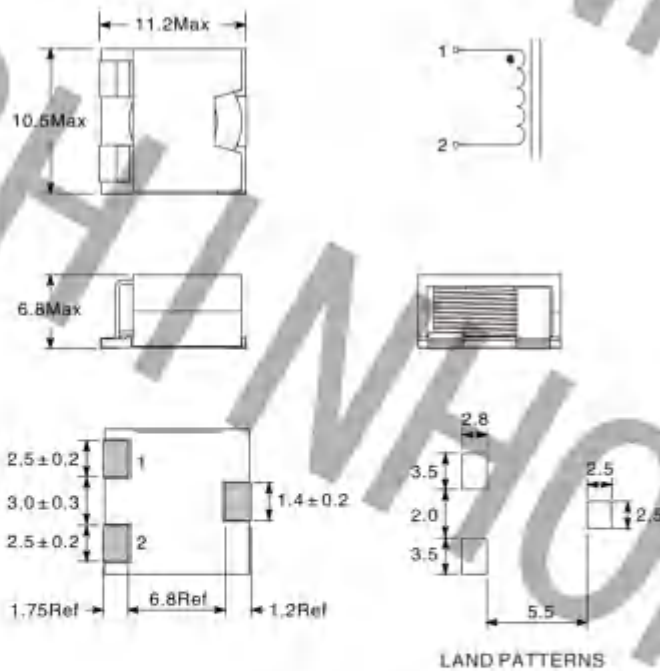
- High efficiency DC/DC converters
- Single and polyphase buck converters
- Filter for audio applications
- Optimized for high current boost applications

ELECTRICAL CHARACTERISTICS:

Part No.	Inductance @ 100KHz (μ H) $\pm$ 20%	DCR (m Ω) Max	DC saturation current			Temperature rise 10°C current (A) Max
			L0 Drop 10% Max	L0 Drop 20% Max	L0 Drop 30% Max	
CEP105-5R6	5.6	10.5	4.0	7.8	10.5	8.5
CEP105-6R8	6.8	12.0	3.5	6.8	9.8	7.5
CEP105-9R0	9.0	16.0	3.2	5.7	9.1	6.6
CEP105-100	10.0	18.8	3.0	5.5	9.0	6.0
CEP105-120	12.0	21.0	2.4	5.0	7.2	5.2
CEP105-150	15.0	26.5	2.0	4.2	6.5	4.6
CEP105-220	22.0	40.0	2.0	3.0	5.2	4.0

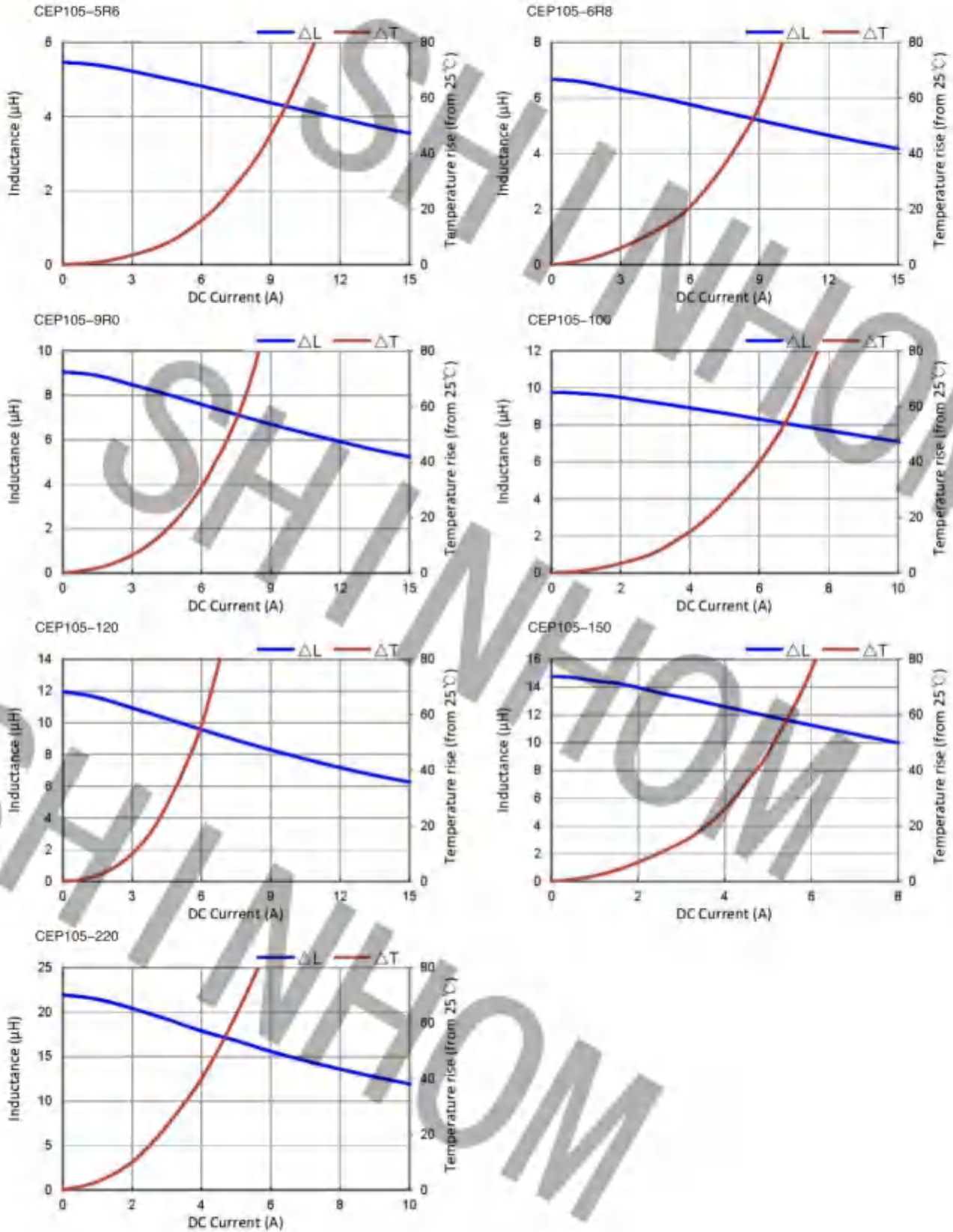
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



- Test Frequency : 100KHz / 0.25V
- Testing Instrument : LHP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- 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.
- All specifications subject to change without notice.

ELECTRICAL CHARACTERISTIC CURVE:





HIGH CURRENT POWER INDUCTORS

CEP 136 SERIES

FEATURES:

- Compact size using flat wire, and SMD type
- Low radiation noise by magnetically shielded construction
- High current
- Low resistance

COMMON APPLICATIONS:

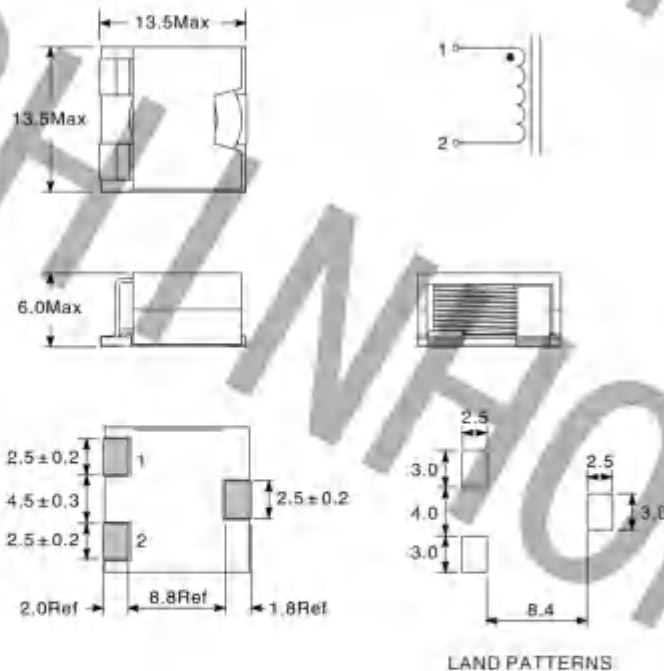
- High efficiency DC/DC converters
- Single and polyphase buck converters
- Filter for audio applications
- Optimized for high current boost applications

ELECTRICAL CHARACTERISTICS:

Part No.	Inductance @ 100KHz (μ H) $\pm$ 20%	DCR (m Ω) Max	DC saturation current			Temperature rise 100% current ($^{\circ}$ C) Max
			L0 Drop 10% Max	L0 Drop 20% Max	L0 Drop 30% Max	
CEP136-1R0	1.0	2.6	32	33	33.5	13
CEP136-2R2	2.2	2.6	15	17	18	13
CEP136-2R7	2.7	2.6	12	13	14	13
CEP136-3R3	3.3	6.0	11.5	12.5	13.5	9.4
CEP136-4R7	4.7	6.0	9.5	11	12	9.4
CEP136-6R8	6.8	6.0	8.0	9	9.5	9.4
CEP136-8R2	8.2	10.8	7.5	8.5	9	7.6
CEP136-100	10	10.8	6.2	7	7.5	7.5

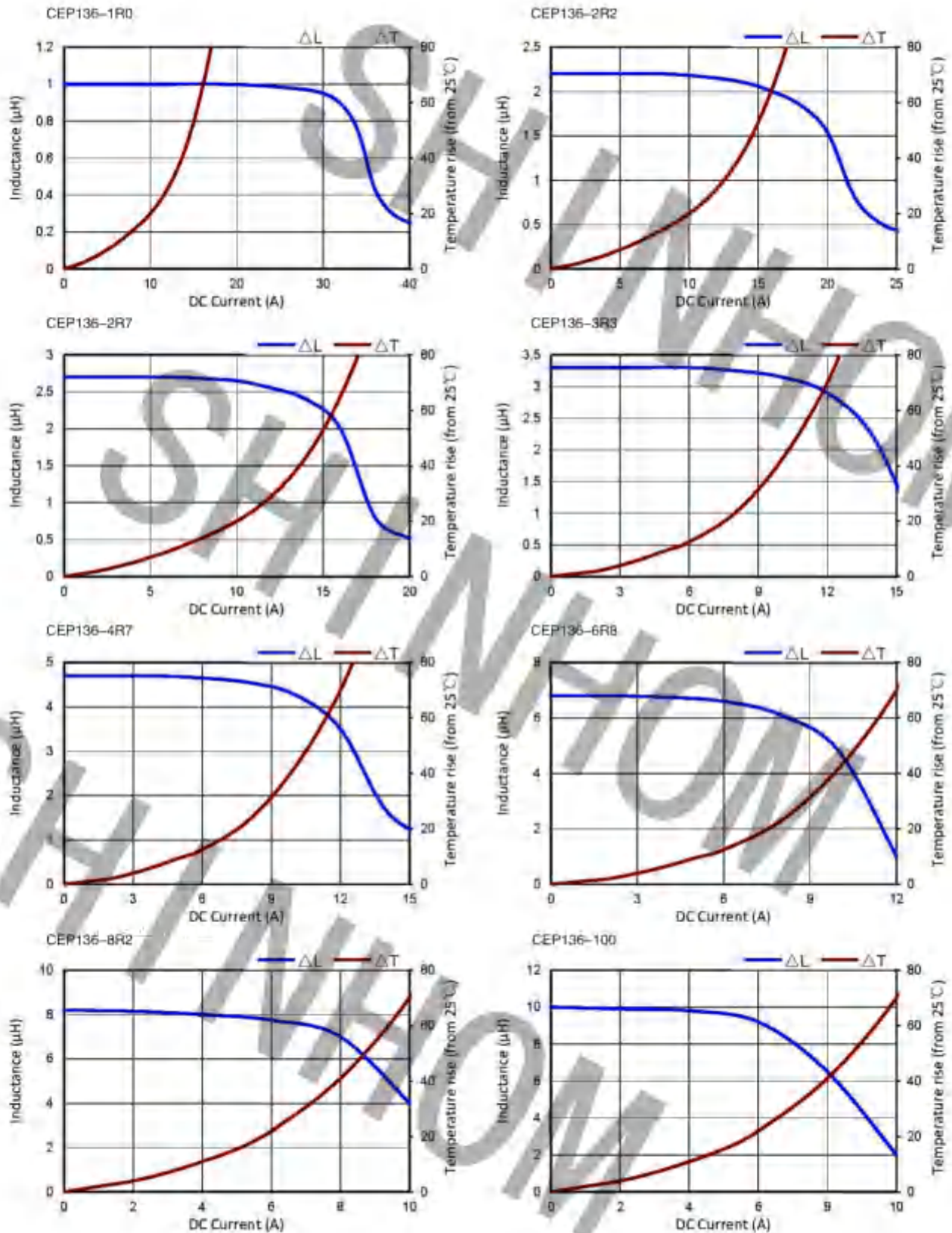
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



- Test Frequency : 100KHz / 0.25V
- Testing Instrument : LHP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- The part temperature (ambient + temp rise) should not exceed 125 $^{\circ}$ 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 $^{\circ}$ C ~ +105 $^{\circ}$ C.
- All specifications subject to change without notice.

ELECTRICAL CHARACTERISTIC CURVE:





HIGH CURRENT POWER INDUCTORS

CEP 139 SERIES

FEATURES:

- Compact size using flat wire, and SMD type
- Low radiation noise by magnetically shielded construction
- High current
- Low resistance

COMMON APPLICATIONS:

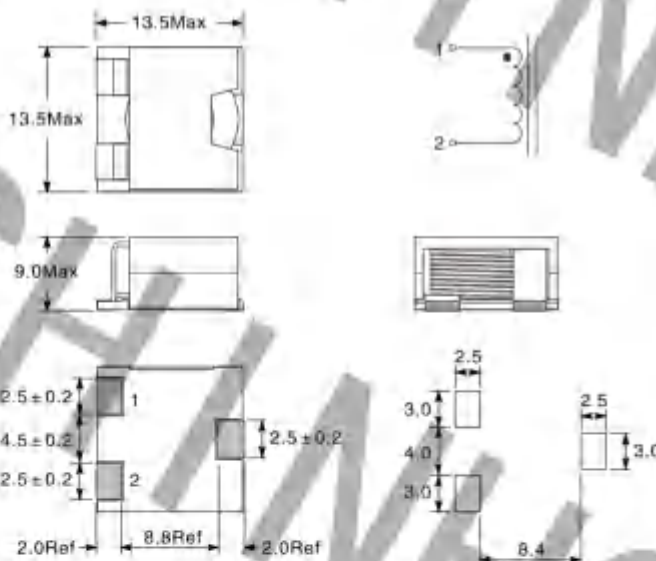
- High efficiency DC/DC converters
- Single and polyphase buck converters
- Filter for audio applications
- Optimized for high current boost applications

ELECTRICAL CHARACTERISTICS:

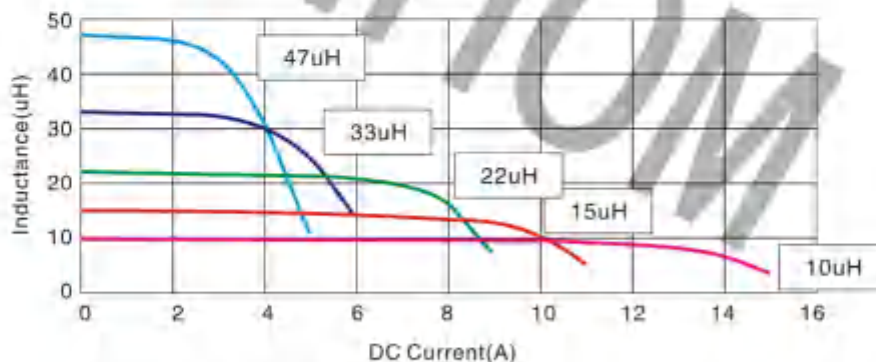
Part No.	Inductance @100KHz (μH) $\pm 20\%$	DCR (m Ω)	DC saturation current			Temperature rise 40°C current (A) Max
			LD Drop 10% Max	LD Drop 20% Max	LD Drop 30% Max	
CEP139-100	10	15	11.4	12.6	13.2	9.2
CEP139-150	15	15	7.2	8.1	8.7	9.2
CEP139-220	22	23	6.1	6.8	7.4	7.7
CEP139-330	33	23	3.6	4.4	4.8	7.7
CEP139-470	47	23	2.6	3.0	3.2	7.7

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



- Test Frequency : 100KHz / 0.25V
- Testing Instrument : L:HP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- 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.
- All specifications subject to change without notice.





HIGH CURRENT POWER INDUCTORS

CEP 1412 SERIES

FEATURES:

- Compact size using flat wire and SMD type
- Low radiation noise by magnetically shielded construction
- High current
- Low resistance

COMMON APPLICATIONS:

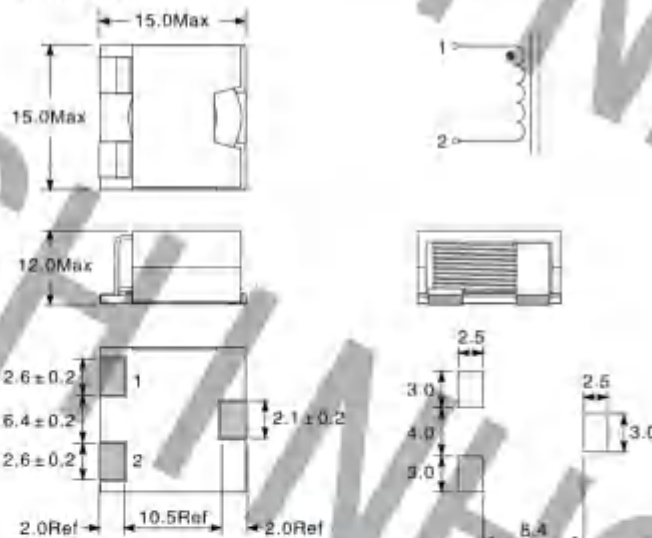
- High efficiency DC/DC converters
- Single and polyphase buck converters
- Filter for audio applications
- Optimized for high current boost applications

ELECTRICAL CHARACTERISTICS:

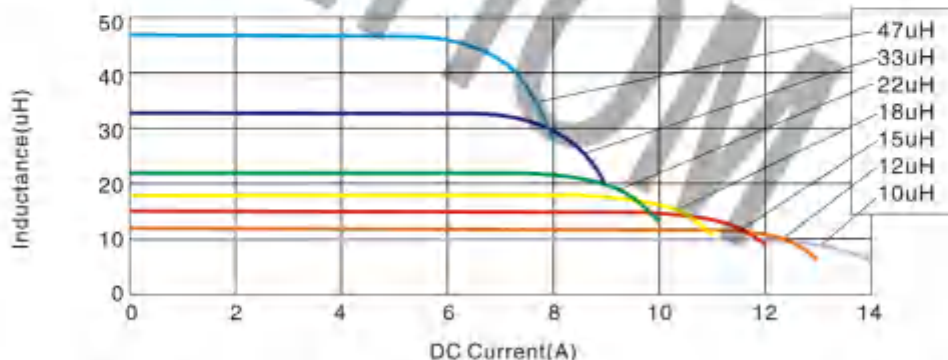
Part No.	Inductance @ 100KHz (uH) $\pm 20\%$	DCR (mΩ)	DC saturation current			Temperature rise 40°C current (A) Max.
			L0 Drop 10% Max	L0 Drop 20% Max	L0 Drop 30% Max	
CEP1412-100	10	7.98	11.9	13.1	13.5	10.1
CEP1412-120	12	9.42	10.7	11.8	12.5	9.7
CEP1412-150	15	10.8	9.8	10.9	11.6	9.1
CEP1412-180	18	12.6	9.1	10.0	10.5	8.4
CEP1412-220	22	15.2	7.9	8.8	9.4	7.8
CEP1412-330	33	17.9	7.0	7.9	8.6	7.1
CEP1412-470	47	17.9	6.0	6.9	7.4	6.5

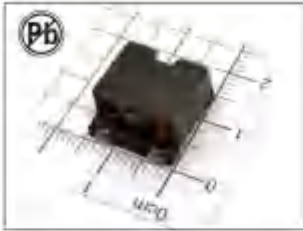
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



- Test Frequency : 100KHz / 0.25V
- Testing Instrument : LHP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- 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.
- All specifications subject to change without notice.





HIGH CURRENT POWER INDUCTORS

CEP 148 SERIES

FEATURES:

- Compact size using flat wire and SMD type
- Low radiation noise by magnetically shielded construction
- High current
- Low resistance

COMMON APPLICATIONS:

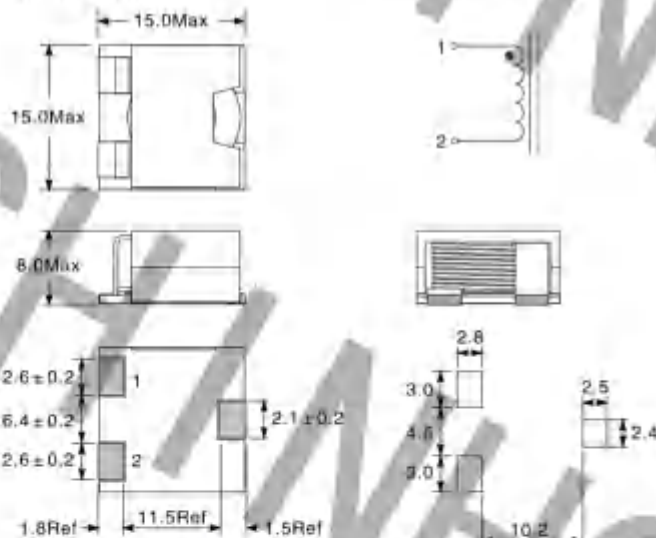
- High efficiency DC/DC converters
- Single and polyphase buck converters
- Filter for audio applications
- Optimized for high current boost applications

ELECTRICAL CHARACTERISTICS:

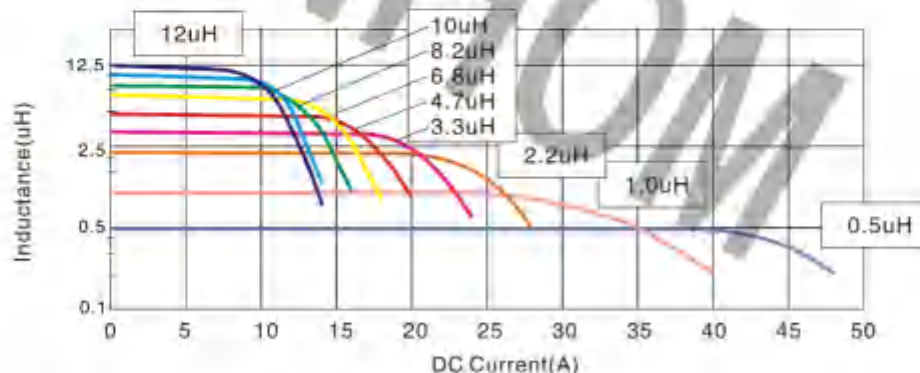
Part No.	Inductance @ 100KHz (μH) $\pm 20\%$	DCR (m Ω)	DC saturation current			Temperature rise 40°C current (A) Max
			L0 Drop 10% Max	L0 Drop 20% Max	L0 Drop 30% Max	
CEP148-0R5	0.5	1.2	39.0	42.0	43.0	23
CEP148-1R0	1.0	1.2	25.4	28.0	29.2	23
CEP148-2R2	2.2	2.0	19.0	21.0	21.8	20
CEP148-3R3	3.3	3.3	15.0	17.0	18.0	17.5
CEP148-4R7	4.7	5.0	12.0	14.0	15.0	16
CEP148-6R8	6.8	6.0	10.2	12.0	12.8	12.5
CEP148-8R2	8.2	7.8	9.0	10.0	10.7	11
CEP148-100	10.0	9.6	8.5	9.5	10.2	10
CEP148-120	12.0	13.0	7.5	8.5	9.2	8.5

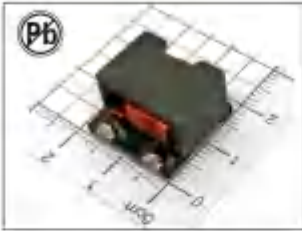
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



- Test Frequency : 100KHz / 0.25V
- Testing Instrument : LHP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc: CH16502, Agilent33420A MICRO OHMMETER.
- 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.
- All specifications subject to change without notice.





HIGH CURRENT POWER INDUCTORS

CEP 1812 SERIES

FEATURES:

- Compact size using flat wire, and SMD type
- Low radiation noise by magnetically shielded construction
- High current
- Low resistance

COMMON APPLICATIONS:

- High efficiency DC/DC converters
- Single and polyphase buck converters
- Filter for audio applications
- Optimized for high current boost applications

ELECTRICAL CHARACTERISTICS:

Part No.	Inductance @ 100KHz (μ H) $\pm 20\%$	DCR (m Ω)Max	DC saturation current L0 Drop 25% Max	Temperature rise 40 $\circ$ C current (A)Max
CEP1812-5R6	5.6	2.00	12.0	22.5
CEP1812-8R2	8.2	2.42	10.5	19.5
CEP1812-12	12	3.29	9.0	18.0
CEP1812-15	15	4.33	8.0	16.5
CEP1812-22	22	5.60	6.8	16.0
CEP1812-27	27	7.92	6.7	12.5
CEP1812-33	33	8.94	5.5	12.0

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



- Test Frequency : 100KHz / 0.25V
- Testing Instrument : L:HP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- The part temperature (ambient + temp rise) should not exceed 125 $\circ$ 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 $\circ$ C - +105 $\circ$ C,
- All specifications subject to change without notice.

SMD HIGH CURRENT POWER INDUCTOR CEP2214 SERIES

FEATURES:

- Magnetic shielding structure, excellent resistance to electromagnetic interference
- Flat wire winding, low ESR, small parasitic capacitance
- Additional terminal design structure, soldering firmly
- Compact design saves installation area
- Low power loss, suitable for applications of wide temperature and frequency range



ELECTRICAL CHARACTERISTICS:@25°C

Part Number	Inductance (uH) ± 20%	DCR (mΩ) Max	Saturation current Isat(A)	Temperature rise current Irms(A)
CEP2214-3R3M	3.3	1.87	52	36.5
CEP2214-6R8M	6.8	1.87	27	36.5
CEP2214-120M	12.0	4.32	23.2	23.5
CEP2214-220M	22.0	4.32	12.5	23.5
CEP2214-330M	33.0	12.6	13.5	12.8
CEP2214-470M	47.0	12.6	10	12.8

PHYSICAL CHARACTERISTICS:

WINDING:



GENERAL SPECIFICATIONS:

- All data is tested based on 25 °C ambient temperature
- Inductance measure condition at 100kHz, 1.0V.
- Saturation current: the actual value of DC current when the inductance decrease 20% of its initial value
- Temperature rise current: the actual value of DC current when the temperature rise is Δ T40 °C (Ta=25 °C)
- Special remind:Circuit design, component placement, PCB size and thickness, cooling system and etc. all will affect the product temperature. Please verify the product temperature in the final application
- Operating temperature : -40 °C to +125 °C (Including coil's temperature rise)

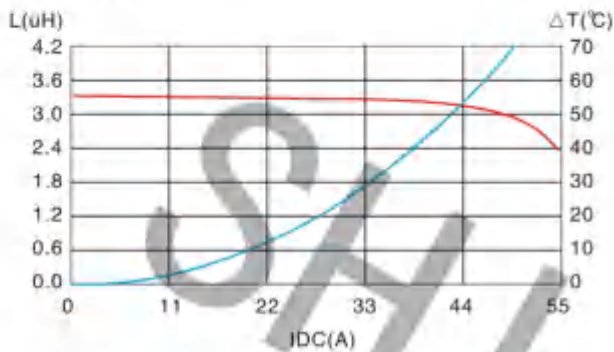
Note:All specifications subject to change without notice.

SMD HIGH CURRENT POWER INDUCTOR CEP2214 SERIES

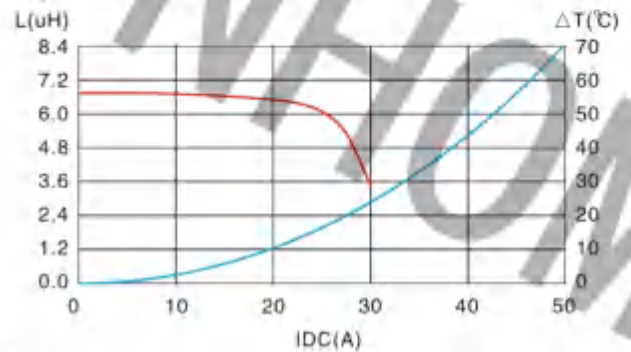


SATURATION CURRENT VS TEMPERATURE RISE CURRENT CURVE

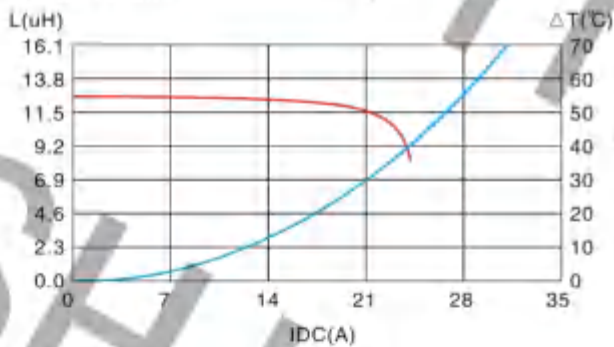
CEP2214-3R3M



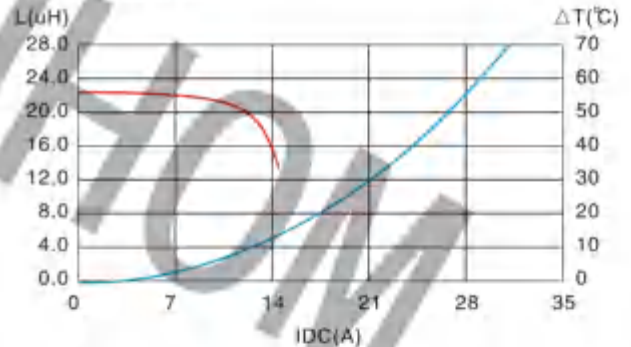
CEP2214-6R8M



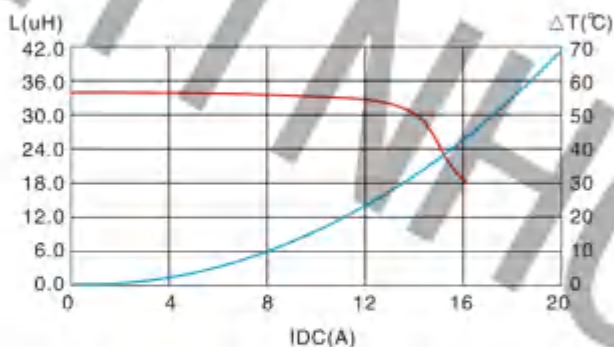
CEP2214-120M



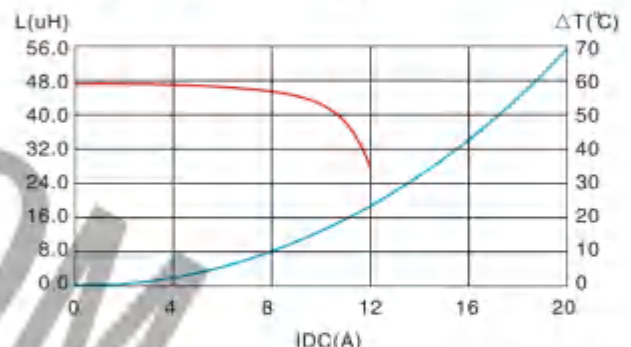
CEP2214-220M



CEP2214-330M



CEP2214-470M

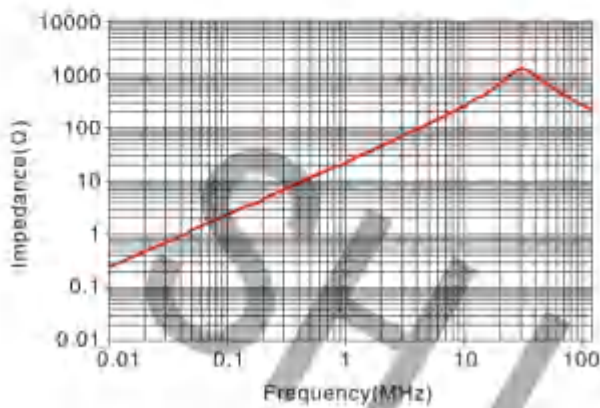


SMD HIGH CURRENT POWER INDUCTOR CEP2214 SERIES

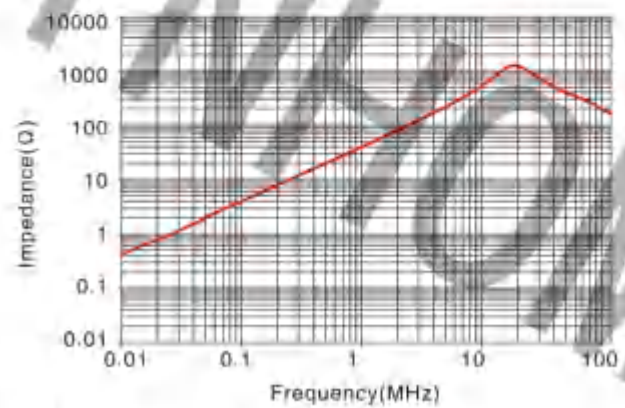


IMPEDANCE VS FREQUENCY

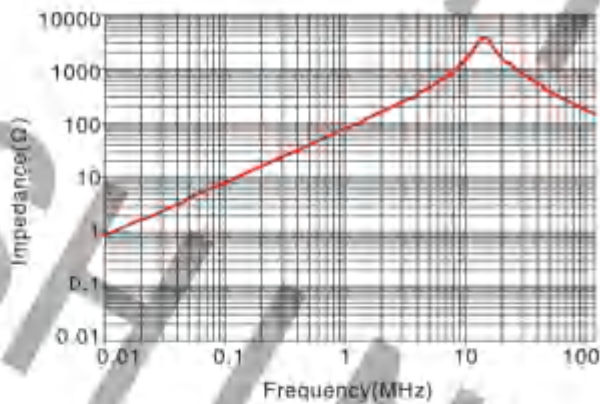
CEP2214-3R3M



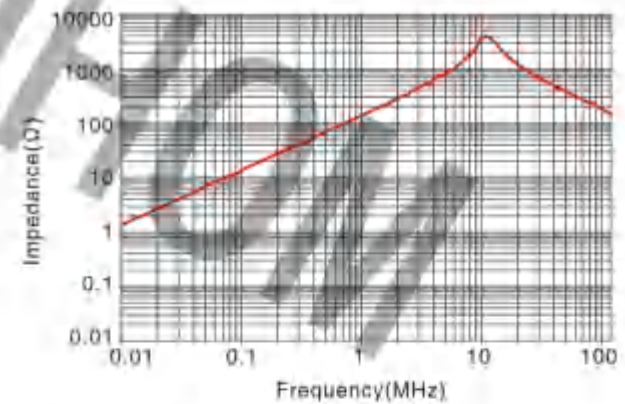
CEP2214-6R8M



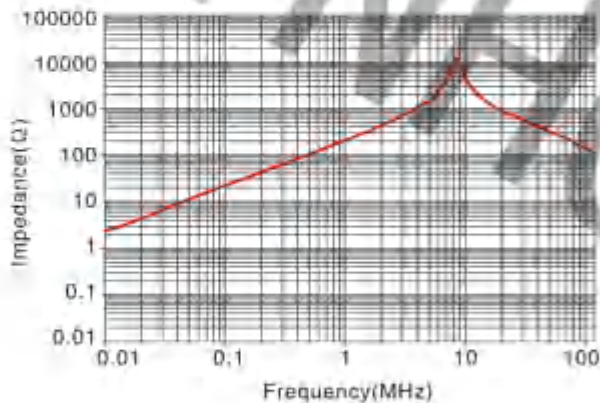
CEP2214-120M



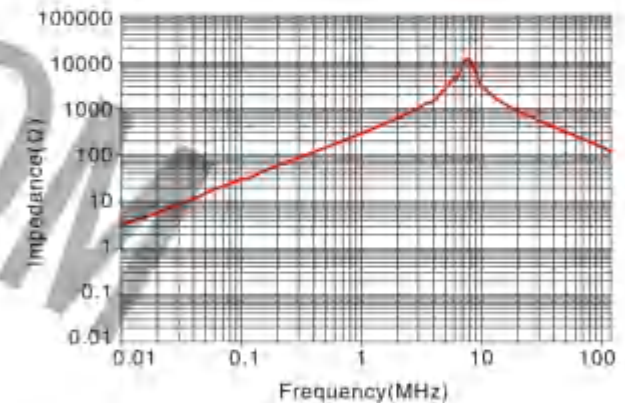
CEP2214-220M



CEP2214-330M



CEP2214-470M





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:

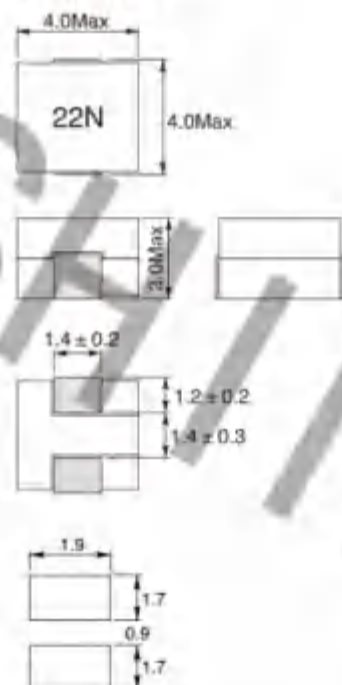
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 15\%$ @0A _{dc}	Inductance (nH) Min @ Isat1	Heat rating current DC Amps I _{rms} (A)	Saturation current DC Amps Isat1(A)	Saturation current DC Amps Isat2(A)	DCR @ 25 °C (mΩ) $\pm 25\%$
HCB0404R1-22NM	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	68	19	16	13	0.32
HCB0404R1-R11Y	110	74	19	14	12	0.32
HCB0505R1-R10K	100	68	30	34	24	0.39

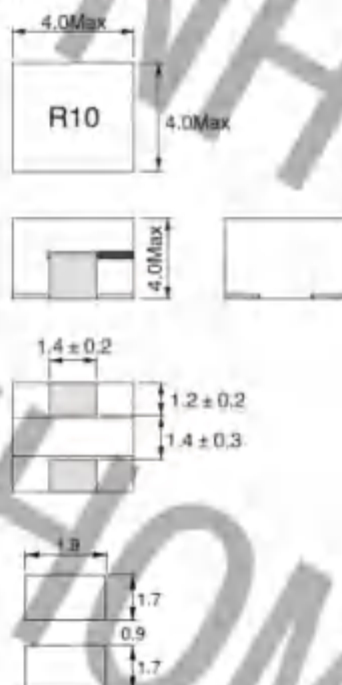
DIMENSIONS:(mm)

0404R1-22NM



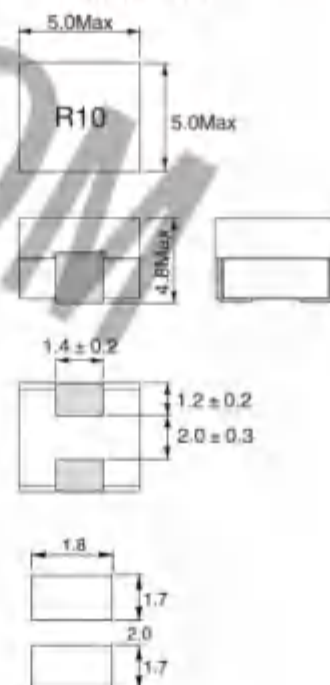
Recommended pad layout

0404R1-65NY,80NY,R10Y,R11Y



Recommended pad layout

0505R1-R10K



Recommended pad layout

NOTES:

- Test Frequency : 100KHz / 0.1V @ 25 °C (1MHz/0.1V for 22NM)
- I_{rms}: 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

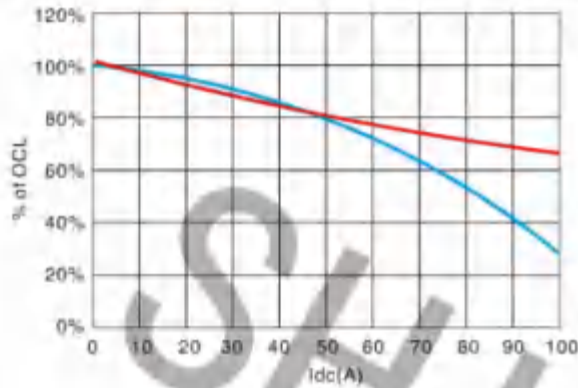


HIGH CURRENT POWER INDUCTORS

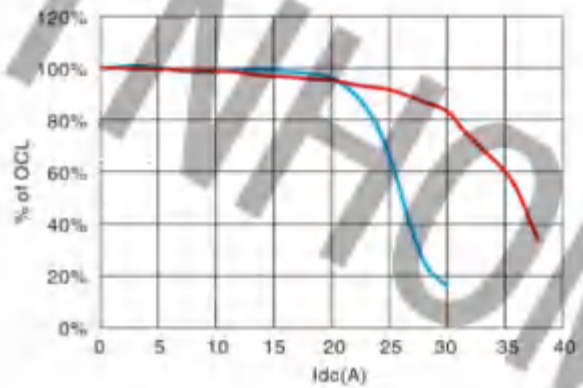
HCB0404 0505 SERIES

INDUCTANCE CHARACTERISTICS:

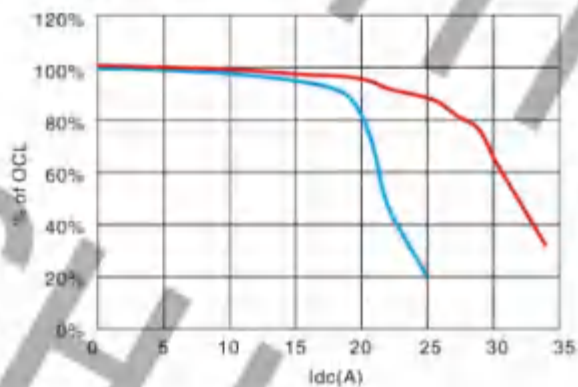
HCB0404R1-22NM



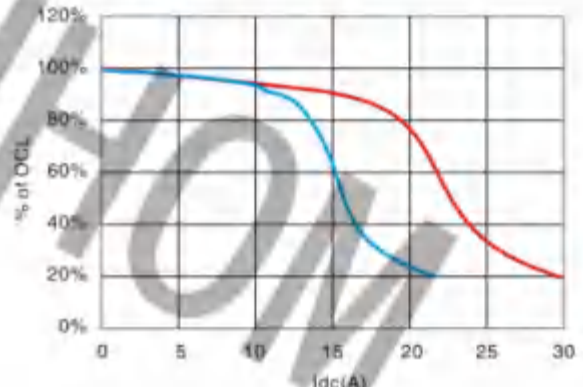
HCB0404R1-65NY



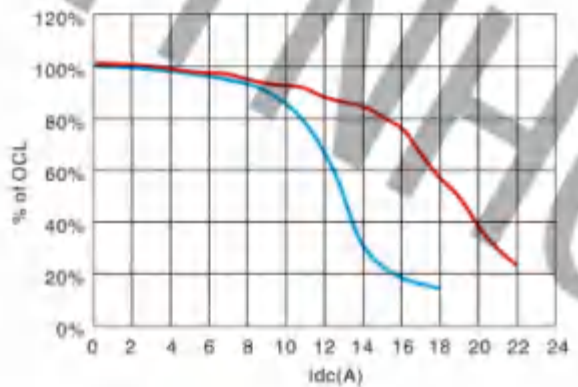
HCB0404R1-80NY



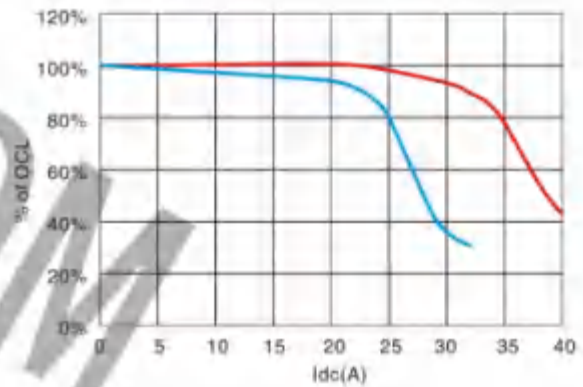
HCB0404R1-R10Y



HCB0404R1-R11Y



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:

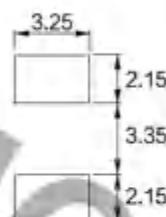
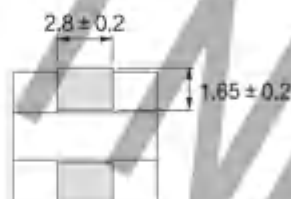
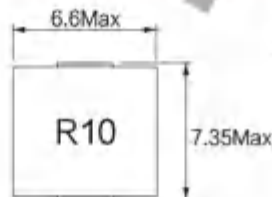
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

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

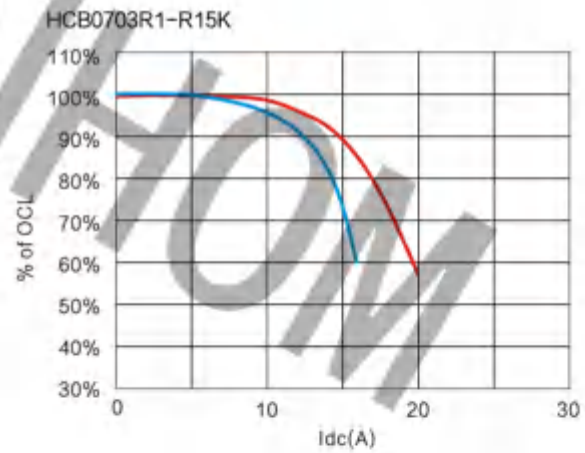
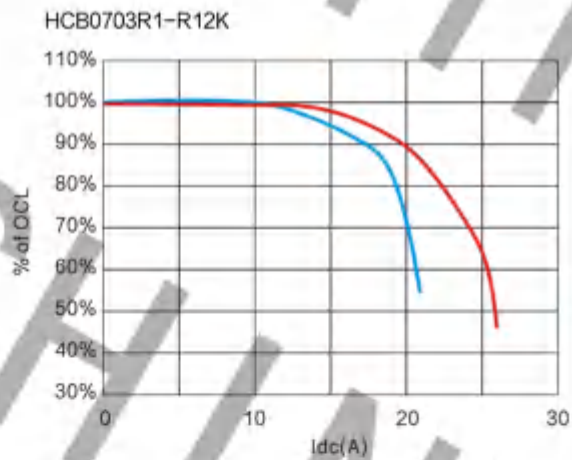
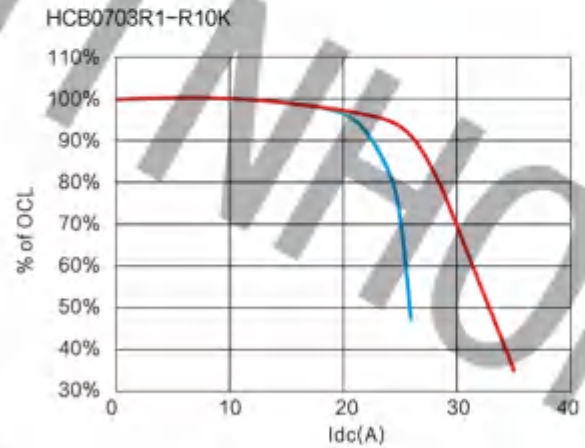
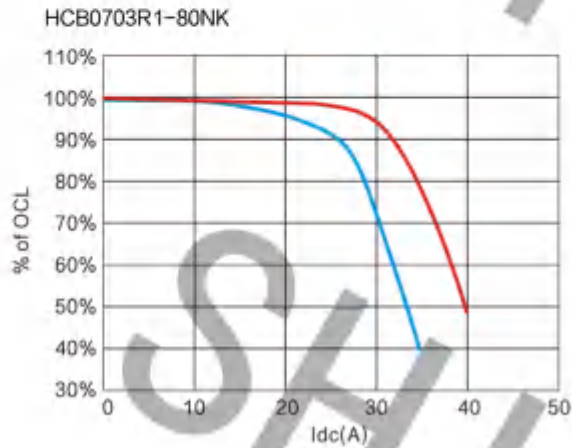
Note: All specifications subject to change without notice.



HIGH CURRENT POWER INDUCTORS

HCB0703 SERIES

INDUCTANCE CHARACTERISTICS:



— +25°C
— +125°C



HIGH CURRENT POWER INDUCTORS HCB0705 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 72nH to 226nH
- Current range from 20A to 65A
- Ferrite core material

OPTIONS:

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

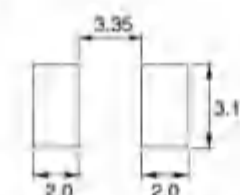
APPLICATIONS:

- 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 @ Isat1	Heat rating current DC Amps I _{rms} (A)	Saturation current DC Amps Isat1(A)	Saturation current DC Amps Isat2(A)	DCR @ 25 °C (mΩ)
HCB0705R1-72NK	72	51	43	65	50	0.25 $\pm 8\%$
HCB0705R1-R10K	105	78	43	44	34	0.25 $\pm 8\%$
HCB0705R1-R12K	120	86	43	37	30	0.25 $\pm 8\%$
HCB0705R1-R15K	150	108	43	30	24	0.25 $\pm 8\%$
HCB0705R1-R18K	180	130	43	25	20	0.25 $\pm 8\%$
HCB0705R1-R22K	226	159	43	20	16	0.25 $\pm 8\%$
HCB0705R2-72NK	72	51	38	65	50	0.32 $\pm 7\%$
HCB0705R2-R10K	105	78	38	44	34	0.32 $\pm 7\%$
HCB0705R2-R12K	120	86	38	37	30	0.32 $\pm 7\%$
HCB0705R2-R15K	150	108	38	30	24	0.32 $\pm 7\%$
HCB0705R2-R18K	180	130	38	25	20	0.32 $\pm 7\%$
HCB0705R2-R22K	226	159	38	20	16	0.32 $\pm 7\%$
HCB0705R3-72NK	72	51	32	65	50	0.46 $\pm 6\%$
HCB0705R3-R10K	105	78	32	44	34	0.46 $\pm 6\%$
HCB0705R3-R12K	120	86	32	37	30	0.46 $\pm 6\%$
HCB0705R3-R15K	150	108	32	30	24	0.46 $\pm 6\%$
HCB0705R3-R18K	180	130	32	25	20	0.46 $\pm 6\%$
HCB0705R3-R22K	226	159	32	20	16	0.46 $\pm 6\%$

DIMENSIONS(mm) :



Recommended pad layout

SCHEMATIC :



NOTES:

- Test Frequency : 100kHz / 0.1V @ 25 °C
- I_{rms}: 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

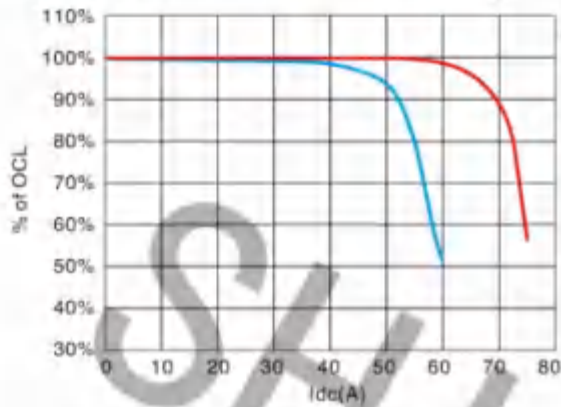


HIGH CURRENT POWER INDUCTORS

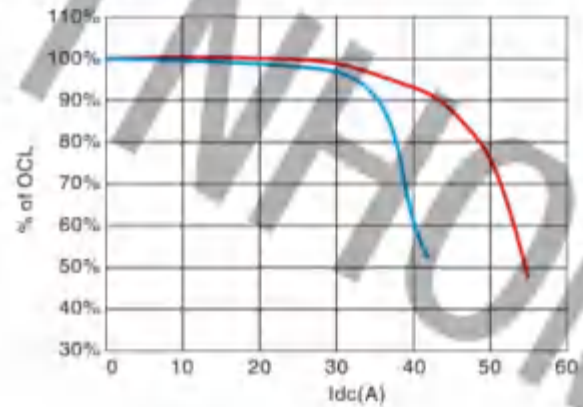
HCB0705 SERIES

INDUCTANCE CHARACTERISTICS:

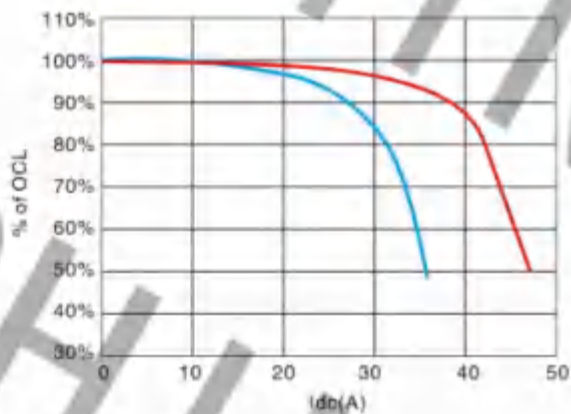
HCB0705RX-72NK



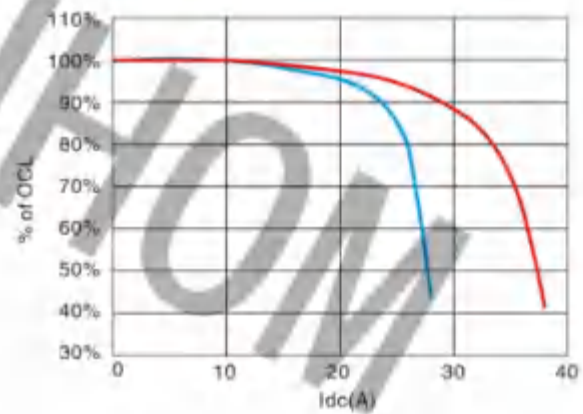
HCB0705RX-R10K



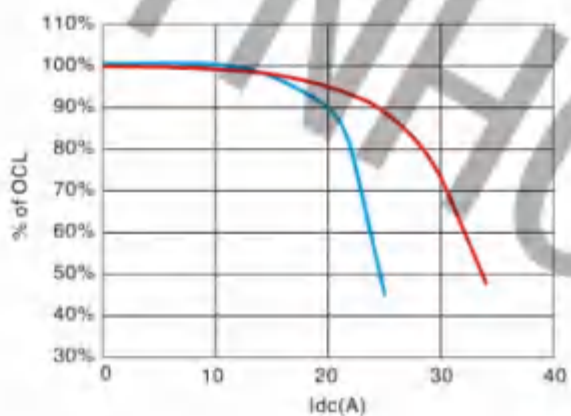
HCB0705RX-R12K



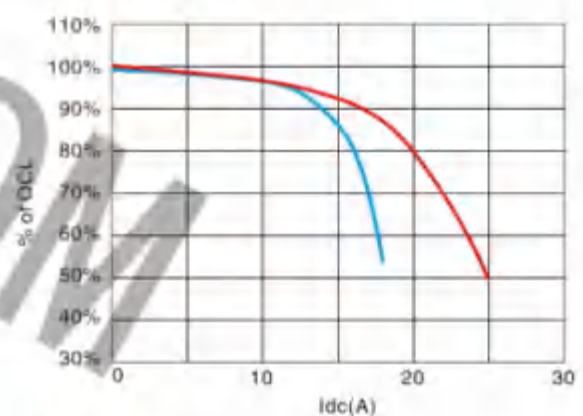
HCB0705RX-R15K



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 20A to 110A
- Ferrite core material

OPTIONS:

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

APPLICATIONS:

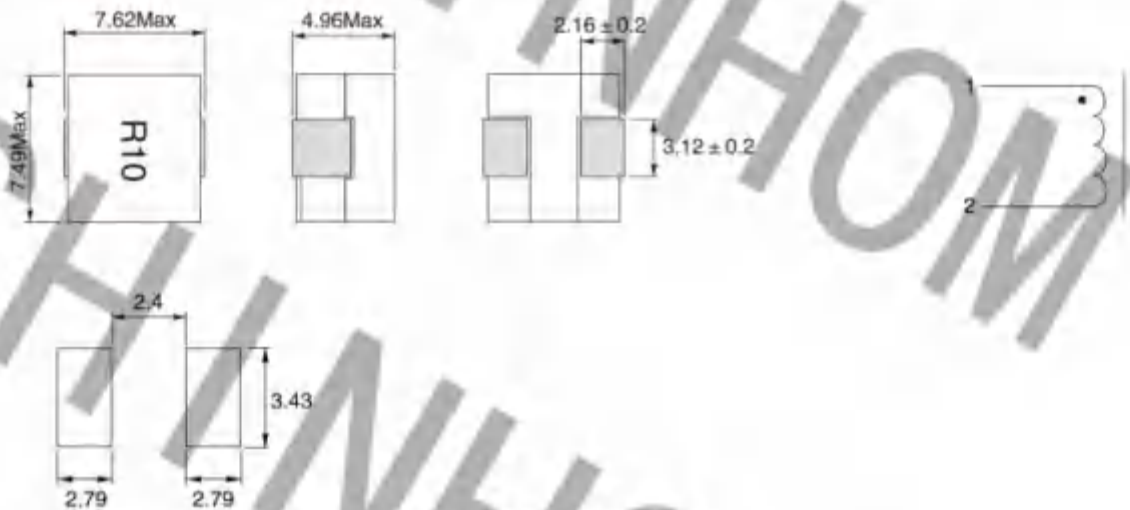
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 10\%$ @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)
HCB0805R1-32NK	32	23	65	110	95	0.17 $\pm 8\%$
HCB0805R1-58NK	58	42	65	83	81	0.17 $\pm 8\%$
HCB0805R1-72NK	72	52	65	67	49	0.17 $\pm 8\%$
HCB0805R1-R10K	100	72	65	50	35	0.17 $\pm 8\%$
HCB0805R1-R20K	200	144	65	20	16	0.17 $\pm 8\%$

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

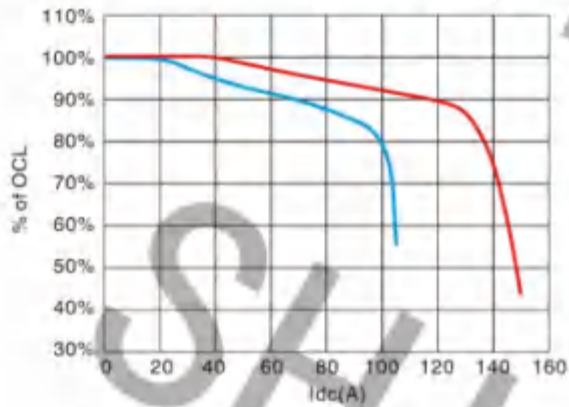


HIGH CURRENT POWER INDUCTORS

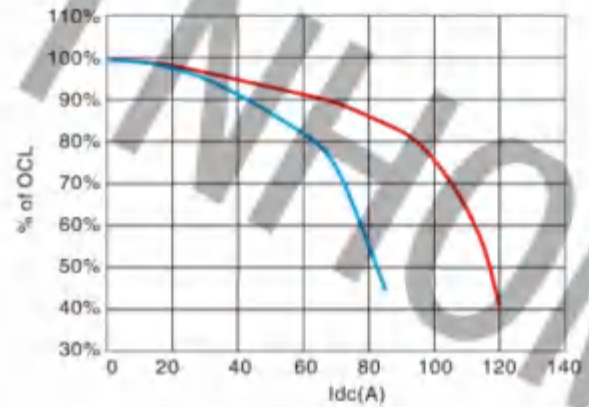
HCB0805 SERIES

INDUCTANCE CHARACTERISTICS:

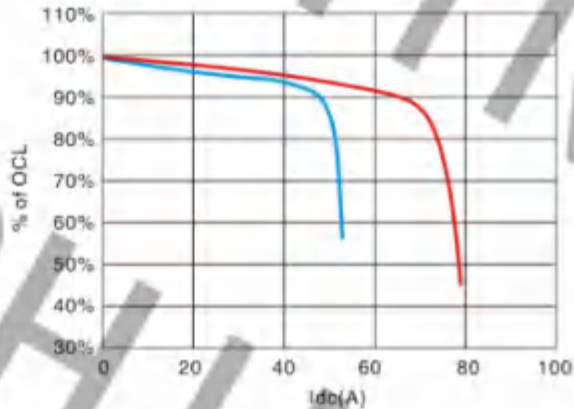
HCB0805R1-32NK



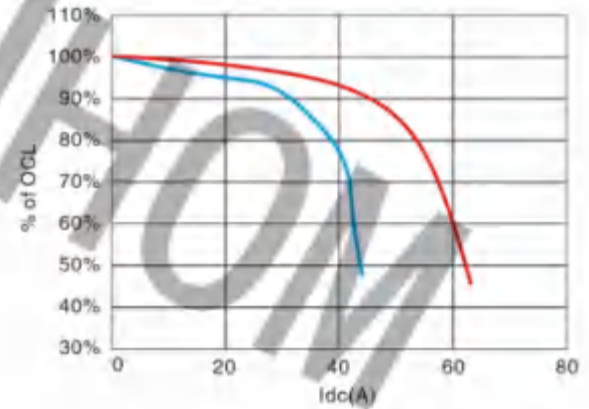
HCB0805R1-58NK



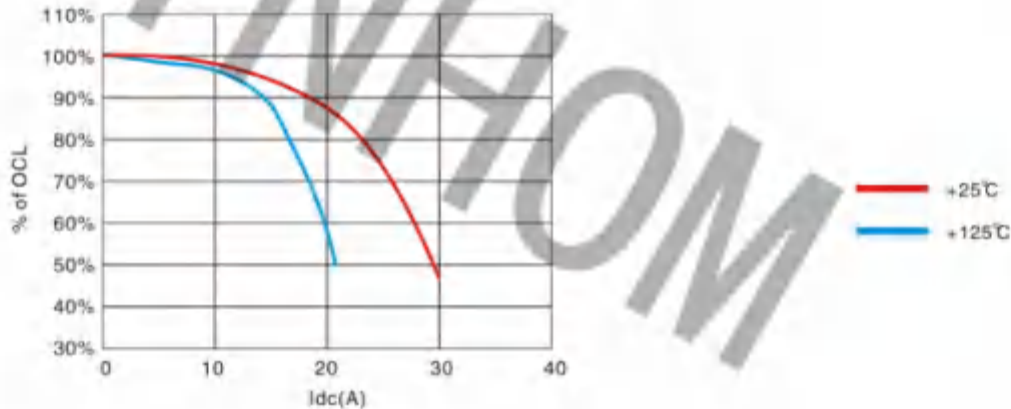
HCB0805R1-72NK



HCB0805R1-R10K



HCB0805R1-R20K





HIGH CURRENT POWER INDUCTORS

HCB0906 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 100nH to 300nH
- Current range from 32.5A to 94A
- Ferrite core material

OPTIONS:

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

APPLICATIONS:

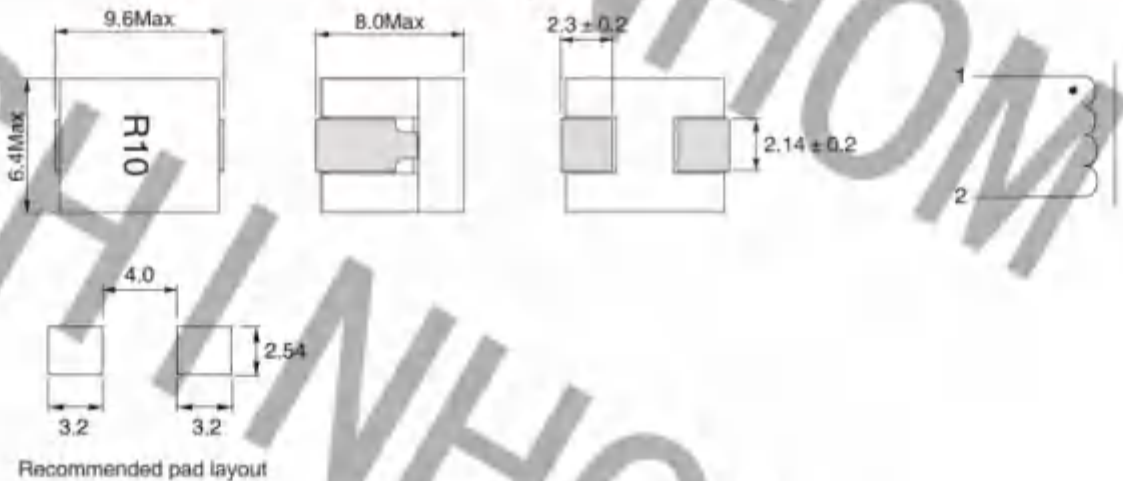
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 10\%$ @0Adc	Inductance (nH) Min @Isat1	Heat rating current DC Amps I _{rms} (A)	Saturation current DC Amps Isat1(A)	Saturation current DC Amps Isat2(A)	DCR @ 25 °C (mΩ)
HCB0906R1-R10K	100	72	51	94	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	216	51	32.5	27.5	0.29 $\pm 5\%$

DIMENSIONS(mm) :

SCHEMATIC :



NOTES:

- Test Frequency : 100KHz / 0.1V @ 25 °C
- I_{rms}: 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

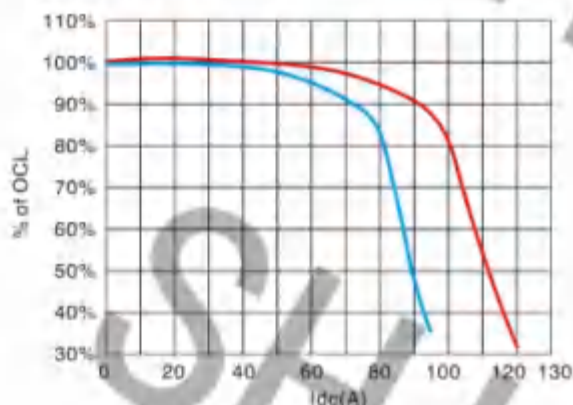


HIGH CURRENT POWER INDUCTORS

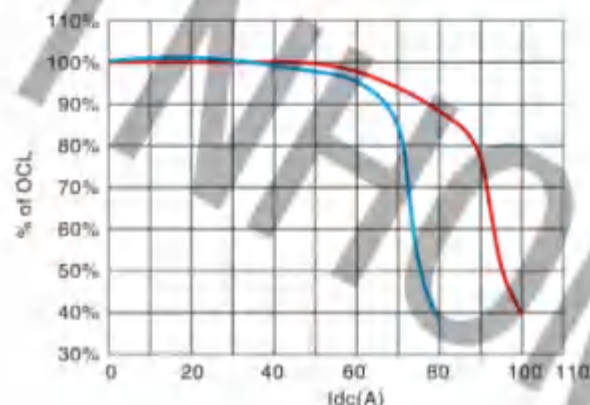
HCB0906 SERIES

INDUCTANCE CHARACTERISTICS:

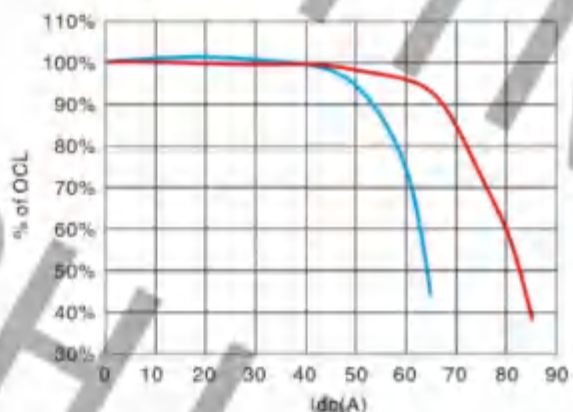
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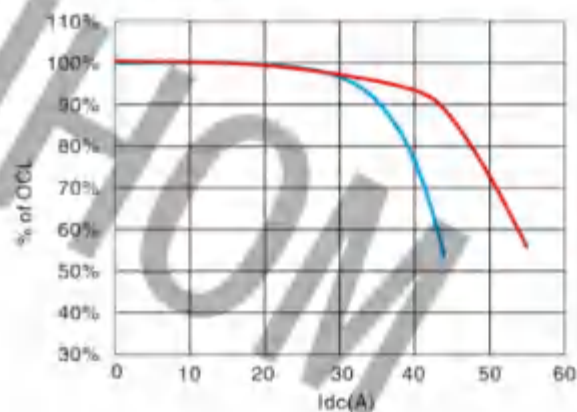
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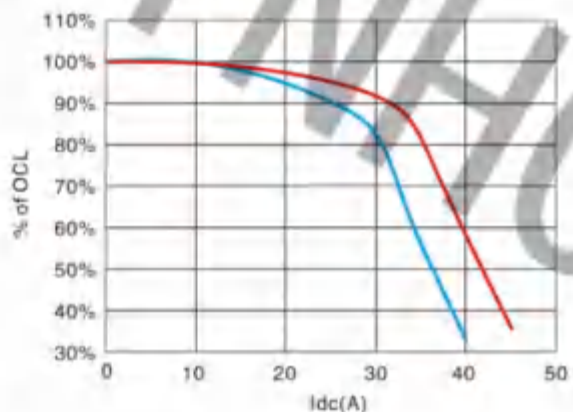
HCB0906R1-R15K



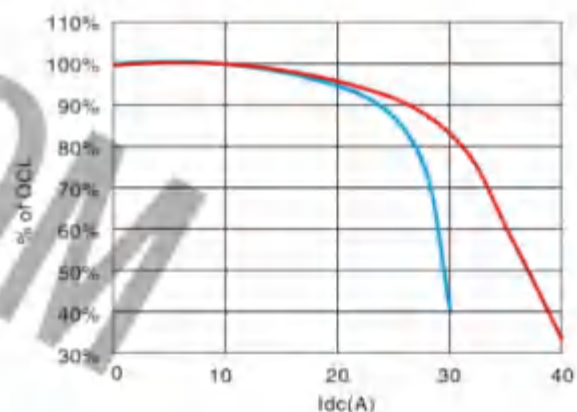
HCB0906R1-R22K



HCB0906R1-R28K



HCB0906R1-R30K



— +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 or Standard Bulk packaging Available for Smaller Quantities

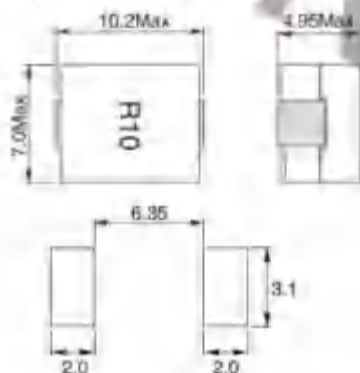
APPLICATIONS:

- 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)
HCB1005R1-80NK	80	60	53	90	64	0.39 $\pm 7.5\%$
HCB1005R1-R10K	100	72	53	73	57	0.39 $\pm 7.5\%$
HCB1005R1-R12K	120	86	53	60	48	0.39 $\pm 7.5\%$
HCB1005R1-R15K	150	108	53	47	37	0.39 $\pm 7.5\%$
HCB1005R1-R22K	220	158	53	33	26	0.39 $\pm 7.5\%$
HCB1005R2-80NK	80	60	50	90	64	0.47 $\pm 6.5\%$
HCB1005R2-R10K	100	72	50	73	57	0.47 $\pm 6.5\%$
HCB1005R2-R12K	120	86	50	60	48	0.47 $\pm 6.5\%$
HCB1005R2-R15K	150	108	50	47	37	0.47 $\pm 6.5\%$
HCB1005R2-R22K	220	158	50	33	26	0.47 $\pm 6.5\%$
HCB1005R3-80NK	80	60	50	90	64	0.55 $\pm 5.4\%$
HCB1005R3-R10K	100	72	50	73	57	0.55 $\pm 5.4\%$
HCB1005R3-R12K	120	86	50	60	48	0.55 $\pm 5.4\%$
HCB1005R3-R15K	150	108	50	47	37	0.55 $\pm 5.4\%$
HCB1005R3-R22K	220	158	50	33	26	0.55 $\pm 5.4\%$
HCB1005R4-80NK	80	60	53	90	64	0.31 $\pm 7.0\%$
HCB1005R4-R10K	100	72	53	73	57	0.31 $\pm 7.0\%$
HCB1005R4-R12K	120	86	53	60	48	0.31 $\pm 7.0\%$
HCB1005R4-R15K	150	108	53	47	37	0.31 $\pm 7.0\%$
HCB1005R4-R22K	220	158	53	33	26	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% 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

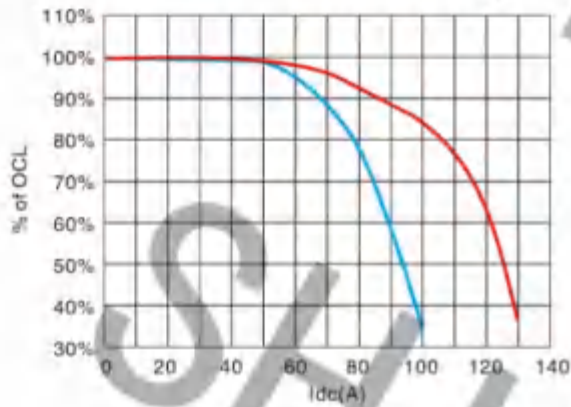


HIGH CURRENT POWER INDUCTORS

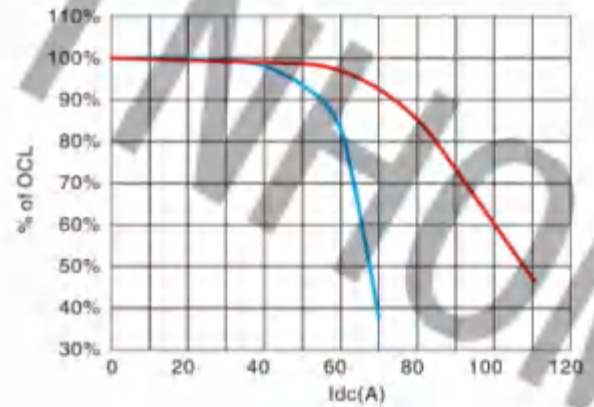
HCB1005 SERIES

INDUCTANCE CHARACTERISTICS:

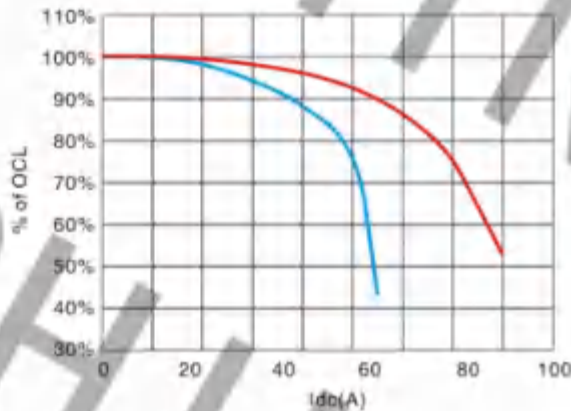
HCB1005RX-80NK



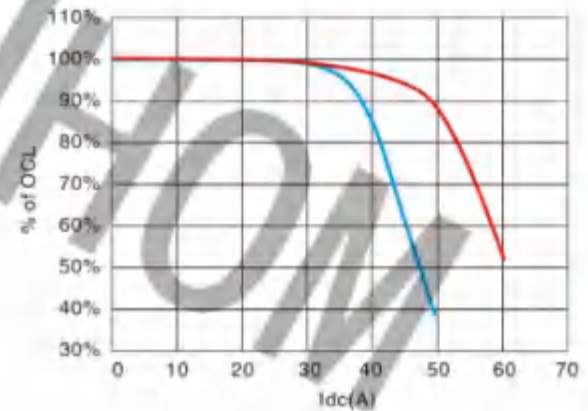
HCB1005RX-R10K



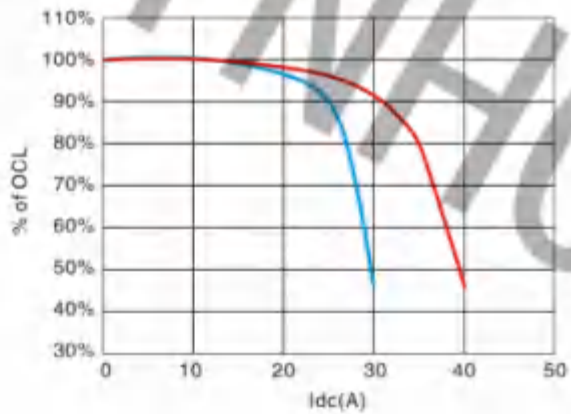
HCB1005RX-R12K



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 94A
- Ferrite core material

OPTIONS:

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

APPLICATIONS:

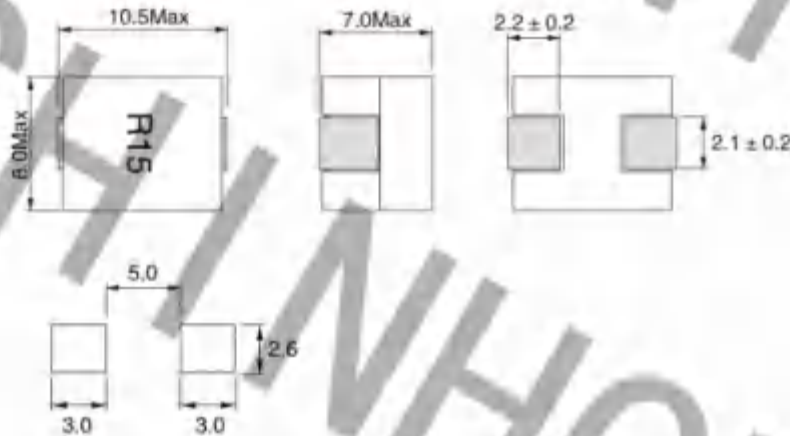
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

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)
HCB1007R1-R11K	115	83	61	94	86	0.29 $\pm 5\%$
HCB1007R1-R15K	150	108	61	75	60	0.29 $\pm 5\%$
HCB1007R1-R18K	180	129	61	60	50	0.29 $\pm 5\%$
HCB1007R1-R22K	220	158	61	50	40	0.29 $\pm 5\%$
HCB1007R1-R27K	270	194	61	41	33	0.29 $\pm 5\%$
HCB1007R1-R30K	300	216	61	35	30	0.29 $\pm 5\%$
HCB1007R1-R33K	330	237	61	33	26.5	0.29 $\pm 5\%$
HCB1007R1-R39K	390	280	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:

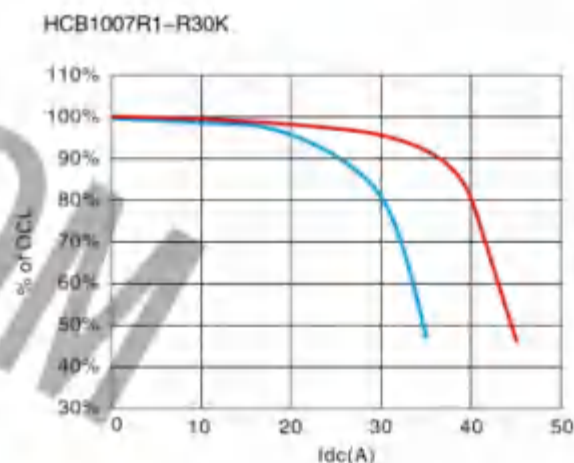
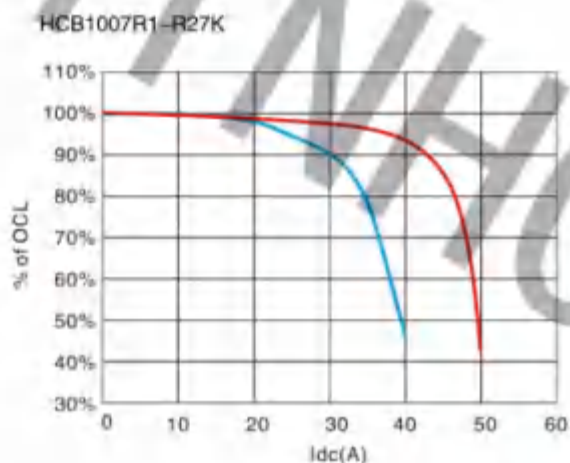
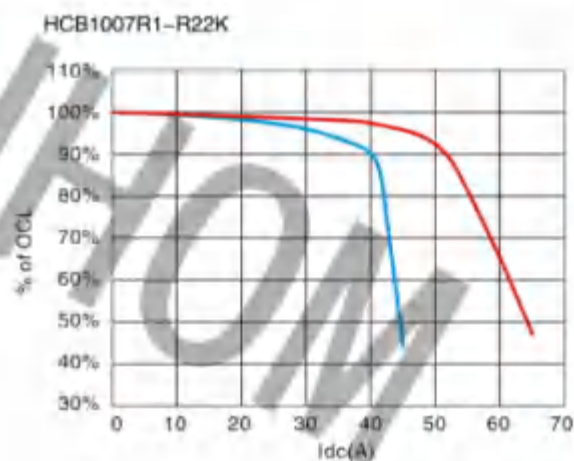
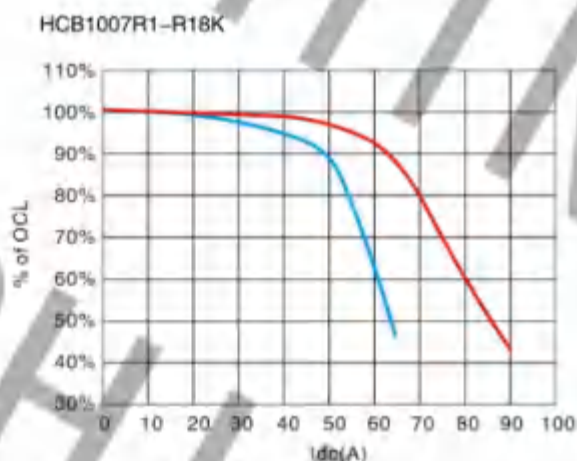
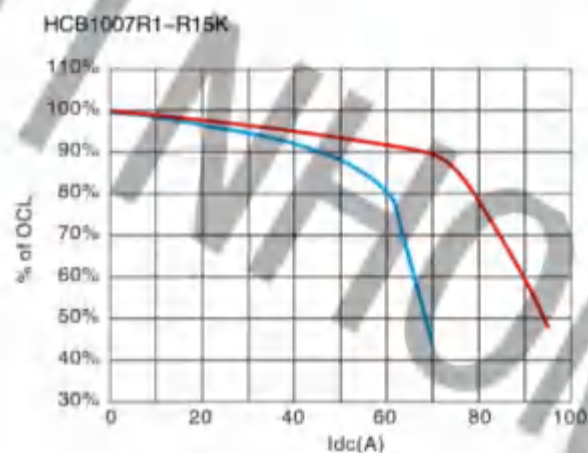
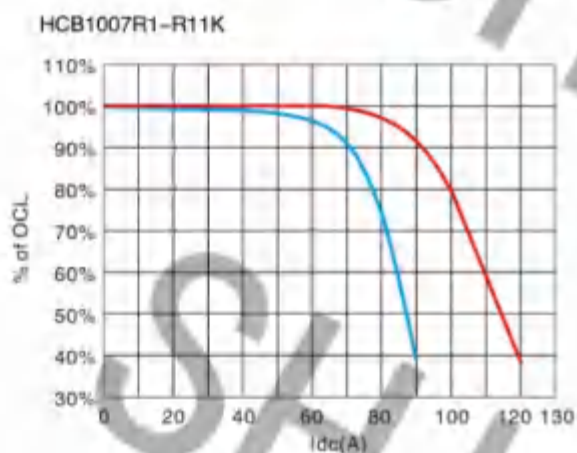
- Test Frequency : 100KHz / 0.1V @25°C
- Irms: DC current for an approximate temperature rise of 40°C without core loss
- Isat1: Peak current for approximately 20% rolloff at +25°C
- Isat2: Peak current for approximately 20% rolloff at +125°C
- Operating temperature: -40°C to +125°C (ambient plus self-temperature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



HIGH CURRENT POWER INDUCTORS

HCB1007 SERIES

INDUCTANCE CHARACTERISTICS:



— +25°C — +125°C

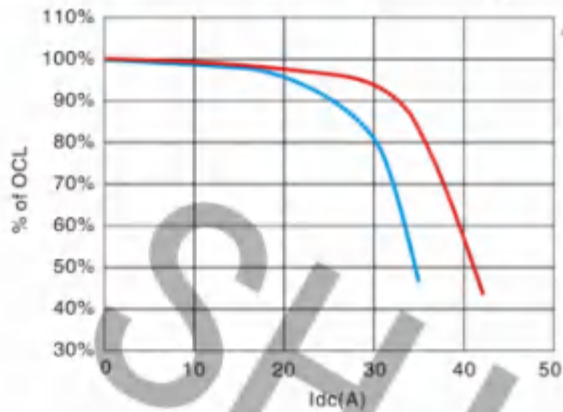


HIGH CURRENT POWER INDUCTORS

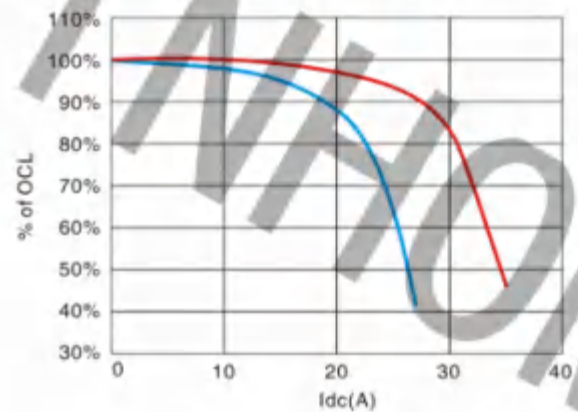
HCB1007 SERIES

INDUCTANCE CHARACTERISTICS:

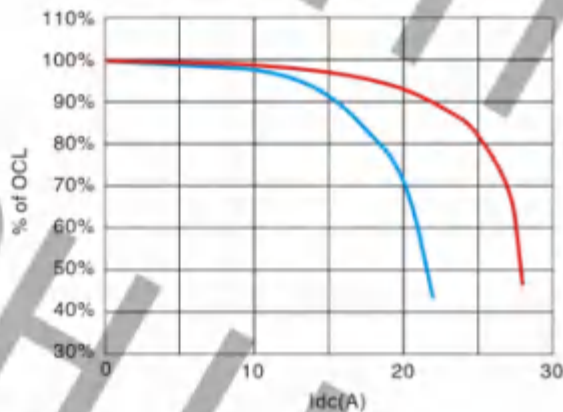
HCB1007R1-R33K



HCB1007R1-R39K



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 58A to 95A
- Ferrite core material

OPTIONS:

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

APPLICATIONS:

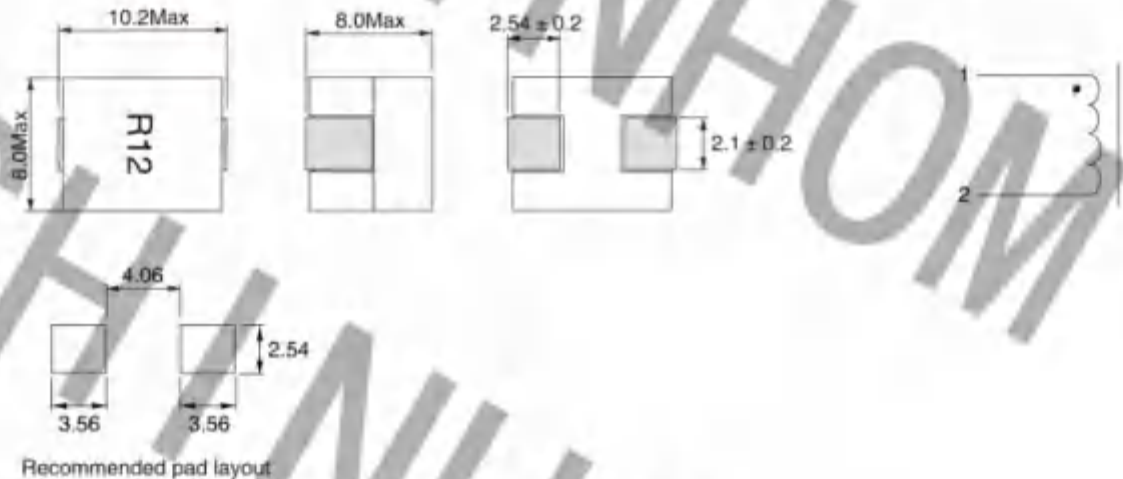
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 10\%$ @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)
HCB1008R1-R12K	120	86.4	68	95	77	$0.18 \pm 5\%$
HCB1008R1-R15K	150	108	68	79	66	$0.18 \pm 5\%$
HCB1008R1-R18K	180	129.6	68	62	52	$0.18 \pm 5\%$
HCB1008R1-R22K	220	158.4	68	58	47	$0.18 \pm 5\%$

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
- 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

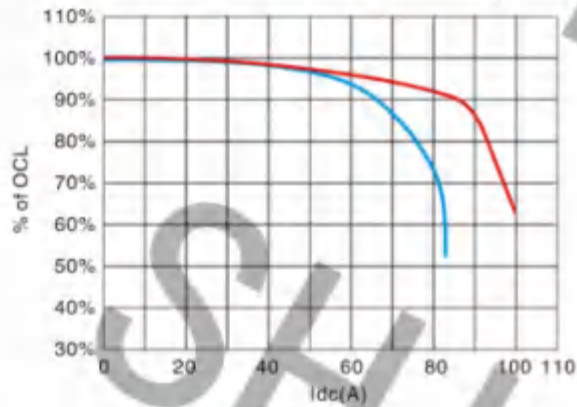


HIGH CURRENT POWER INDUCTORS

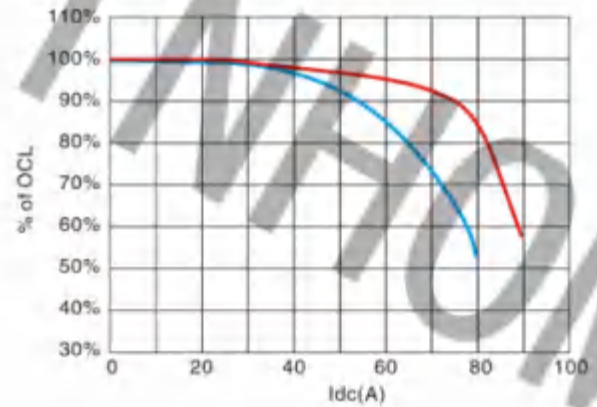
HCB1008 SERIES

INDUCTANCE CHARACTERISTICS:

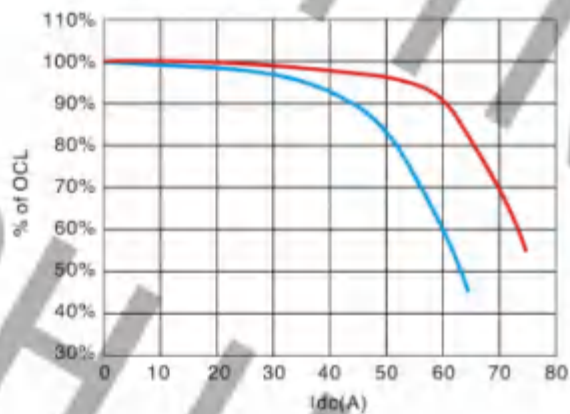
HCB1008R1-R12K



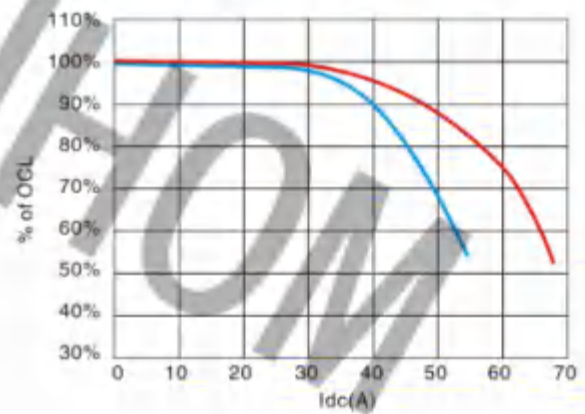
HCB1008R1-R15K



HCB1008R1-R18K



HCB1008R1-R22K



— +25°C

— +125°C



HIGH CURRENT POWER INDUCTORS

HCB1107 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 120nH to 510nH
- Current range from 18A 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 @ I _{sat1}	Heat rating current DC Amps I _{rms} (A)	Saturation current DC Amps I _{sat1} (A)	Saturation current DC Amps I _{sat2} (A)	DCR @ 25 °C (mΩ)
HCB1107R1-R12K	120	86	55	90	72	0.29 $\pm 5\%$
HCB1107R1-R15K	150	108	55	70	56	0.29 $\pm 5\%$
HCB1107R1-R23K	230	166	55	45	36	0.29 $\pm 5\%$
HCB1107R1-R30K	300	217	55	35	28	0.29 $\pm 5\%$
HCB1107R1-R40K	400	288	55	25	20	0.29 $\pm 5\%$
HCB1107R1-R51K	510	364	55	18	14.5	0.29 $\pm 5\%$
HCB1107R2-R12K	120	86	42	90	72	0.47 $\pm 6\%$
HCB1107R2-R15K	150	108	42	70	56	0.47 $\pm 6\%$
HCB1107R2-R23K	230	166	42	45	36	0.47 $\pm 6\%$
HCB1107R2-R30K	300	217	42	35	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) :



Recommended pad layout

SCHEMATIC :



NOTES:

- Test Frequency : 100KHz / 0.1V @ 25 °C
- I_{rms}: 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 (ambient plus self-temperature rise)
- Storage temperature: -40 °C to +125 °C

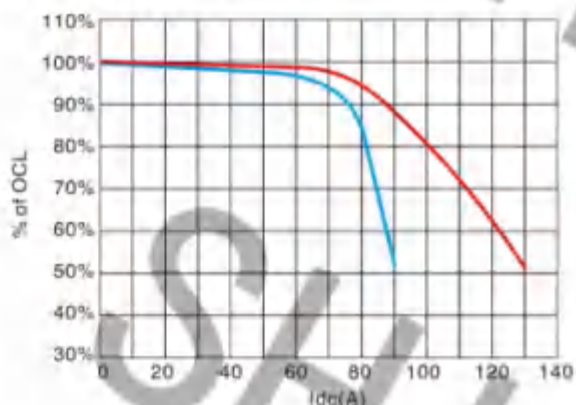


HIGH CURRENT POWER INDUCTORS

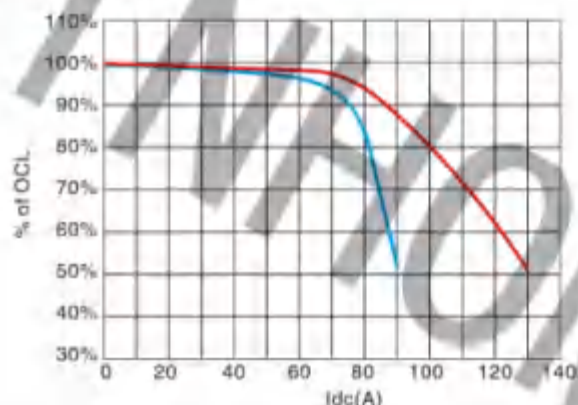
HCB1107 SERIES

INDUCTANCE CHARACTERISTICS:

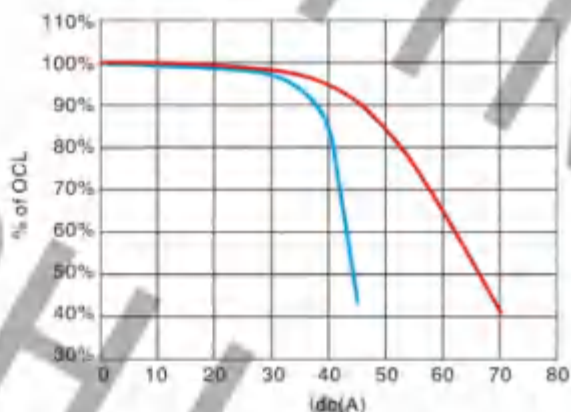
HCB1107RX-R12K



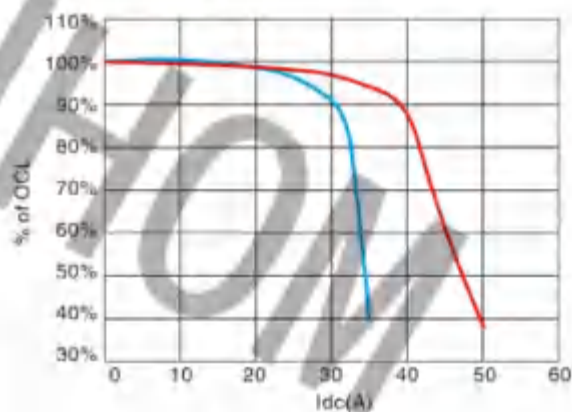
HCB1107RX-R15K



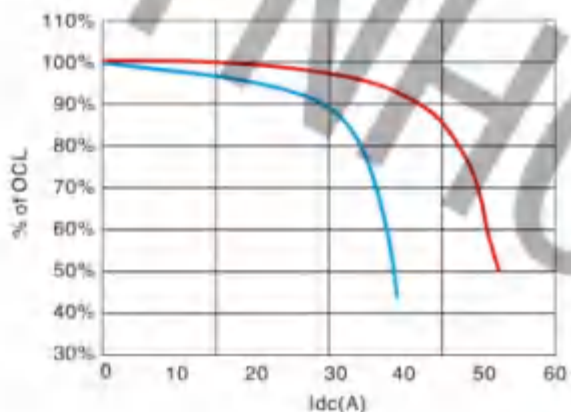
HCB1107RX-R23K



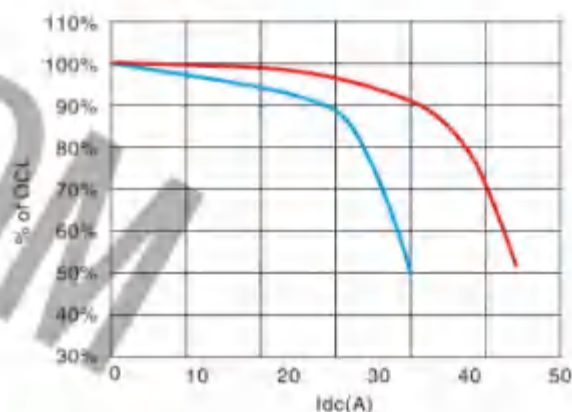
HCB1107RX-R30K



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:

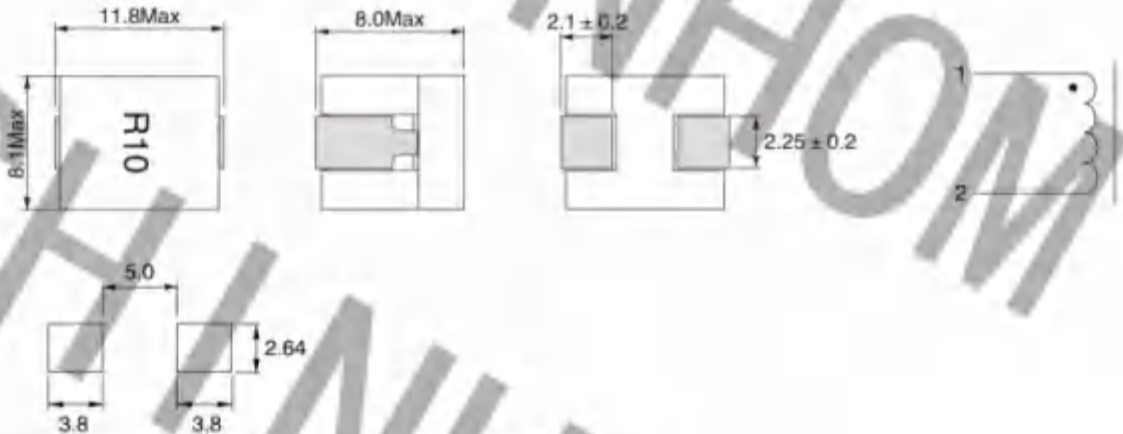
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 10\%$ @0Adc	Inductance (nH)Min @Isat1	Heat rating current DC Amps I _{rms} (A)	Saturation current DC Amps Isat1(A)	Saturation current DC Amps Isat2(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	176	50	61	50	0.29 $\pm 5\%$
HCB1208R1-R25K	250	191	50	55	44	0.29 $\pm 5\%$

DIMENSIONS(mm) :

SCHEMATIC :



Recommended pad layout

NOTES:

- Test Frequency : 100KHz / 0.1V @25°C
- I_{rms}: 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

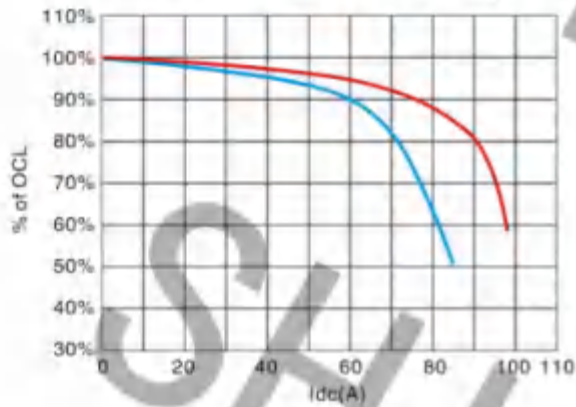


HIGH CURRENT POWER INDUCTORS

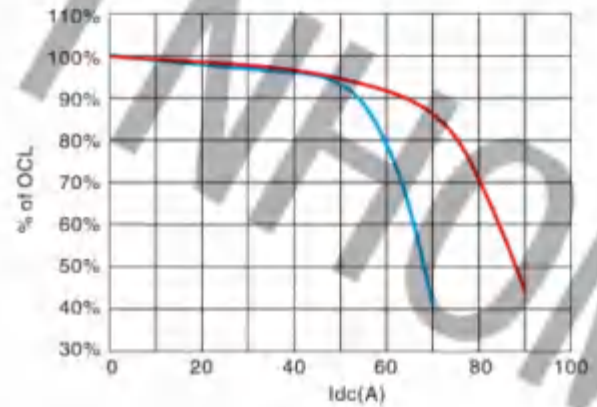
HCB1208 SERIES

INDUCTANCE CHARACTERISTICS:

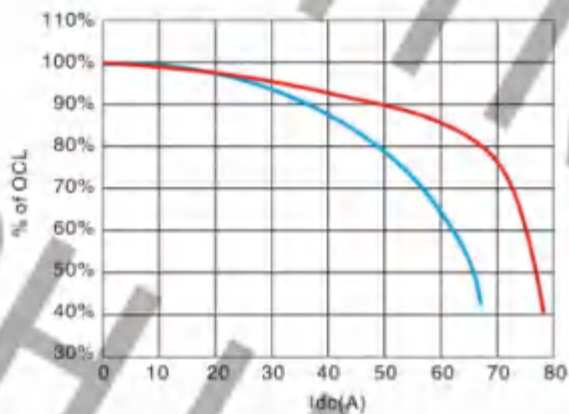
HCB1208R1-R15K



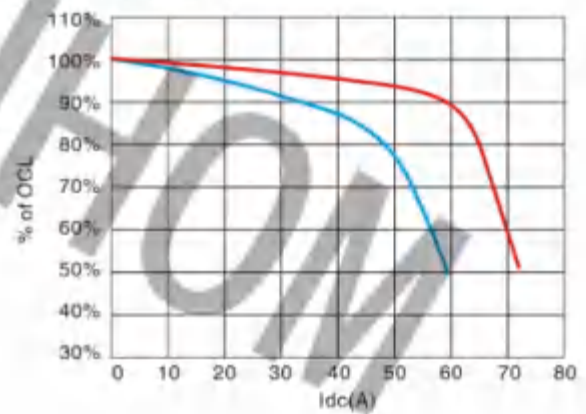
HCB1208R1-R18K



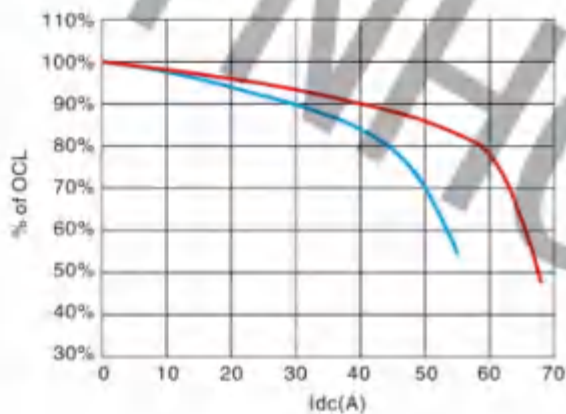
HCB1208R1-R21K



HCB1208R1-R23K



HCB1208R1-R25K





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 60A
- Ferrite core material

OPTIONS:

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

APPLICATIONS:

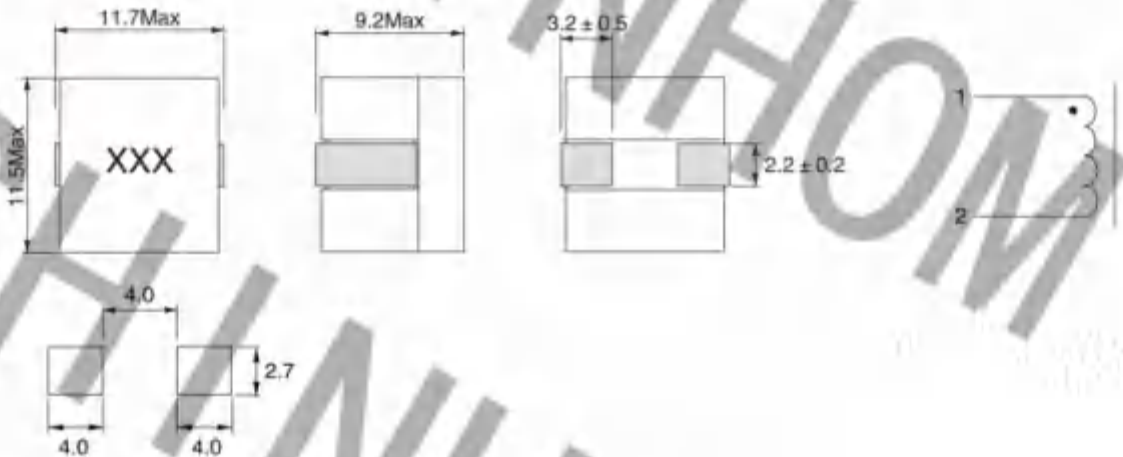
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

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-R46K	460	368	40	32	$0.3 \pm 7\%$
HCB1211R1-R54K	540	432	40	26	$0.3 \pm 7\%$

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



HIGH CURRENT POWER INDUCTORS

HCB1313 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 210nH to 520nH
- Current range from 13A to 71A
- Ferrite core material

OPTIONS:

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

APPLICATIONS:

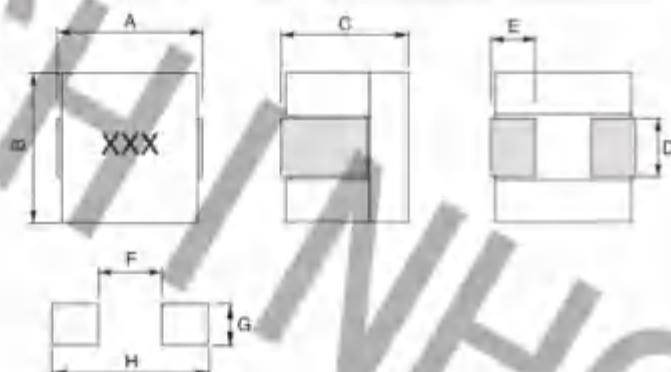
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 15\%$ @0Adc	Inductance (nH)Min @Isat1	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-R28K	280	224	50	30	$0.155 \pm 10\%$
HCB1313R1-R31K	310	248	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	168	45	71	$0.32 \pm 9.4\%$
HCB1313R2-R26K	260	208	45	60	$0.32 \pm 9.4\%$
HCB1313R2-R32K	320	256	45	50	$0.32 \pm 9.4\%$
HCB1313R2-R44K	440	352	45	35	$0.32 \pm 9.4\%$
HCB1313R2-R50K	500	400	45	28	$0.32 \pm 9.4\%$

DIMENSIONS(mm) :

SCHEMATIC :



Recommended pad layout.

Dimensions

Part No.	A	B	C	D	E	F	G	H
R1	13.5max	13.2max	5.3max	5.0 ± 0.2	2.0 ± 0.2	8.0	5.5	14.0
R2	13.46max	13.0max	8.0max	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% 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

HCB1413 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 300nH to 680nH
- Current range from 24A to 60A
- Ferrite core material

OPTIONS:

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

APPLICATIONS:

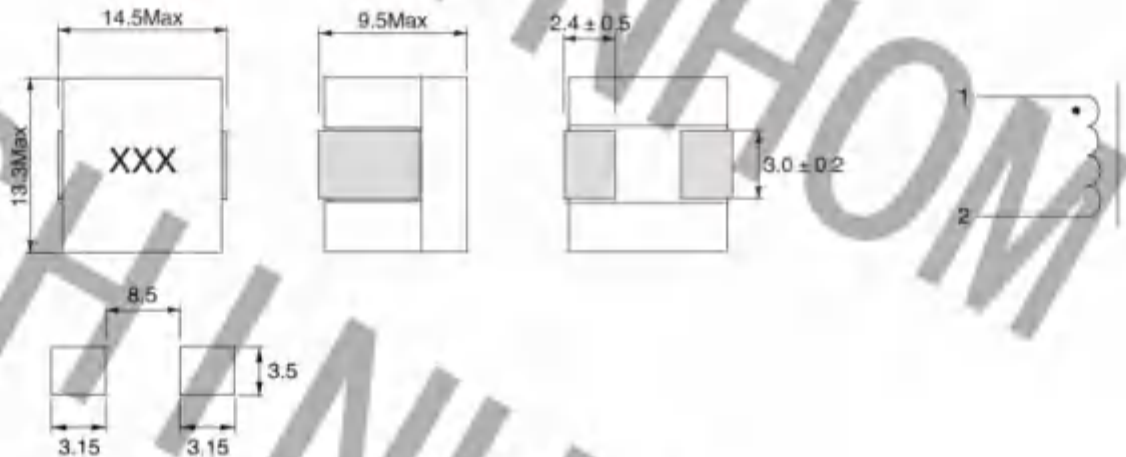
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module (VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) $\pm 15\%$ @0Adc	Inductance (nH)Min @ Isat	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-R45K	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

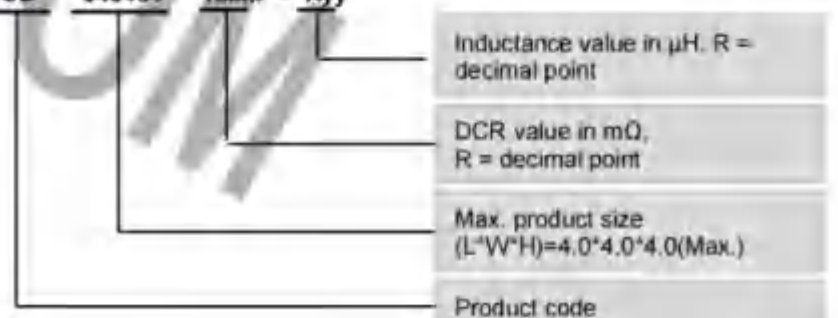
Part Number ⁵	OCL ¹ (nH) ±15%	I _{rms} ² (Amps)	I _{sat} ³ (Amps)	Height (max.)	DCR(mΩ) typical @ +20 °C
HCB040404R32-R05	55	19	30	4.0	0.32
HCB040404R32-R06	65	19	26	4.0	0.32
HCB040404R32-R08	80	19	22	4.0	0.32
HCB040404R32-R10	100	19	17	4.0	0.32

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:

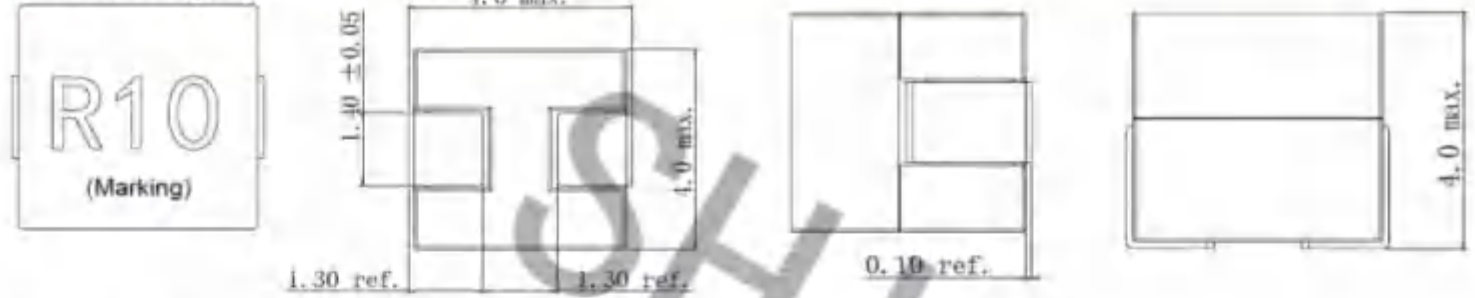
HCB 040404 Rxxx - Ryy



Technical Data

HCB040404R32 Series

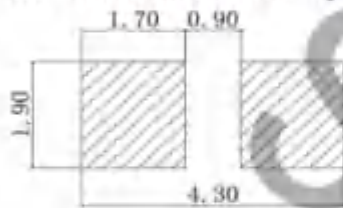
Dimensions:[mm]



Product Marking:

Part Code	Ryy
Date Code	YYWW

Recommended Pad Layout:[mm]

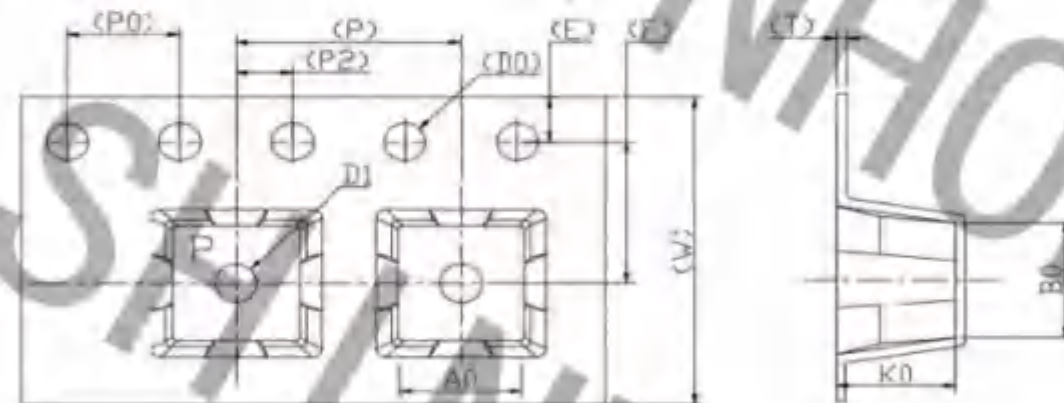


Schematic:

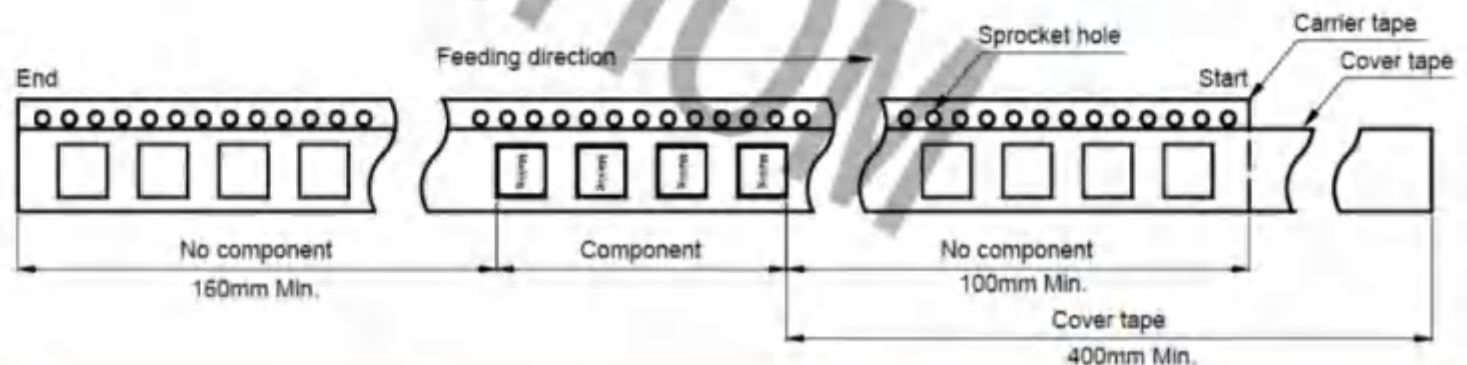


Packaging Information:[mm]

Tape Dimensions



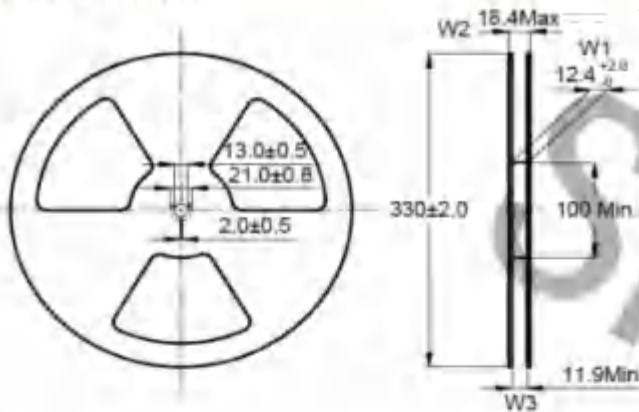
Material	A0(±0.1)	B0(±0.1)	W(±0.3)	T(±0.05)	K0(±0.1)	P(±0.1)	F(±0.1)	E(±0.1)	D0(±0.1)	P0(±0.1)	P2(±0.1)	D1(±0.1)
Polystyrene	4.50	4.50	12.00	0.40	4.20	8.00	5.50	1.75	1.50	4.00	2.00	1.50



Technical Data

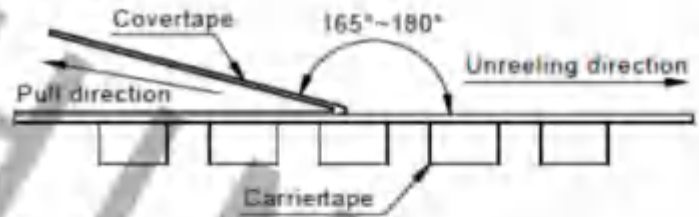
HCB040404R32 Series

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)
HCB040404R32 Type	1800

Recommended Reflow Profile:

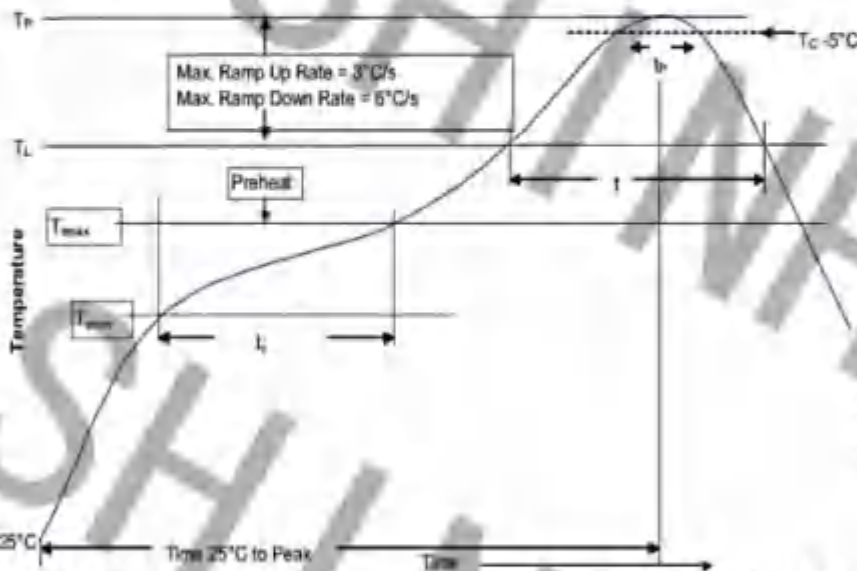


Table 1 - Standard SnPb Solder (T_c)

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)

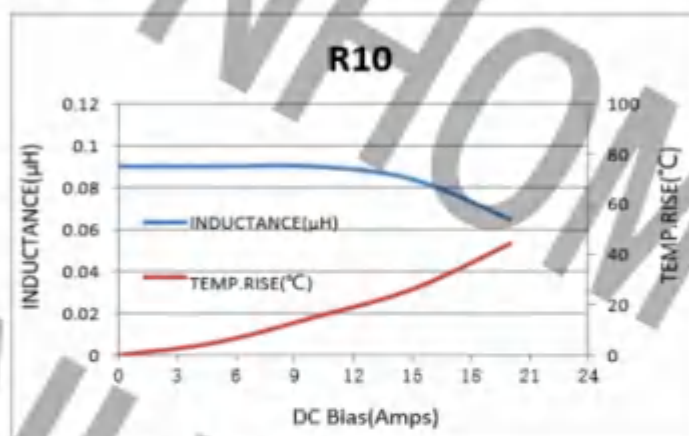
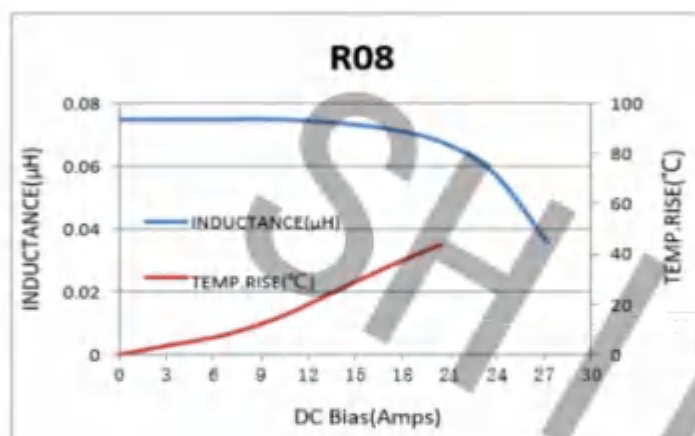
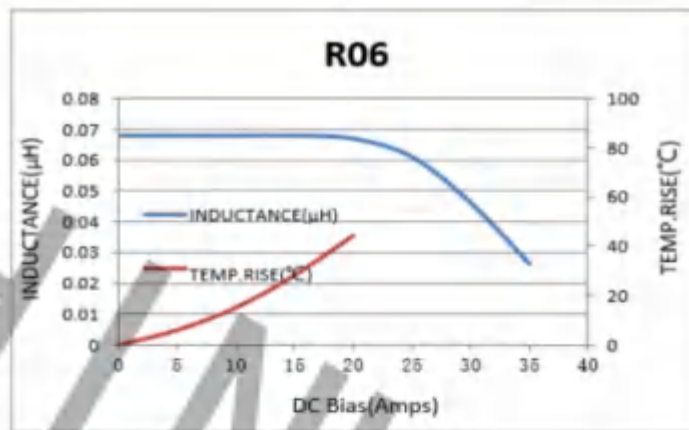
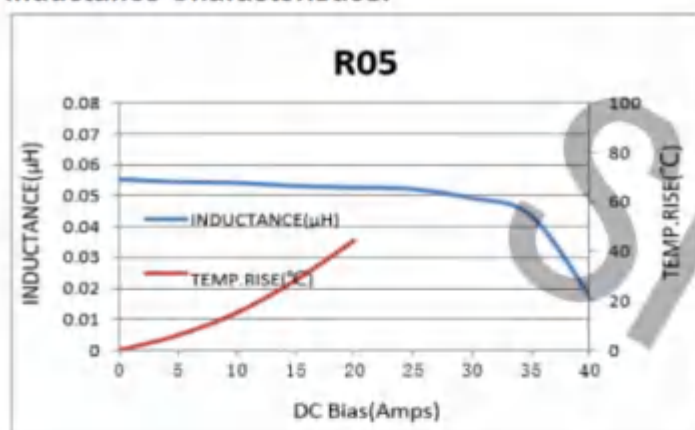
Package Thickness	Volume mm^3 <350	Volume mm^3 350 - 2000	Volume mm^3 >2000
<1.6mm	250°C	260°C	260°C
1.6 - 2.5mm	260°C	250°C	245°C
>2.5mm	250°C	245°C	245°C

Profile Feature	Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak		
• Temperature min. (T_{smin})	100°C	150°C
• Temperature max. (T_{smax})	150°C	200°C
• Time (T_{smin} to T_{smax}) (t_s)	60-120 Seconds	60-120 Seconds
Average ramp up rate T_{smax} to T_p	3°C/ Second Max.	3°C/ Second Max.
Liquidous temperature (T_l)	183°C	217°C
Time at liquidous (t_l)	60-150 Seconds	60-150 Seconds
Peak package body temperature (T_p)*	Table 1	Table 2
Time (t_p)** within 5 °C of the specified classification temperature (T_c)	20 Seconds**	30 Seconds**
Average ramp-down rate (T_p to T_{smax})	6°C/ Second Max.	6°C/ Second Max.
Time 25°C to Peak Temperature	8 Minutes Max.	8 Minutes Max.

* Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.

** Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

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

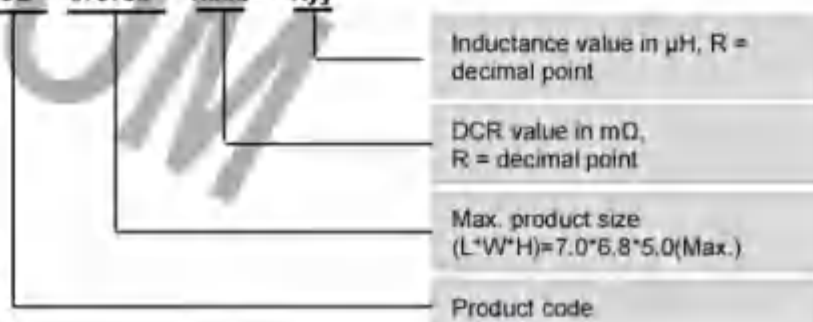
Part Number ⁵	OCL ¹ (nH) $\pm 15\%$	I _{rms} ² (Amps)	I _{sat} ³ (Amps)	Height (max.)	DCR(mΩ) typical @ +20 °C
HCB070705R32-R10	100	50	53	5.0	0.32
HCB070705R32-R12	120	50	40	5.0	0.32
HCB070705R32-R15	150	50	35	5.0	0.32
HCB070705R32-R18	180	50	28	5.0	0.32

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:

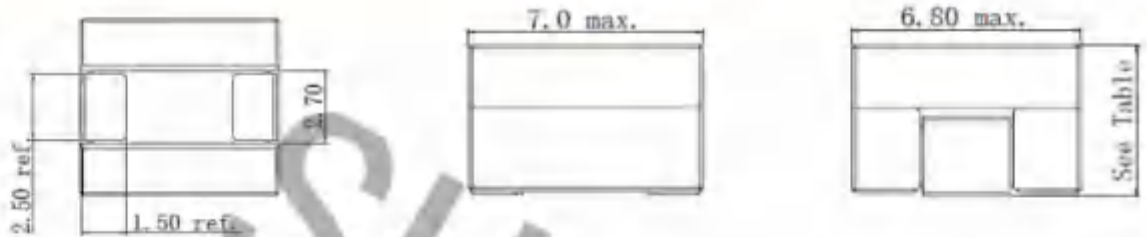
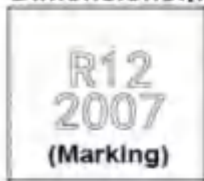
HCB 070705 Rxxx - Ryy



Technical Data

HCB070705R32 Series

Dimensions:[mm]



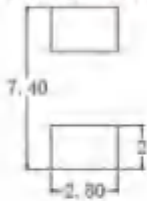
Product Marking:

Part Code	Ryy
Date Code	YYWW

Table

Part Number	Max. Height
HCB070705R32 Type	5.0

Recommended Pad Layout:[mm]

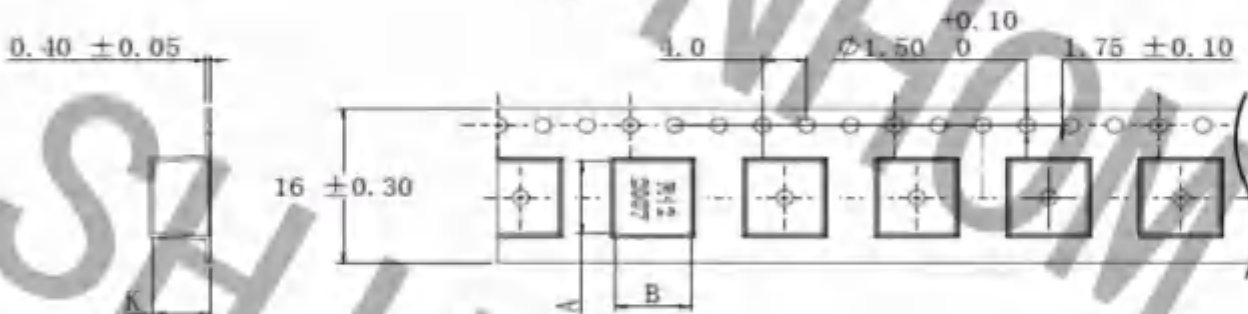


Schematic:

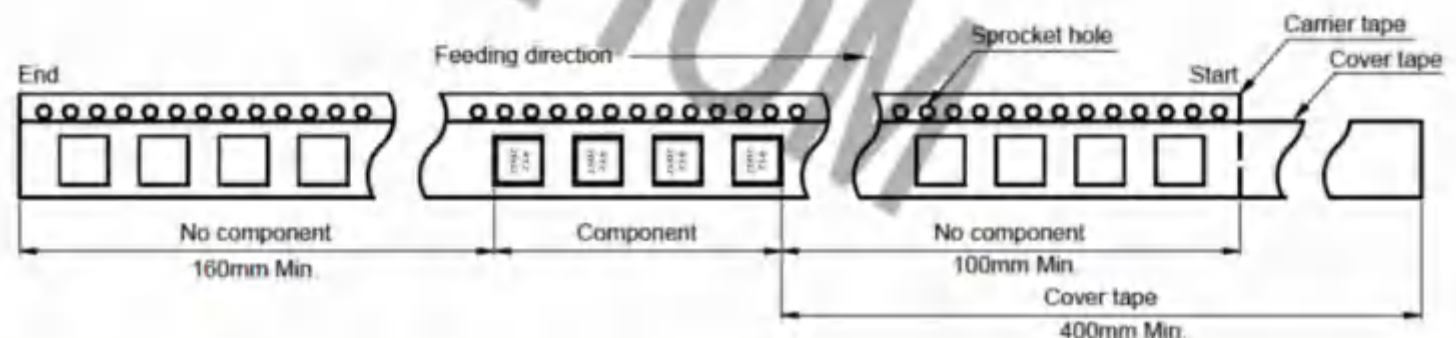


Packaging Information:[mm]

Tape Dimensions



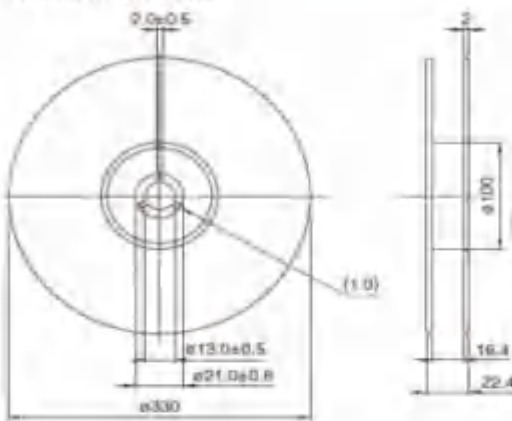
Part Number	A	B	K
HCB070705R32 Type	7.5±0.1	6.9±0.1	5.2±0.1



Technical Data

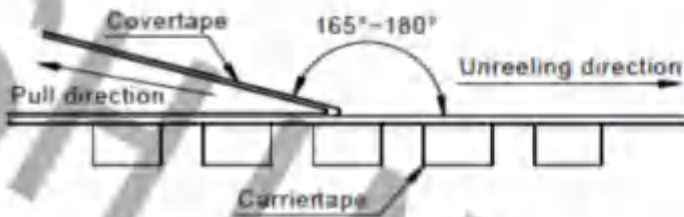
HCB070705R32 Series

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)
HCB070705R32 Type	900

Recommended Reflow Profile:

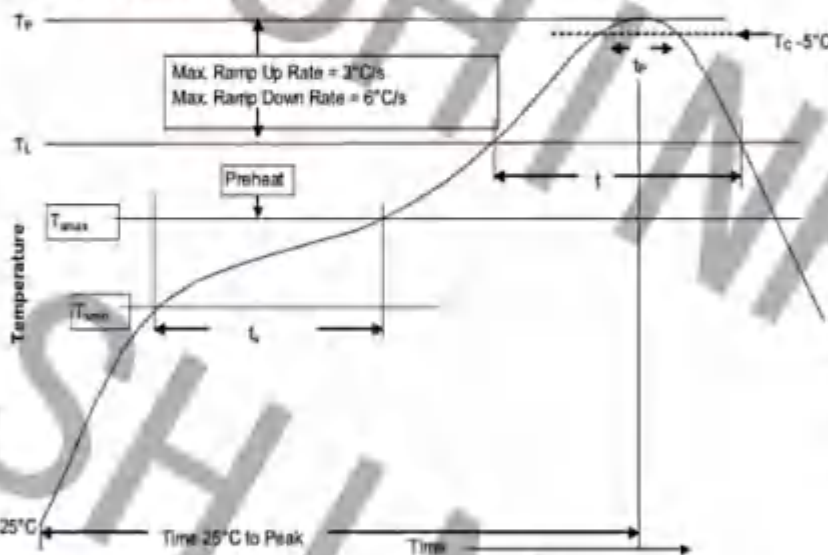


Table 1 - Standard SnPb Solder (T_c)

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)

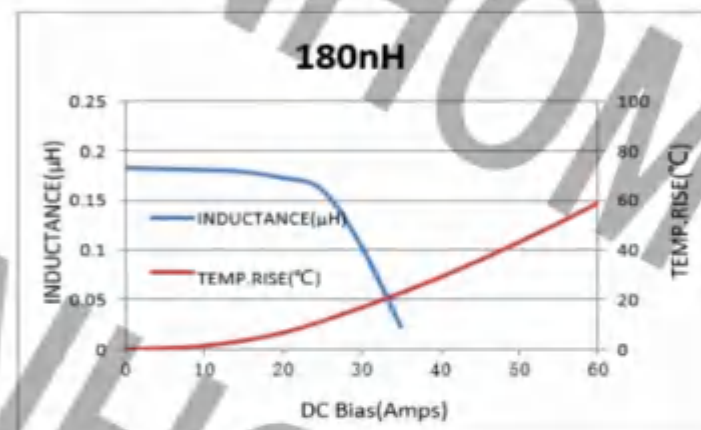
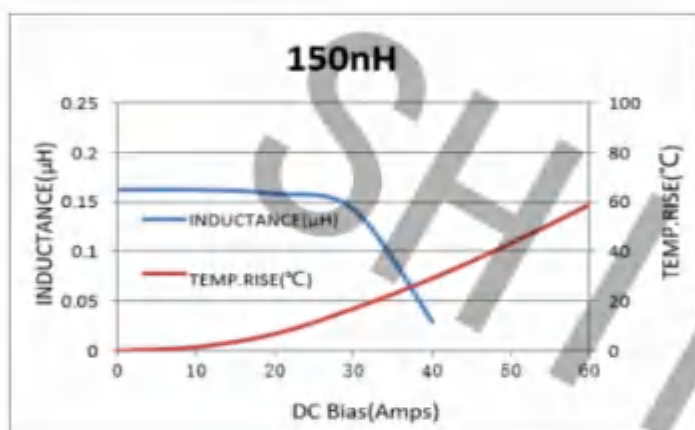
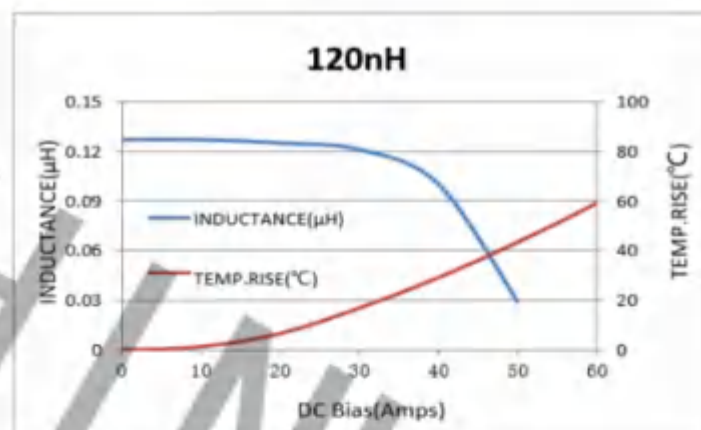
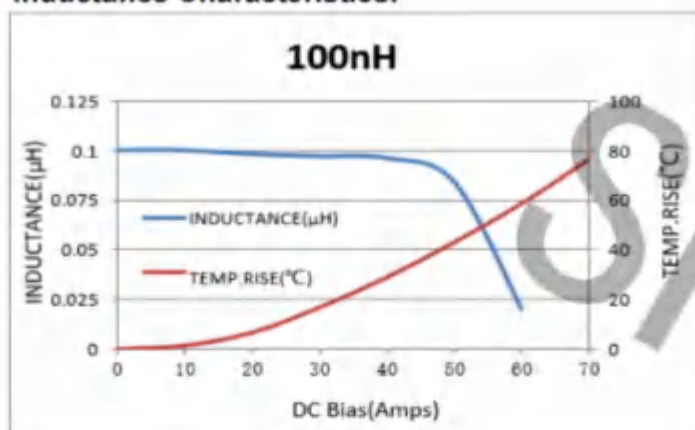
Package Thickness	Volume mm^3 <350	Volume mm^3 350 - 2000	Volume mm^3 >2000
<1.6mm	260°C	260°C	260°C
1.6 - 2.5mm	260°C	250°C	245°C
>2.5mm	250°C	245°C	245°C

Profile Feature	Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak		
• Temperature min. (T_{smin})	100°C	150°C
• Temperature max. (T_{smax})	150°C	200°C
• Time (T_{smin} to T_{smax}) (t_s)	60-120 Seconds	60-120 Seconds
Average ramp up rate T_{smax} to T_p	3°C/ Second Max.	3°C/ Second Max.
Liquidous temperature (T_l)	183°C	217°C
Time at liquidous (t_l)	60-150 Seconds	60-150 Seconds
Peak package body temperature (T_p)*	Table 1	Table 2
Time (t_p)** within 5 °C of the specified classification temperature (T_c)	20 Seconds**	30 Seconds**
Average ramp-down rate (T_p to T_{smax})	6°C/ Second Max.	6°C/ Second Max.
Time 25°C to Peak Temperature	6 Minutes Max.	8 Minutes Max.

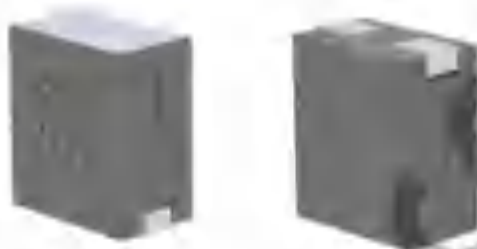
* Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.

** Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

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 point

DCR value in mΩ,
R = decimal point

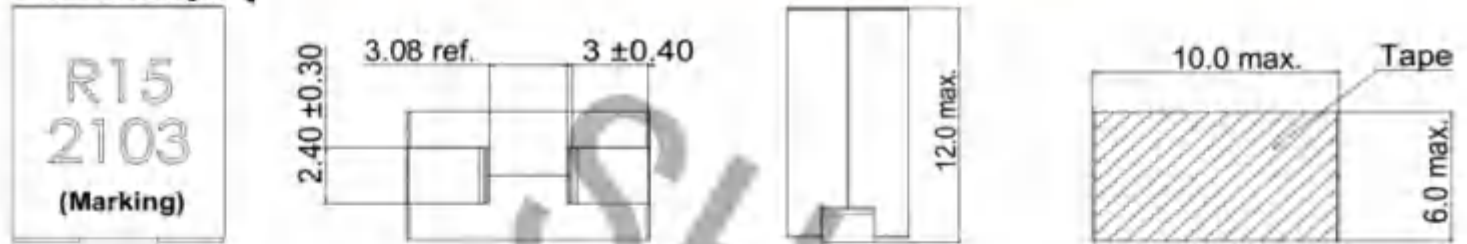
Max. product size
(L*W*H)=10.0*6.0*12.0(Max.)

Product code

Technical Data

HCB100612R125 Series

Dimensions:[mm]



Product Marking:

Part Code	Ryy
Date Code	YYWW

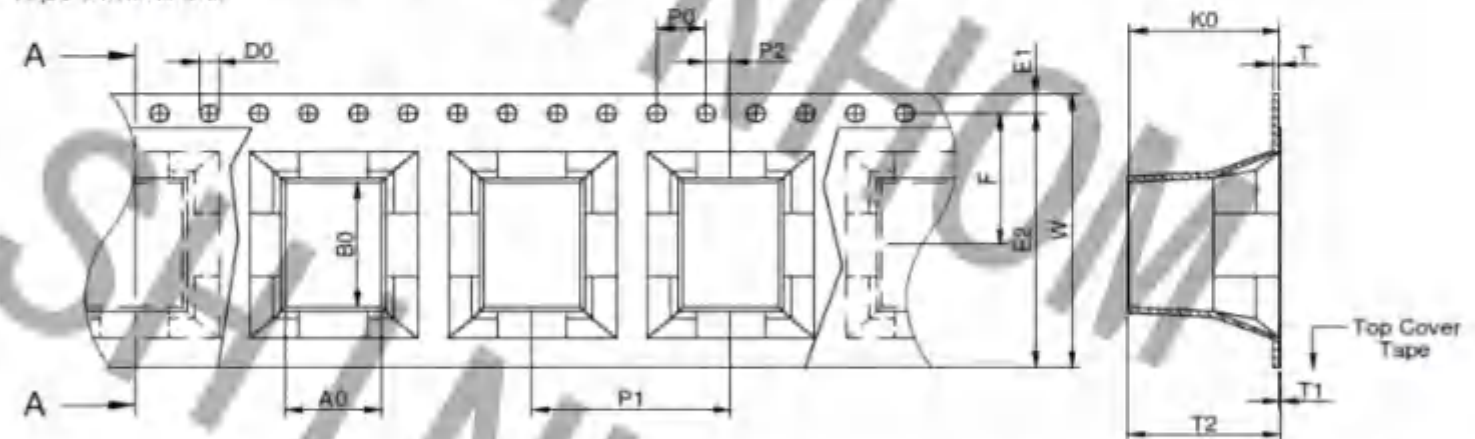
Recommended Pad Layout:[mm]

Schematic:

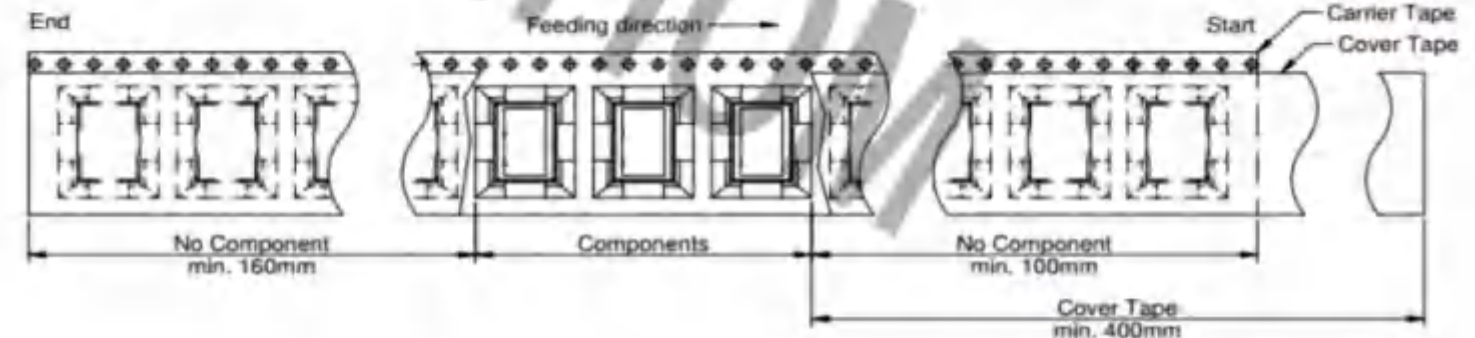


Packaging Information:[mm]

Tape Dimensions



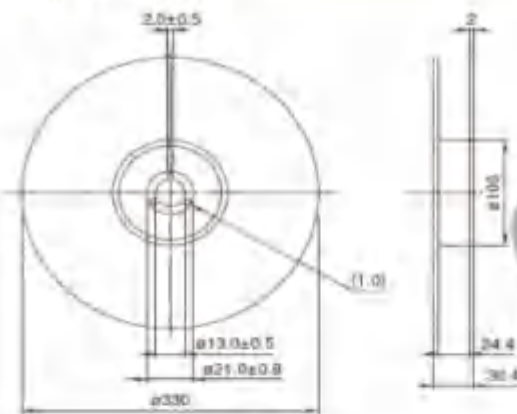
Material	A0(typ.)	B0(typ.)	W (±0.3)	T (ref.)	T1 (max.)	T2 (typ.)	P0 (±0.1)	P1 (±0.1)	P2 (±0.1)	D0 (+0.1/-0.0)	E1 (±0.1)	E2 (min.)	F (±0.1)
Polystyrene	6.20	10.20	24.60	0.50	0.10	12.50	4.00	16.00	2.00	1.50	1.75	22.25	11.50



Technical Data

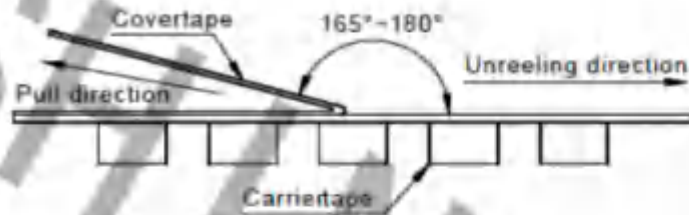
HCB100612R125 Series

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:

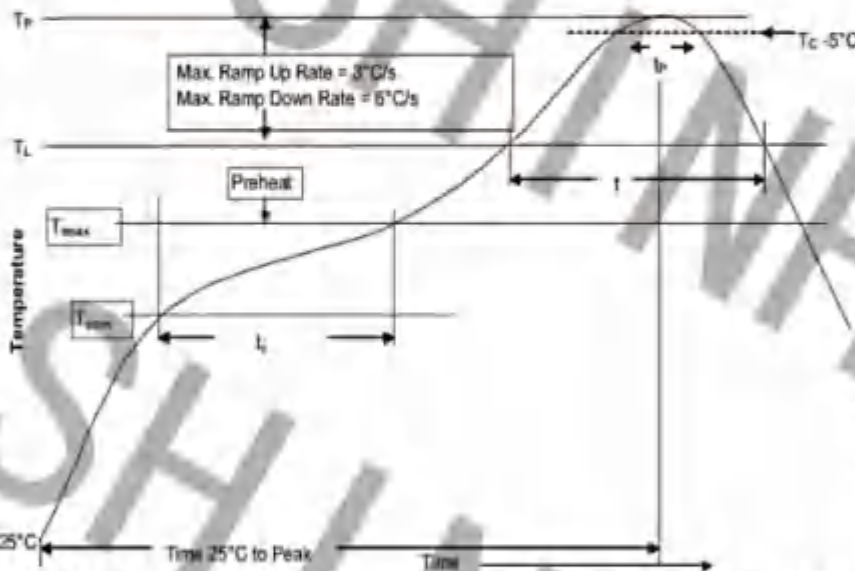


Table 1 - Standard SnPb Solder (T_c)

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

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

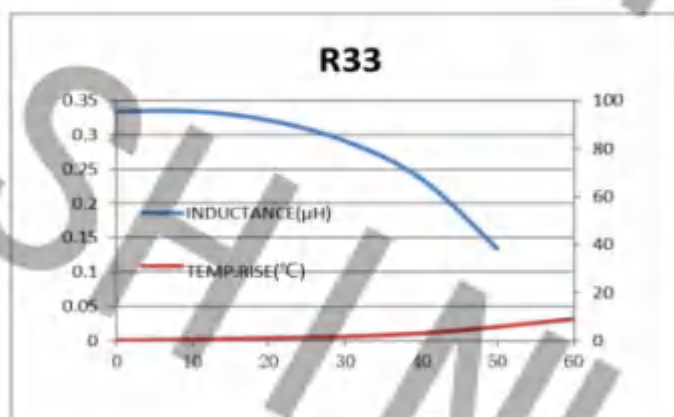
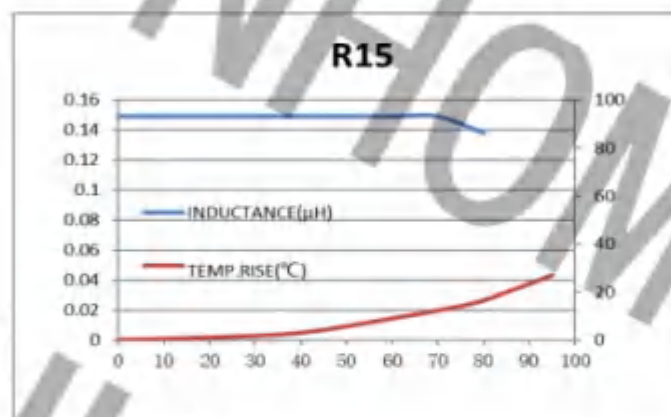
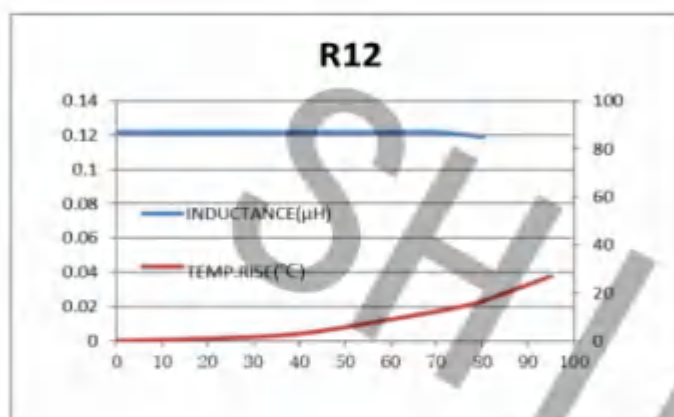
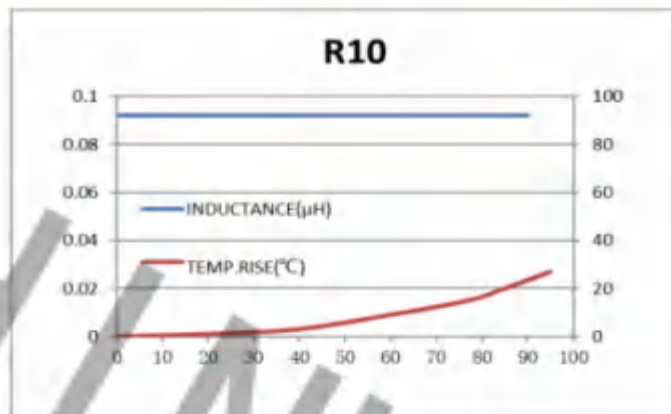
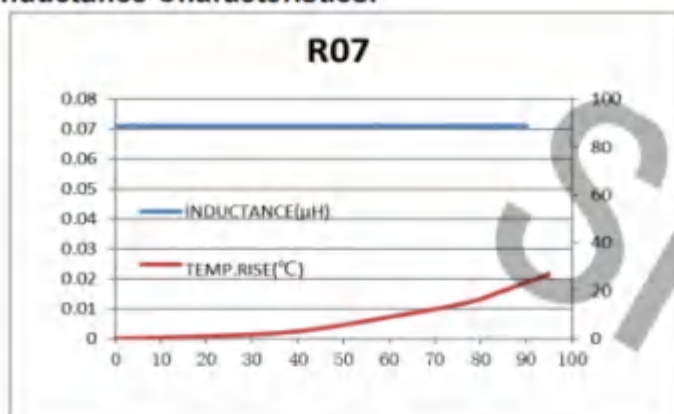
Package Thickness	Volume mm ³ <350	Volume mm ³ 350 - 2000	Volume mm ³ >2000
<1.6mm	250°C	260°C	260°C
1.6 - 2.5mm	260°C	250°C	245°C
>2.5mm	250°C	245°C	245°C

Profile Feature	Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak		
• Temperature min. (T_{smin})	100°C	150°C
• Temperature max. (T_{smax})	150°C	200°C
• Time (T_{smin} to T_{smax}) (t_s)	60-120 Seconds	60-120 Seconds
Average ramp up rate T_{smin} to T_p	3°C/ Second Max.	3°C/ Second Max.
Liquidous temperature (T_l)	183°C	217°C
Time at liquidous (t_l)	60-150 Seconds	60-150 Seconds
Peak package body temperature (T_p)*	Table 1	Table 2
Time (t_p)** within 5 °C of the specified classification temperature (T_c)	20 Seconds**	30 Seconds**
Average ramp-down rate (T_p to T_{smax})	6°C/ Second Max.	6°C/ Second Max.
Time 25°C to Peak Temperature	8 Minutes Max.	8 Minutes Max.

* Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.

** Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

Inductance Characteristics:

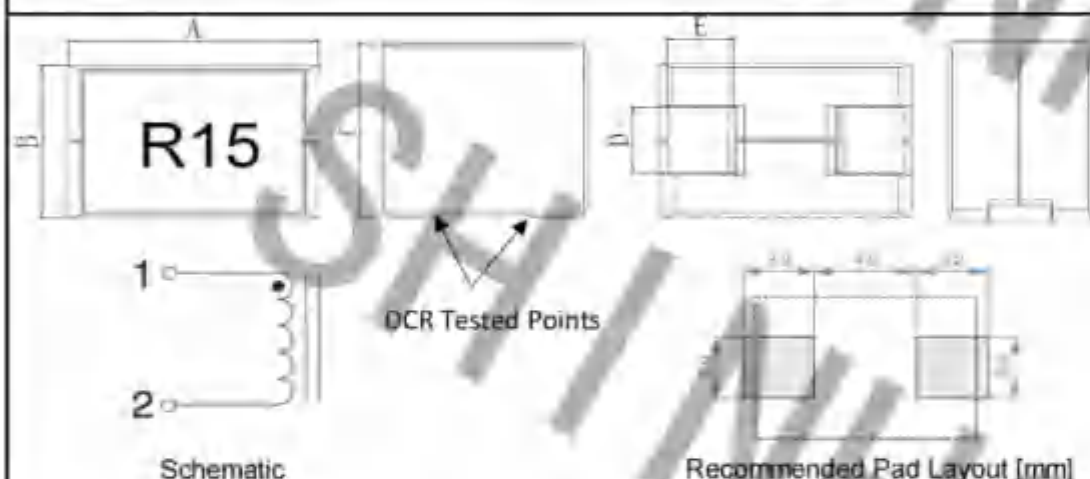


TECHNICAL DATA

HCB100709R18 SERIES

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: 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

HCB100709R18 SERIES

4. PRODUCT IDENTIFICATION

HCB 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

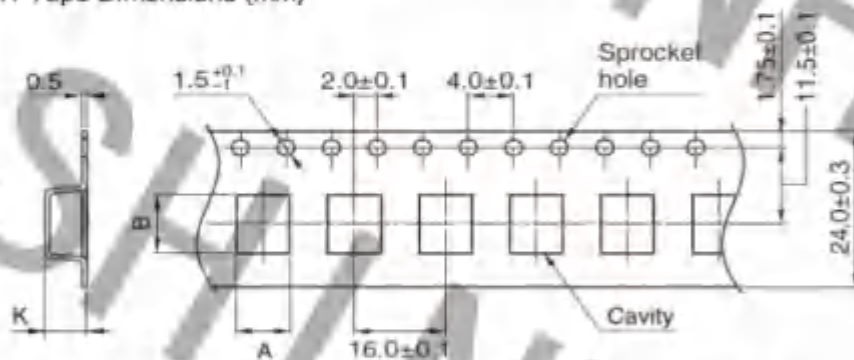
6. CONSTRUCTION AND MATERIAL LIST



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

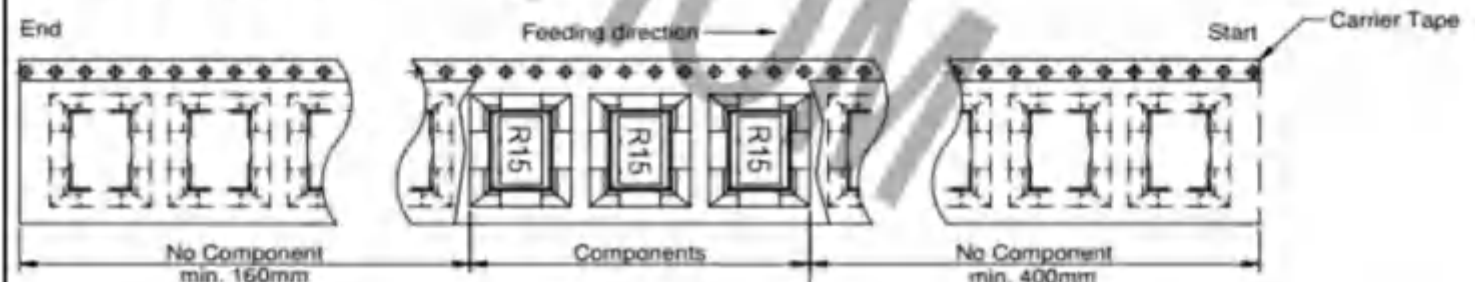
7. PACKAGING INFORMATION

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

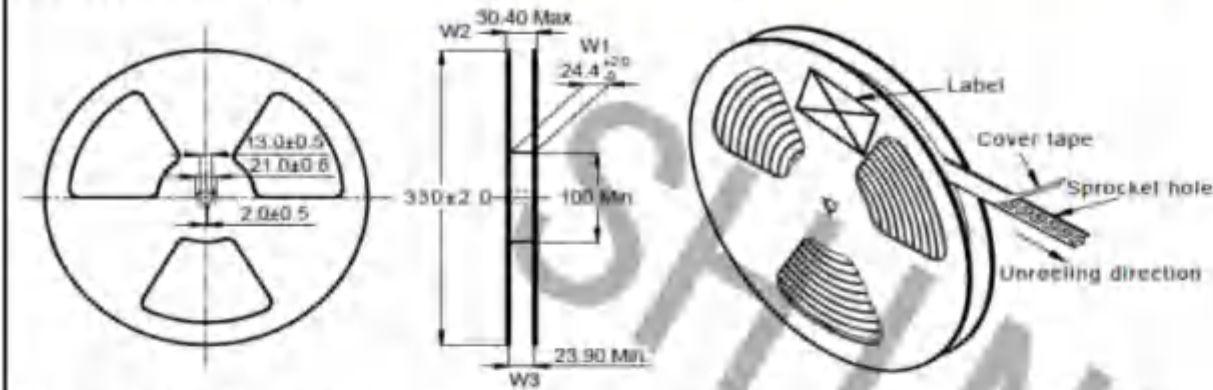
7.2 Product Packing in Tape



TECHNICAL DATA

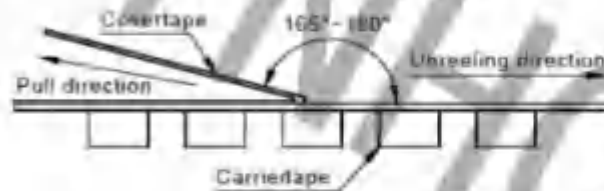
HCB100709R18 SERIES

7.3 Reel Dimensions (mm)



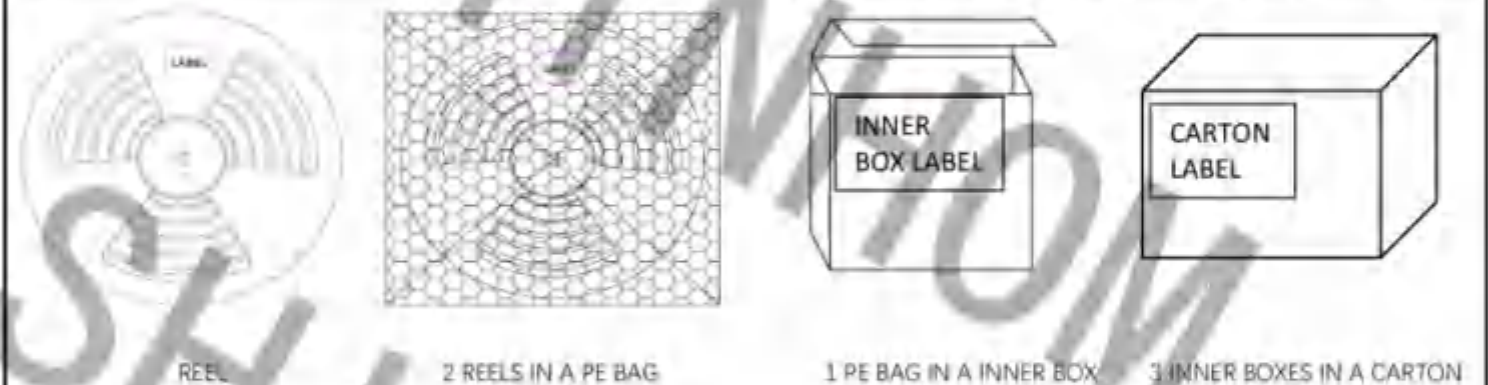
7.4 Cover tape peel off condition

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

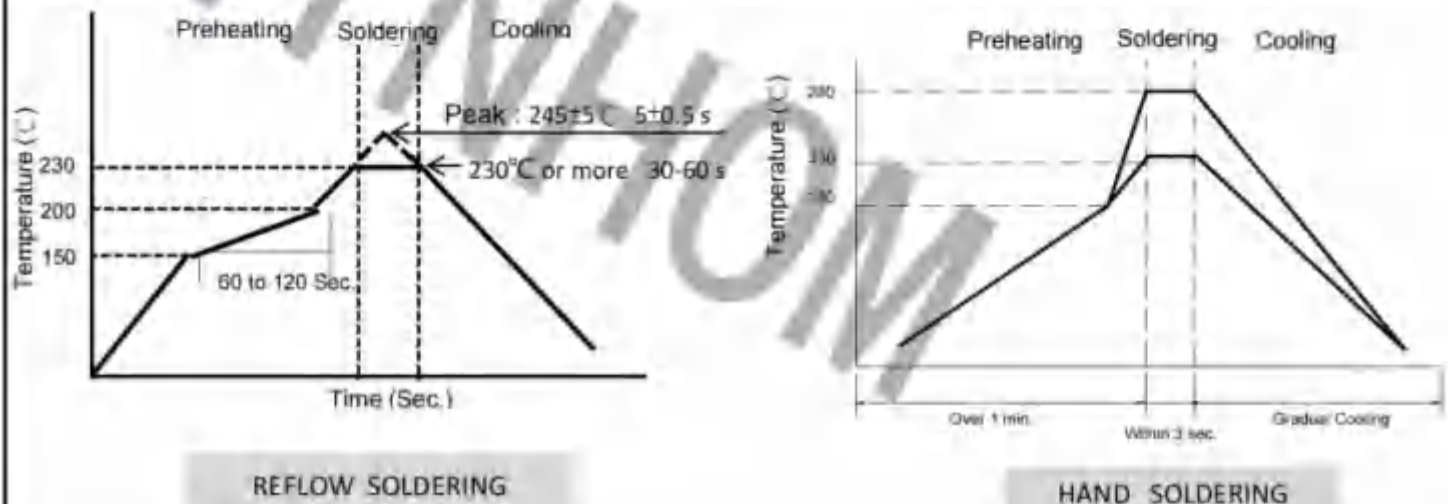


7.5 Packing Quantity

Part Number	Chips/Reel	Chips/Inner Box	Chips/Carton
HCB100709R18 SERIES	400	800 (2 reels/ PE bag / inner box)	2400 (3 inner boxes/ Carton)



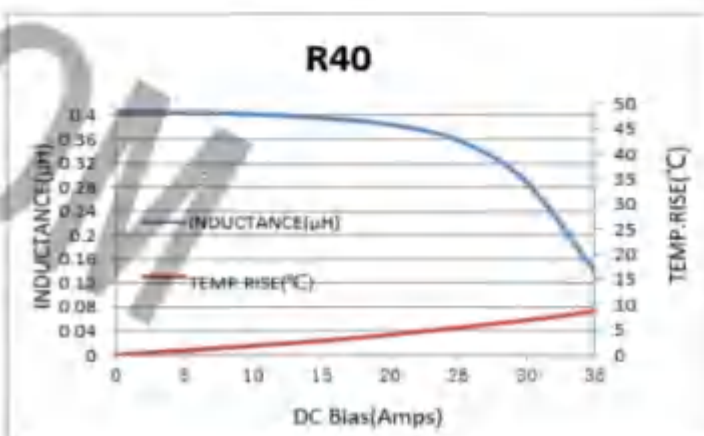
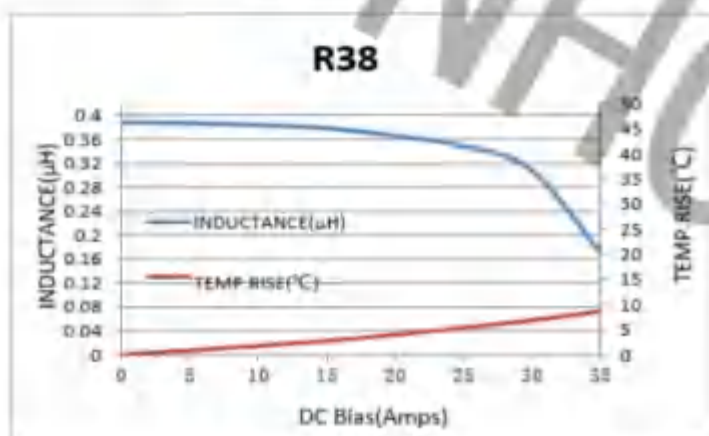
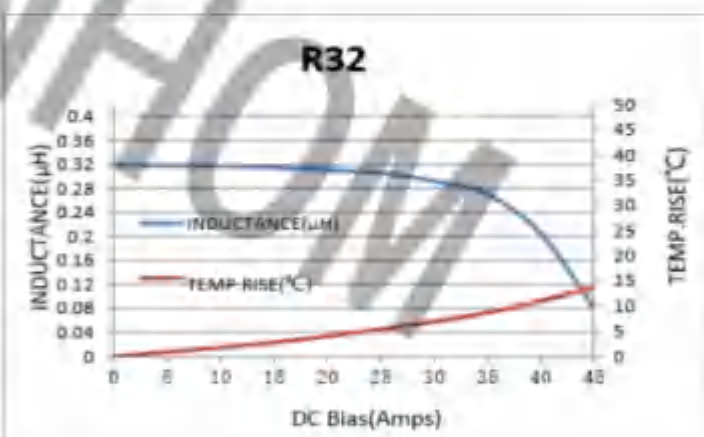
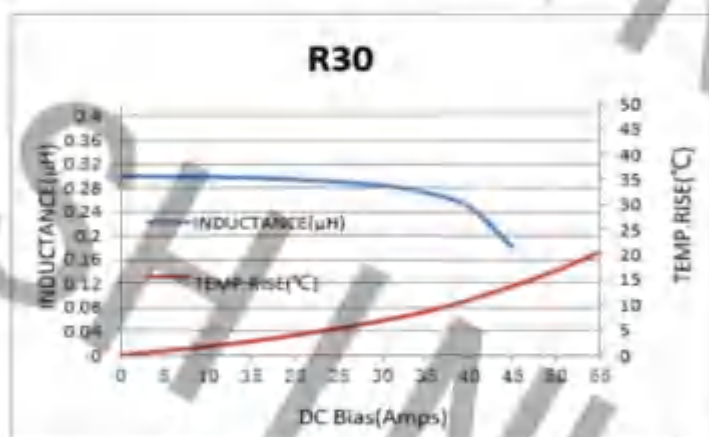
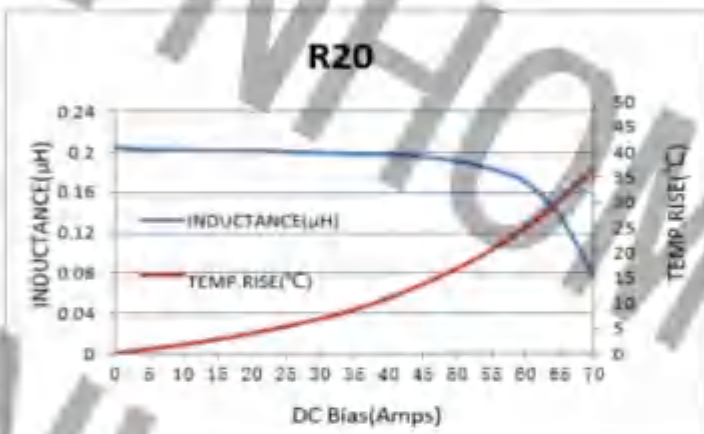
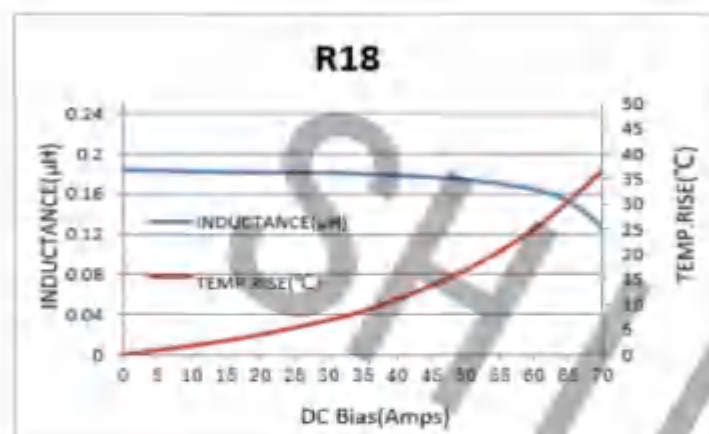
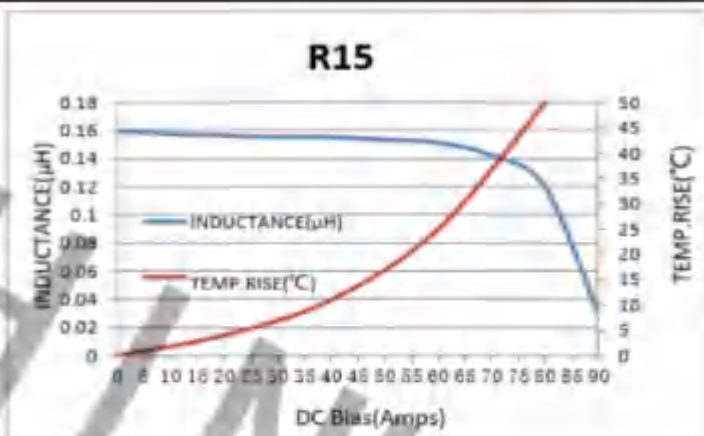
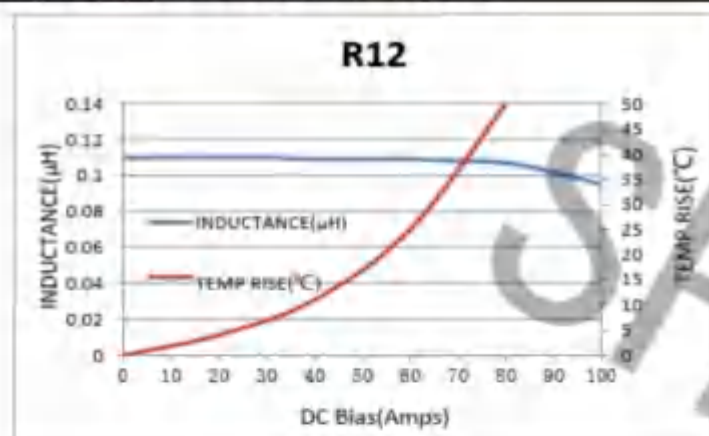
8. RECOMMENDED SOLDERING PROFILE



TECHNICAL DATA

HCB100709R18 SERIES

9. INDUCTANCE CHARACTERISTICS

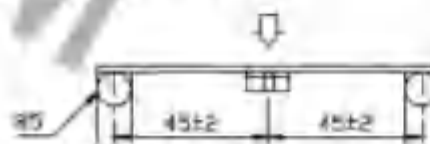


TECHNICAL DATA

HCB100709R18 SERIES

10. RELIABILITY TEST SPECIFICATIONS FOR POWER BEAD INDUCTORS

Item	Specification	Test Conditions
Operating temperature range	-40℃ ~ +125℃	
Storage temperature and humidity range	25±5℃ , 70% RH Max (In Original Packaging: <40℃ , <75%RH)	
Solderability	More than 90% of the terminal electrode should be covered with solder	Soldering Temperature for Pb Product: 230±5℃ Soldering Temperature for Pb-free Product: 260±5℃ 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℃ SMD Type: 245±5℃ 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℃ 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℃ 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℃±5℃ and 30±2 minutes, then put 3±1 minutes under room temperature, and test under 125℃±5℃ 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℃ 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℃ and Pressure Barrel Temperature is 47℃. 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)

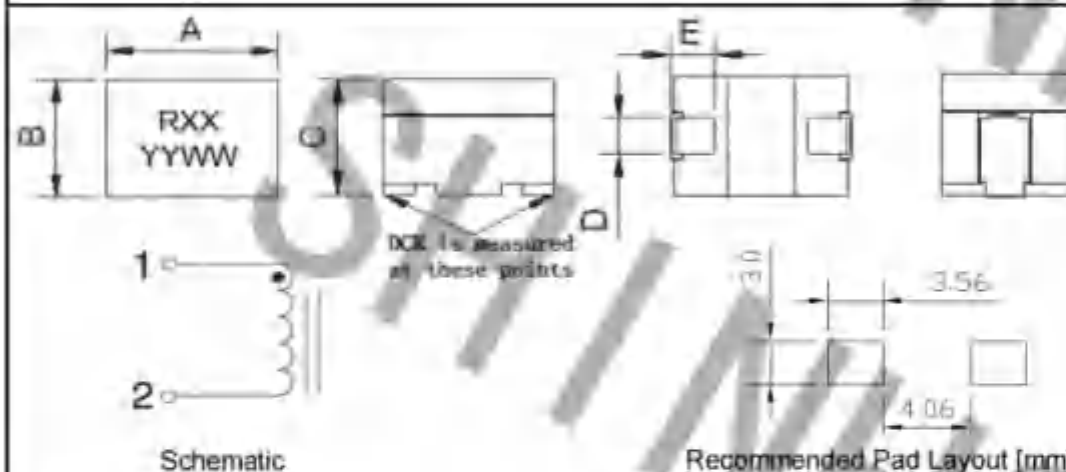


TECHNICAL DATA

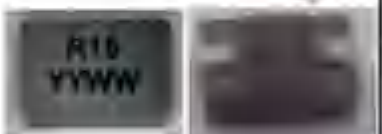
HCB100808AR18 SERIES

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 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. 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)

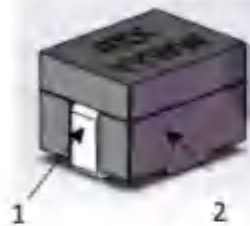
5. PRODUCT MARKING



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

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

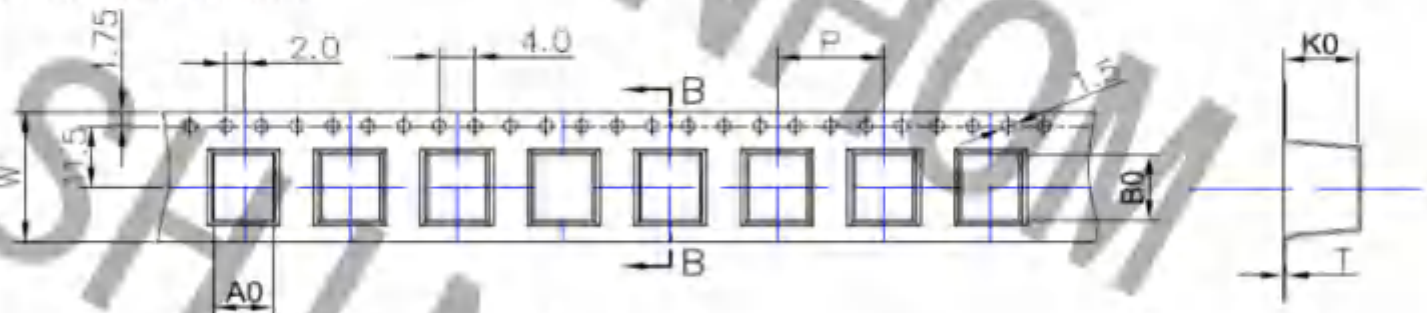
6. CONSTRUCTION AND MATERIAL LIST



No.	Part	Material
1	Clip	C1100
2	Core	Ferrite

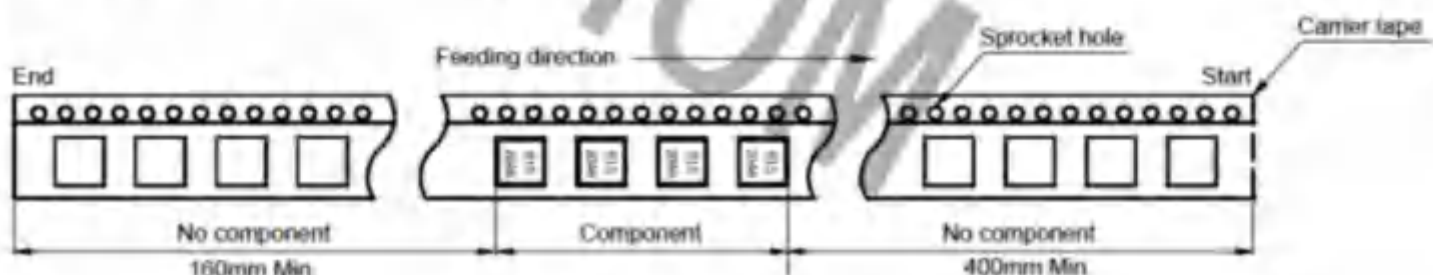
7. PACKAGING INFORMATION

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

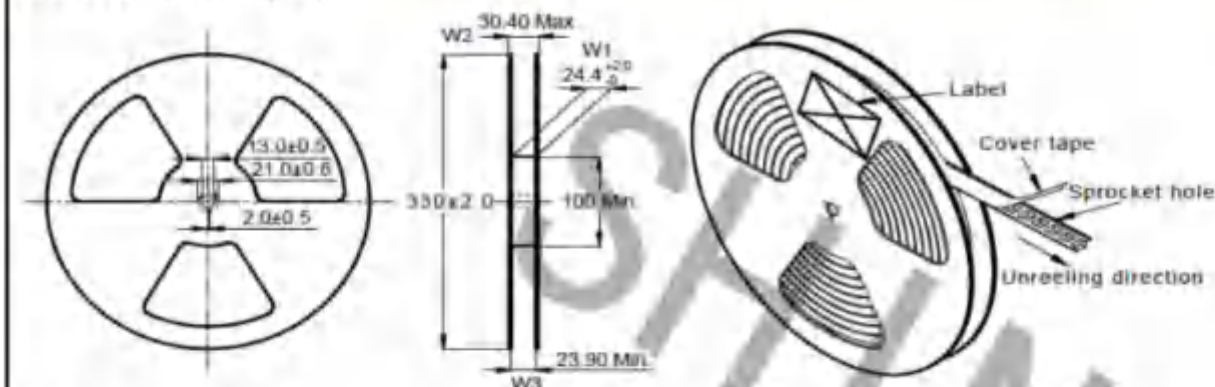




TECHNICAL DATA

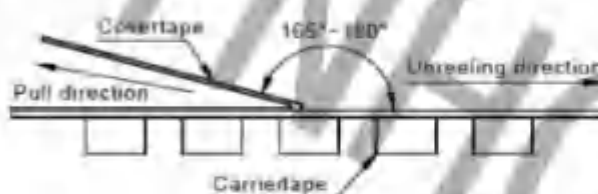
HCB100808AR18 SERIES

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

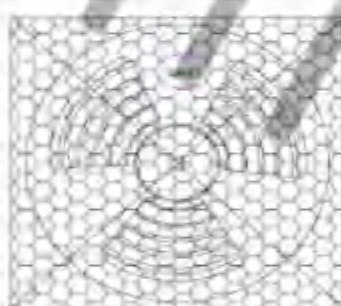


7.5 Packing Quantity

Part Number	Chips/Reel	Chips/Inner Box	Chips/Carton
HCB100808AR18 SERIES	800	1200 (2 reels/ PE bag / inner box)	3600 (3 inner boxes/ Carton)



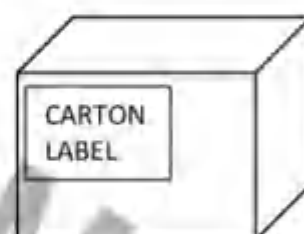
REEL



2 REELS IN A PE BAG

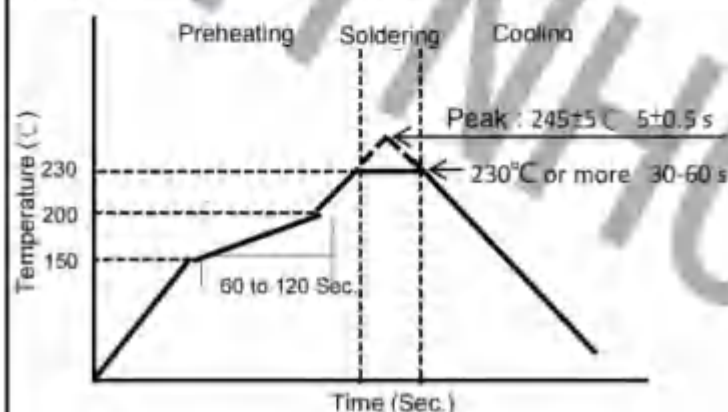


1 PE BAG IN A INNER BOX

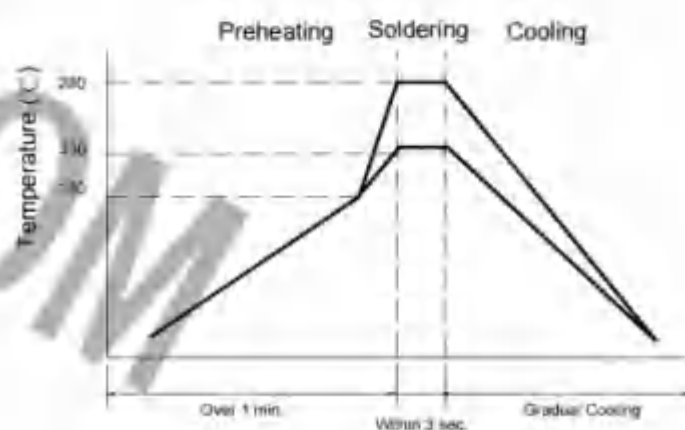


3 INNER BOXES IN A CARTON

8. RECOMMENDED SOLDERING PROFILE



REFLOW SOLDERING

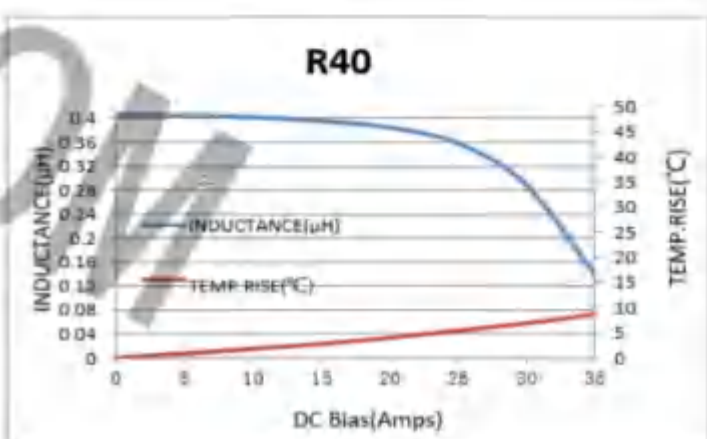
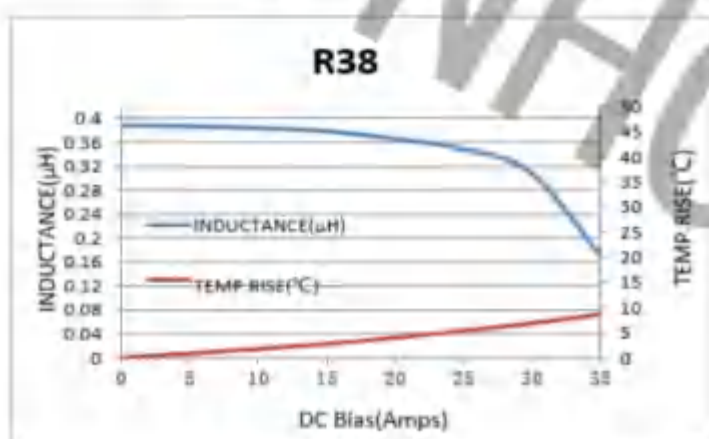
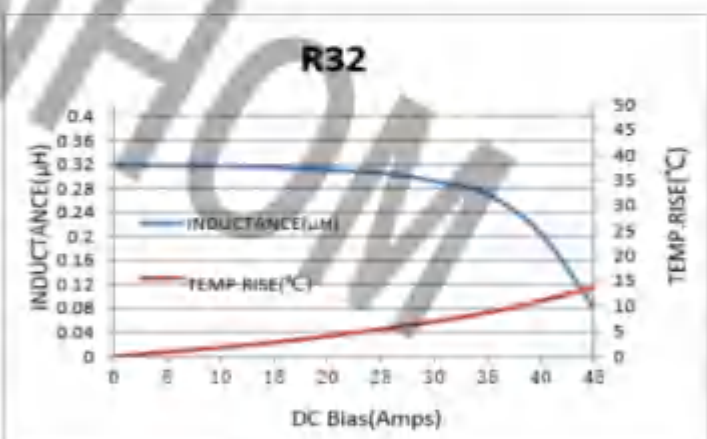
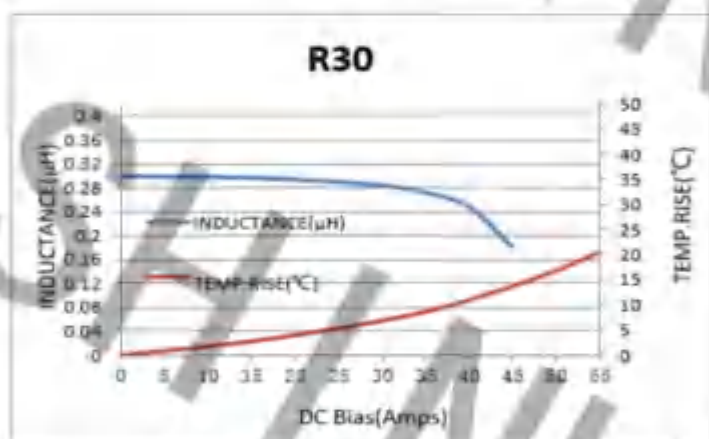
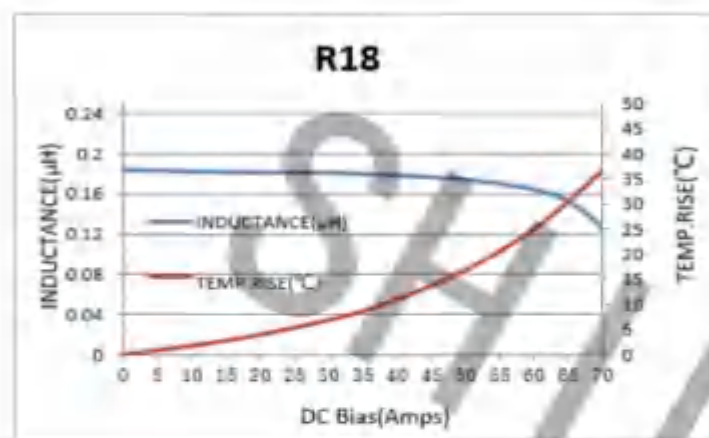
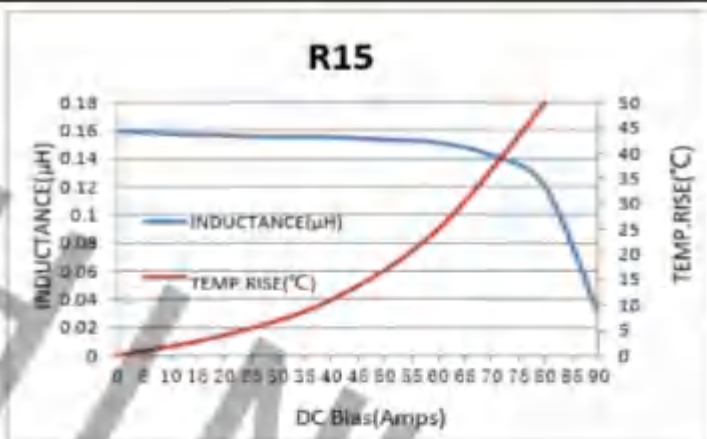
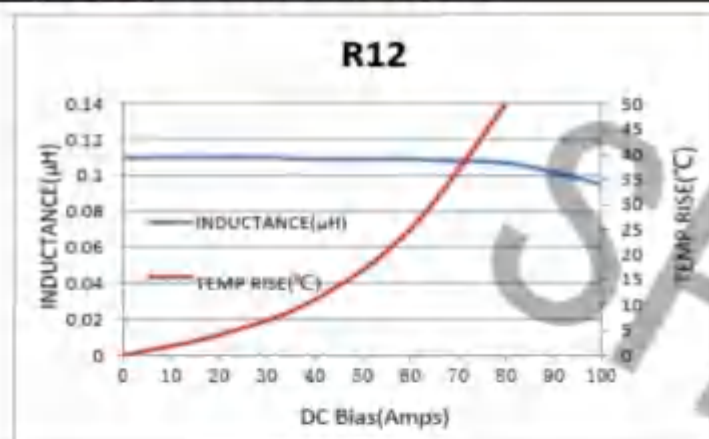


HAND SOLDERING

TECHNICAL DATA

HCB100808AR18 SERIES

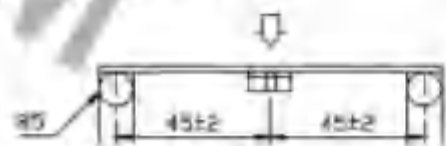
9. INDUCTANCE CHARACTERISTICS



TECHNICAL DATA

HCB100808AR18 SERIES

10. RELIABILITY TEST SPECIFICATIONS FOR POWER BEAD INDUCTORS

Item	Specification	Test Conditions
Operating temperature range	-40℃ ~ +125℃	
Storage temperature and humidity range	25±5℃ , 70% RH Max (In Original Packaging: <40℃ , <75%RH)	
Solderability	More than 90% of the terminal electrode should be covered with solder	Soldering Temperature for Pb Product: 230±5℃ Soldering Temperature for Pb-free Product: 260±5℃ 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℃ SMD Type: 245±5℃ 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℃ 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℃ 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℃±5℃ and 30±2 minutes, then put 3±1 minutes under room temperature, and test under 125℃±5℃ 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℃ 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℃ and Pressure Barrel Temperature is 47℃. 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 point

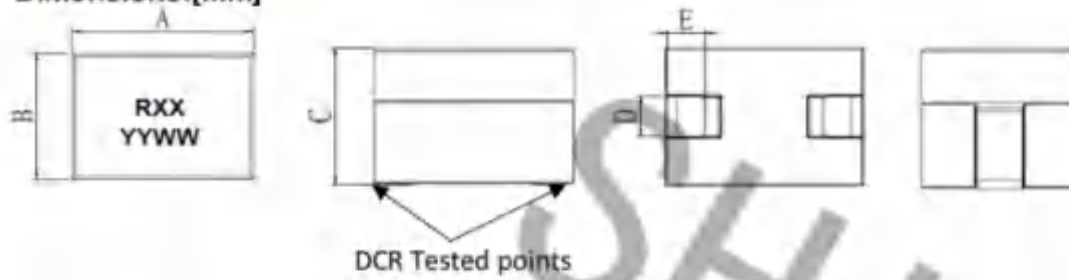
Max. product size (L*W*H)=10.6*8.0*8.2(Max.)

Product code

Technical Data

HCB100808R18 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.)

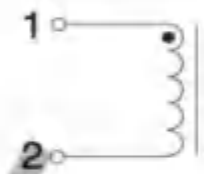
Product Marking:

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

Recommended Pad Layout:[mm]

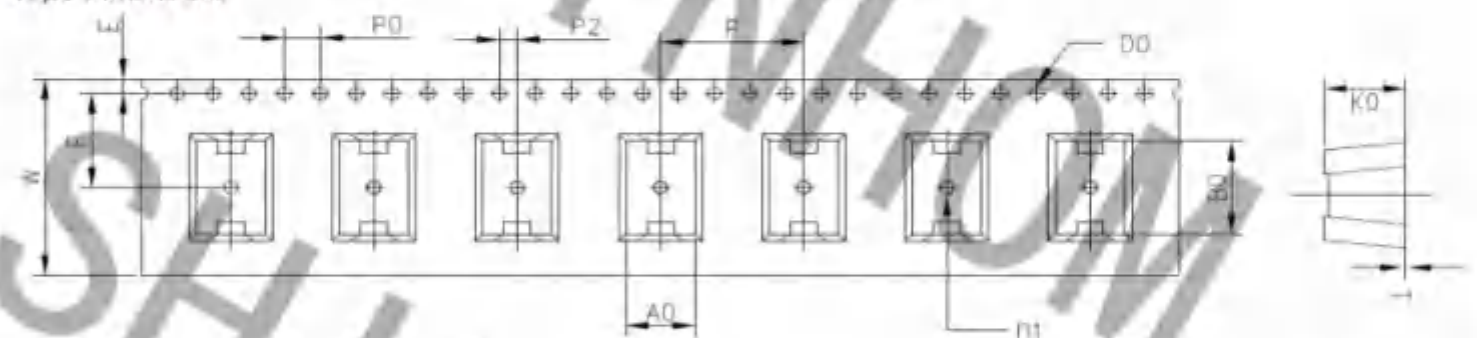


Schematic:

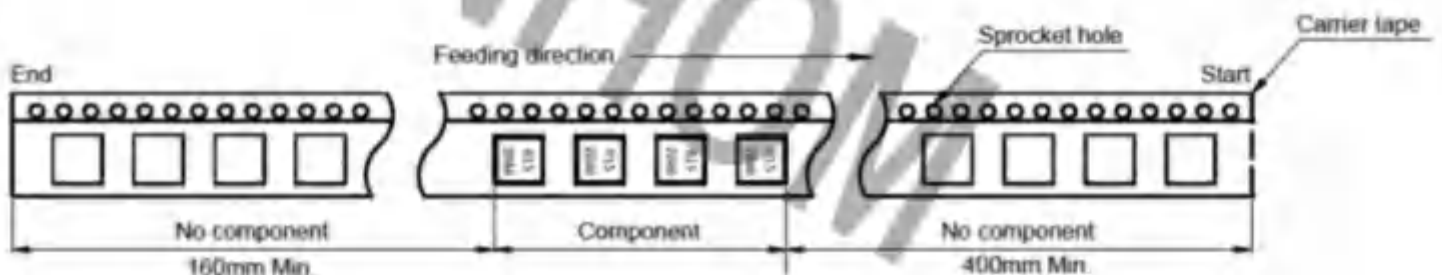


Packaging Information:[mm]

Tape Dimensions



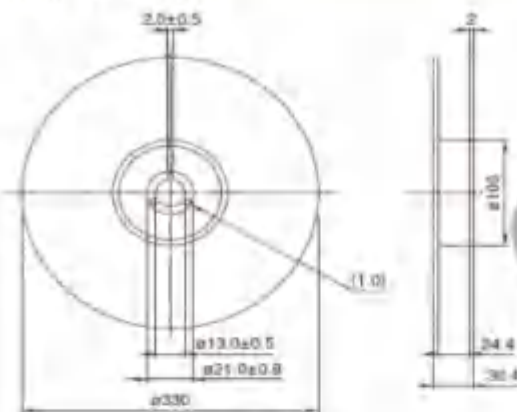
Material	A0(±0.1)	B0(±0.1)	W (±0.3)	T (±0.05)	K0(±0.1)	P(±0.1)	F(±0.1)	E(±0.1)	D0(±0.1)	P0(±0.1)	P2(±0.1)	D1(±0.1)
Polystyrene	8.40	12.20	24.00	0.35	8.50	16.00	11.50	1.75	1.50	4.00	2.00	1.50



Technical Data

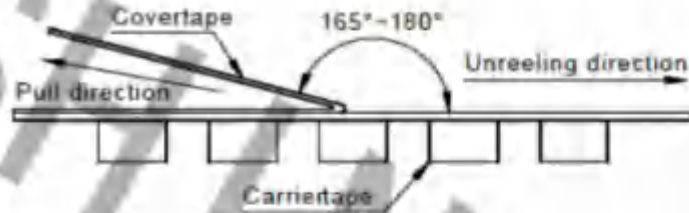
HCB100808R18 Series

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:

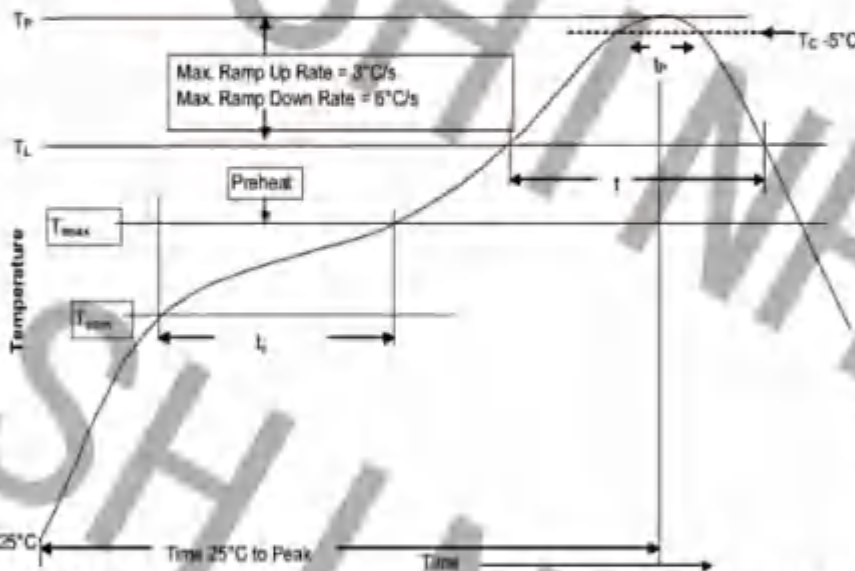


Table 1 - Standard SnPb Solder (T_c)

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)

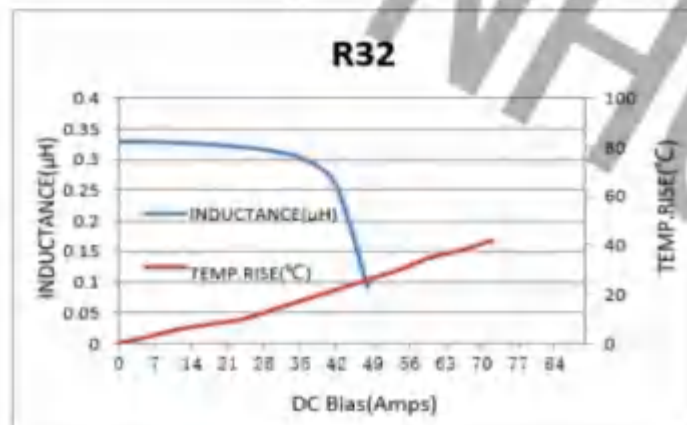
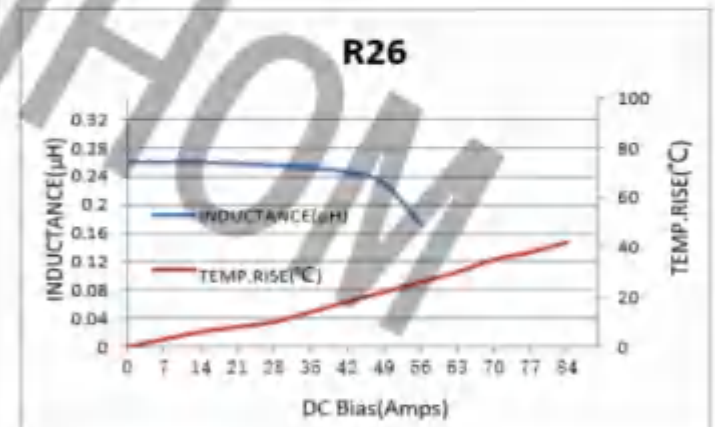
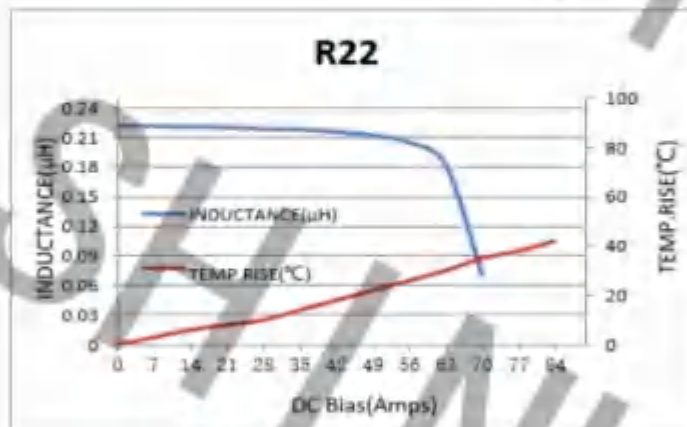
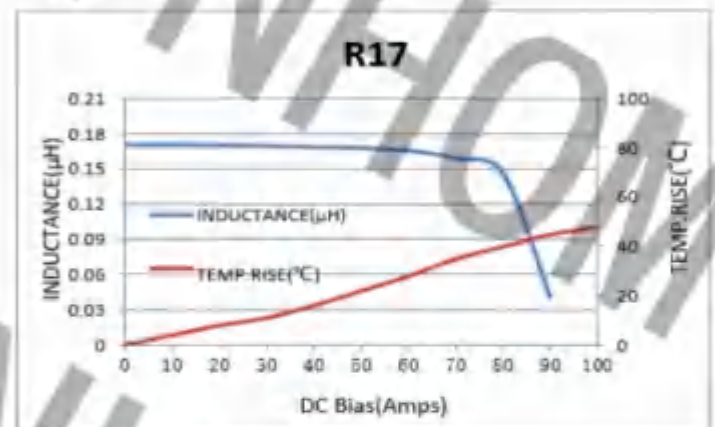
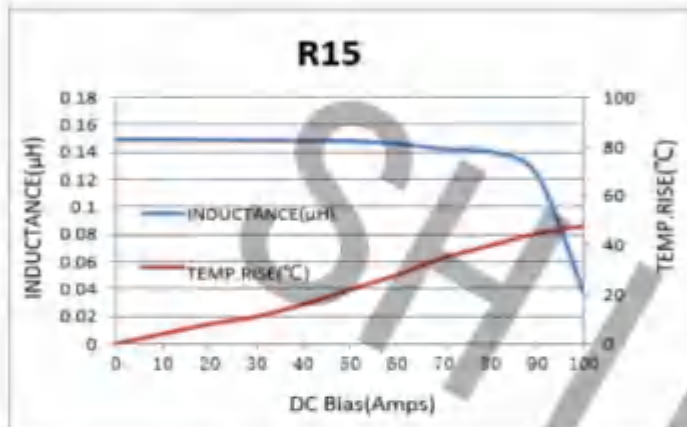
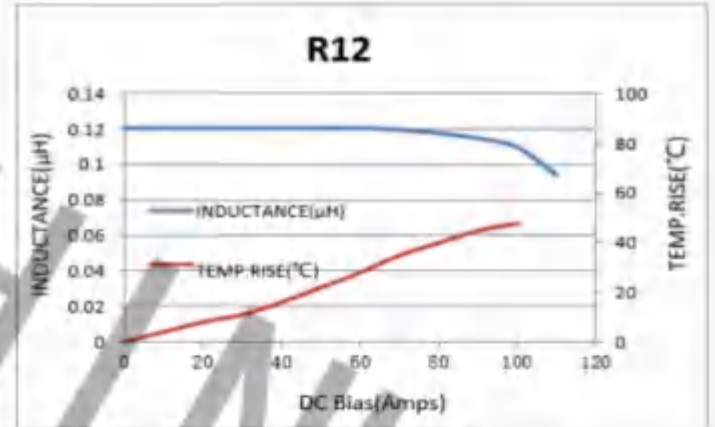
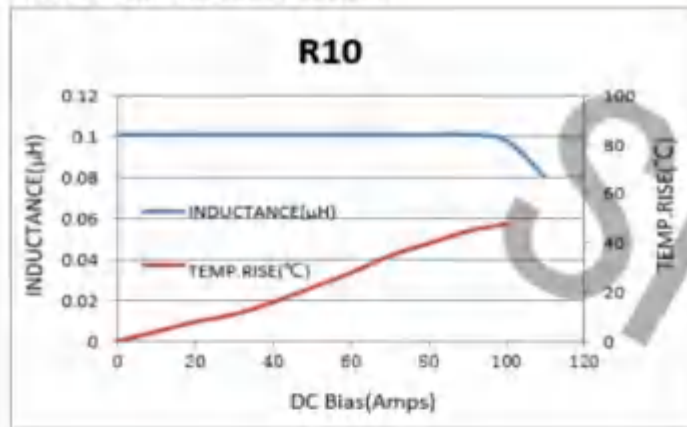
Package Thickness	Volume mm ³ <350	Volume mm ³ 350 - 2000	Volume mm ³ >2000
<1.6mm	230°C	260°C	260°C
1.6 - 2.5mm	260°C	250°C	245°C
>2.5mm	250°C	245°C	245°C

Profile Feature	Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak		
• Temperature min. (T_{smin})	100°C	150°C
• Temperature max. (T_{smax})	150°C	200°C
• Time (T_{smin} to T_{smax}) (t_s)	60-120 Seconds	60-120 Seconds
Average ramp up rate T_{smax} to T_p	3°C/ Second Max.	3°C/ Second Max.
Liquidous temperature (T_L)	183°C	217°C
Time at liquidous (t_L)	60-150 Seconds	60-150 Seconds
Peak package body temperature (T_p)*	Table 1	Table 2
Time (t_p)** within 5 °C of the specified classification temperature (T_c)	20 Seconds**	30 Seconds**
Average ramp-down rate (T_p to T_{smax})	6°C/ Second Max.	6°C/ Second Max.
Time 25°C to Peak Temperature	8 Minutes Max.	8 Minutes Max.

* Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.

** Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

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
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 Aac, +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

5. Part Number Definition:

HCB 100875 Rxx - Ryy

Inductance value in μH, R =
decimal point

DCR value in mΩ,
R = decimal point

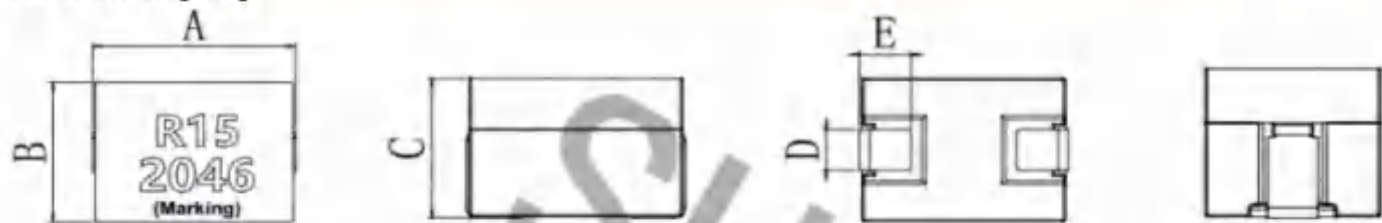
Max. product size
(L*W*H)=10.0*8.0*7.5(Max.)

Product code

Technical Data

HCB100875R29 Series

Dimensions:[mm]



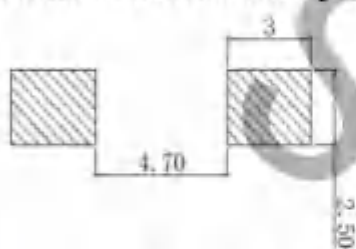
Product Marking:

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]

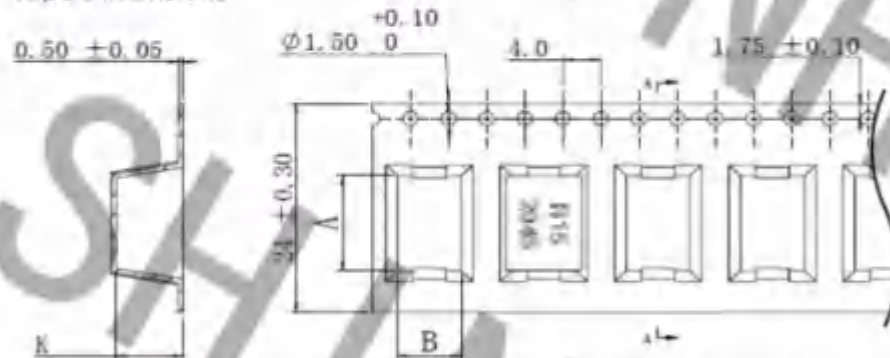


Schematic:

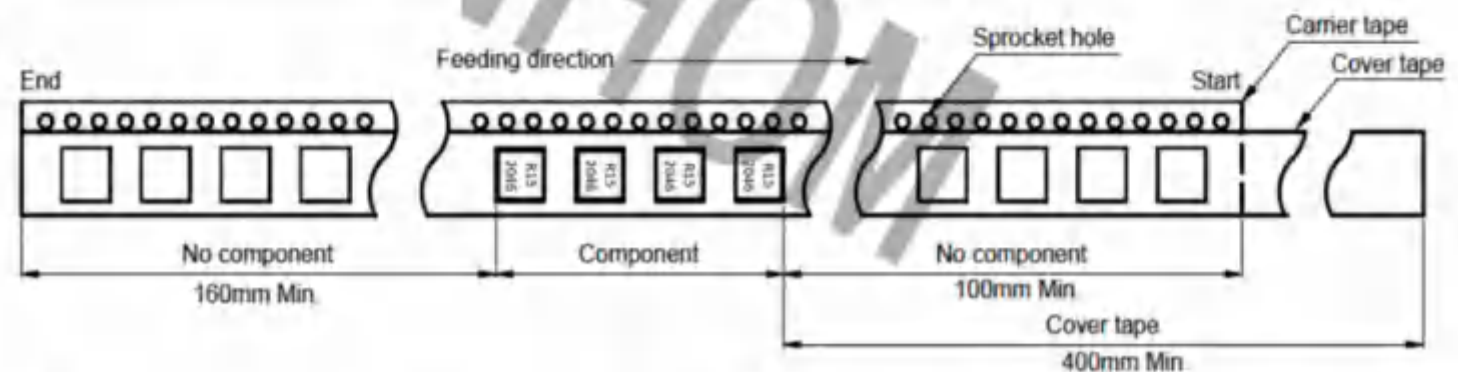


Packaging Information:[mm]

Tape Dimensions



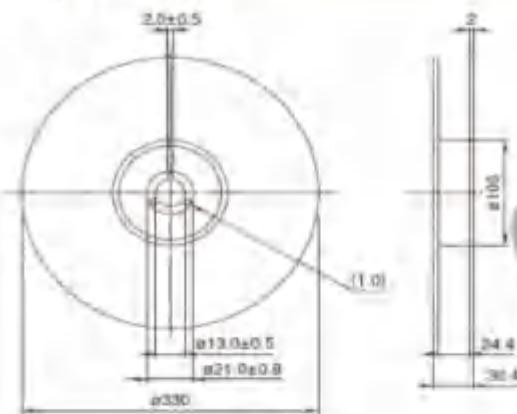
Part Number	A	B	K
HCB100875R29 Type	10.8±0.1	8.0±0.1	7.7±0.1



Technical Data

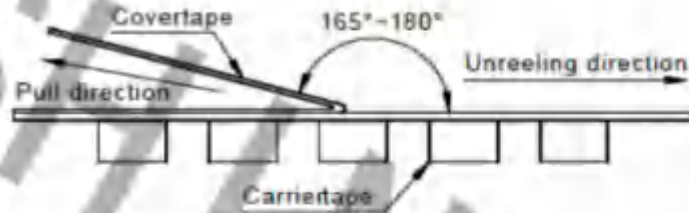
HCBI00875R29 Series

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)
HCBI00875R29 Type	700

Recommended Reflow Profile:

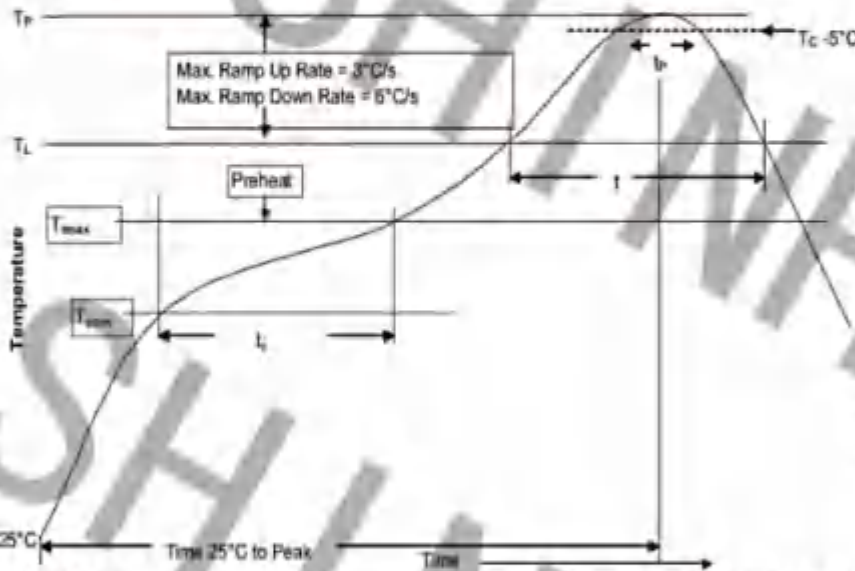


Table 1 - Standard SnPb Solder (T_c)

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)

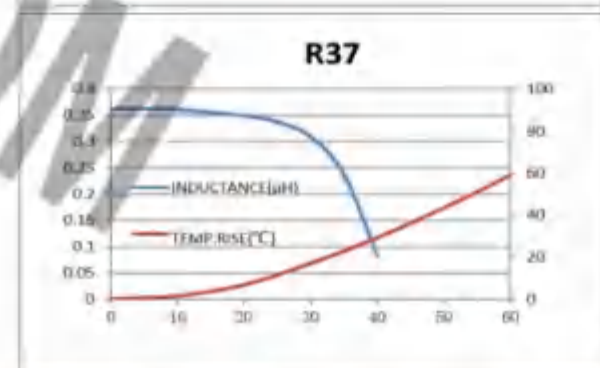
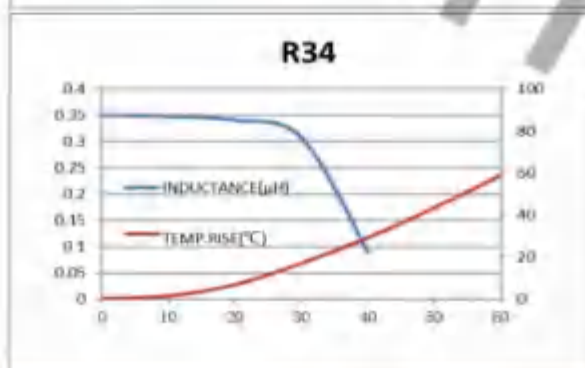
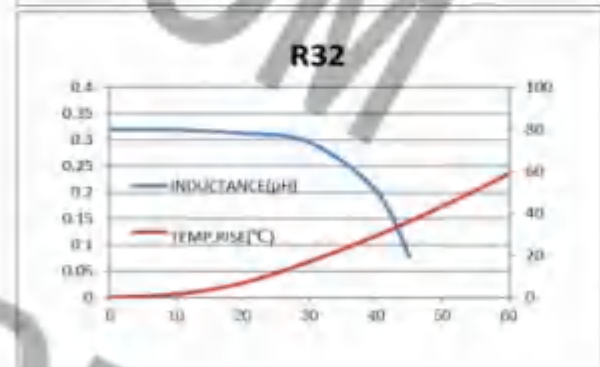
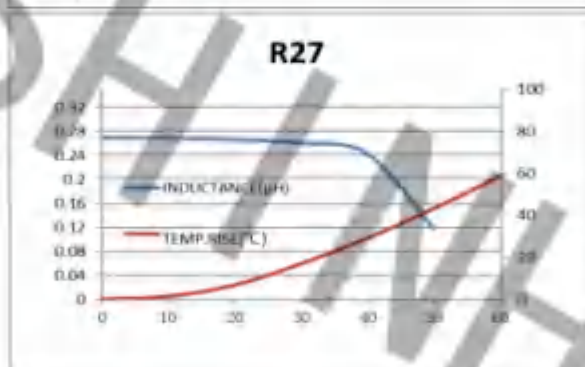
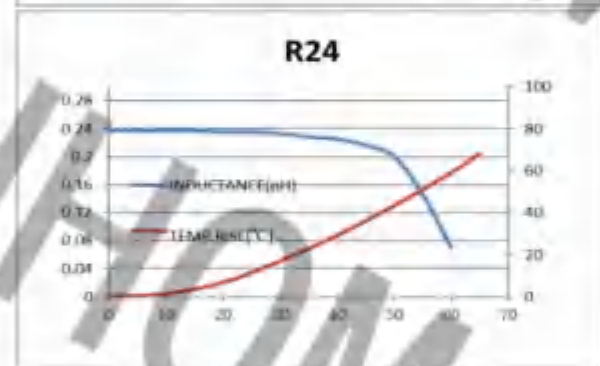
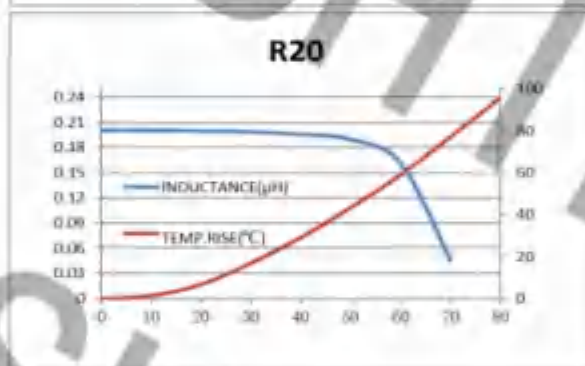
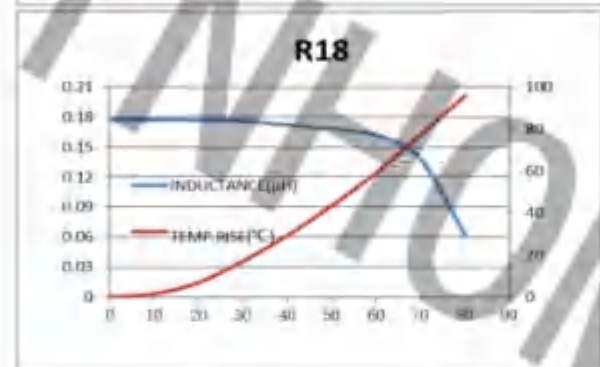
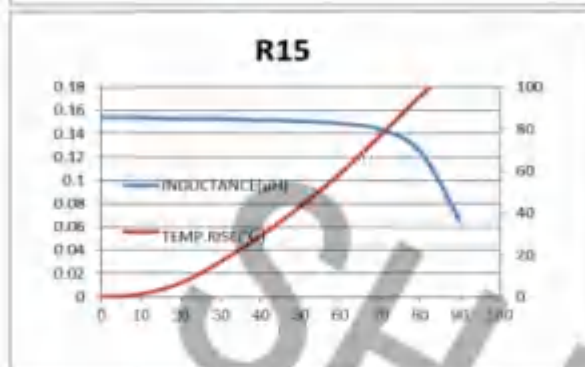
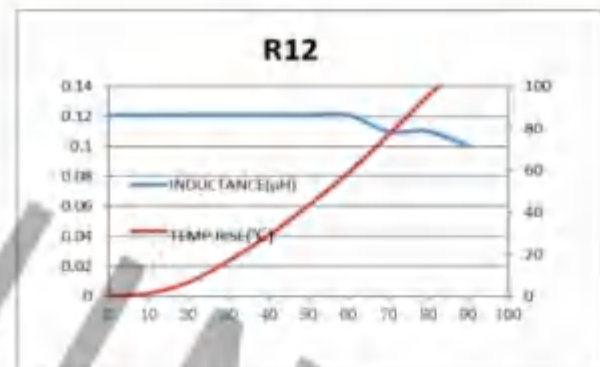
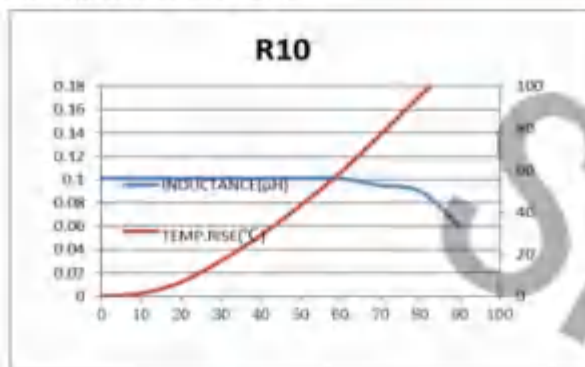
Package Thickness	Volume mm ³ <350	Volume mm ³ 350 - 2000	Volume mm ³ >2000
<1.6mm	250°C	260°C	260°C
1.6 - 2.5mm	260°C	250°C	245°C
>2.5mm	250°C	245°C	245°C

Profile Feature	Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak		
• Temperature min. (T_{smin})	100°C	150°C
• Temperature max. (T_{smax})	150°C	200°C
• Time (T_{smin} to T_{smax}) (t_s)	60-120 Seconds	60-120 Seconds
Average ramp up rate T_{smin} to T_p	3°C/ Second Max.	3°C/ Second Max.
Liquidous temperature (T_L)	183°C	217°C
Time at liquidous (t_L)	60-150 Seconds	60-150 Seconds
Peak package body temperature (T_p)*	Table 1	Table 2
Time (t_p)** within 5 °C of the specified classification temperature (T_c)	20 Seconds**	30 Seconds**
Average ramp-down rate (T_p to T_{smax})	6°C/ Second Max.	6°C/ Second Max.
Time 25°C to Peak Temperature	8 Minutes Max.	8 Minutes Max.

* Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.

** Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

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(mΩ) typical @ +20 °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 point

DCR value in $\text{m}\Omega$,
 R = decimal point

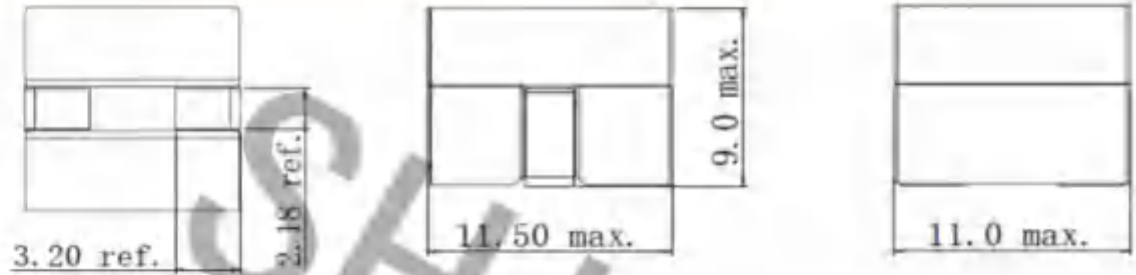
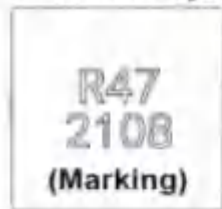
Max. product size
 (L*W*H)= $11.5*11.0*9.0(\text{Max.})$

Product code

Technical Data

HCB121109R30 Series

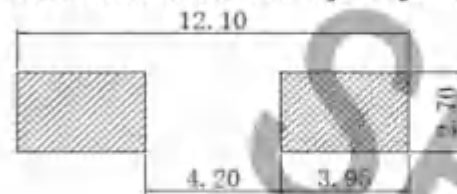
Dimensions:[mm]



Product Marking:

Part Code	Ryy
Date Code	YYWW

Recommended Pad Layout:[mm]

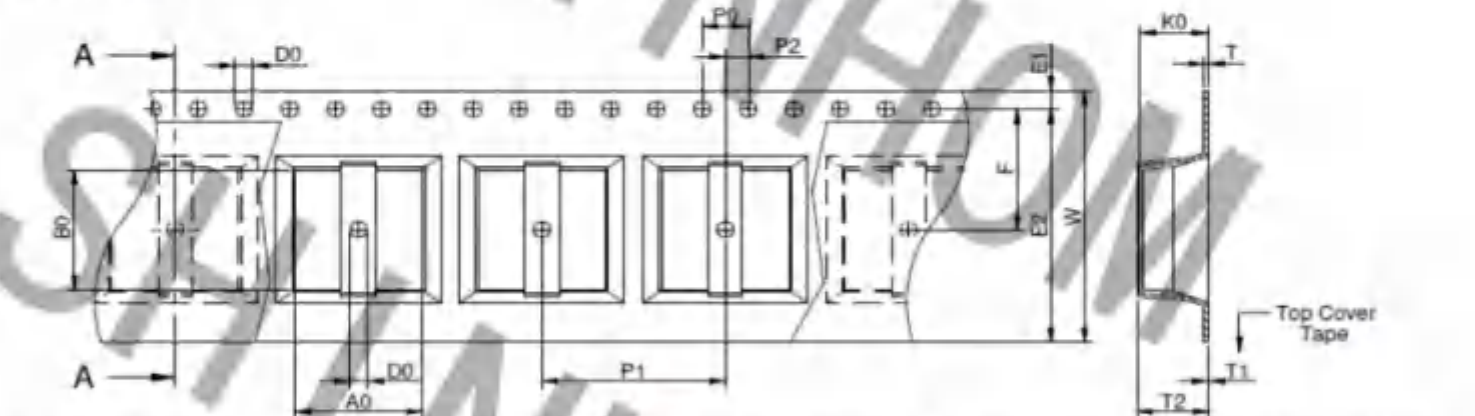


Schematic:

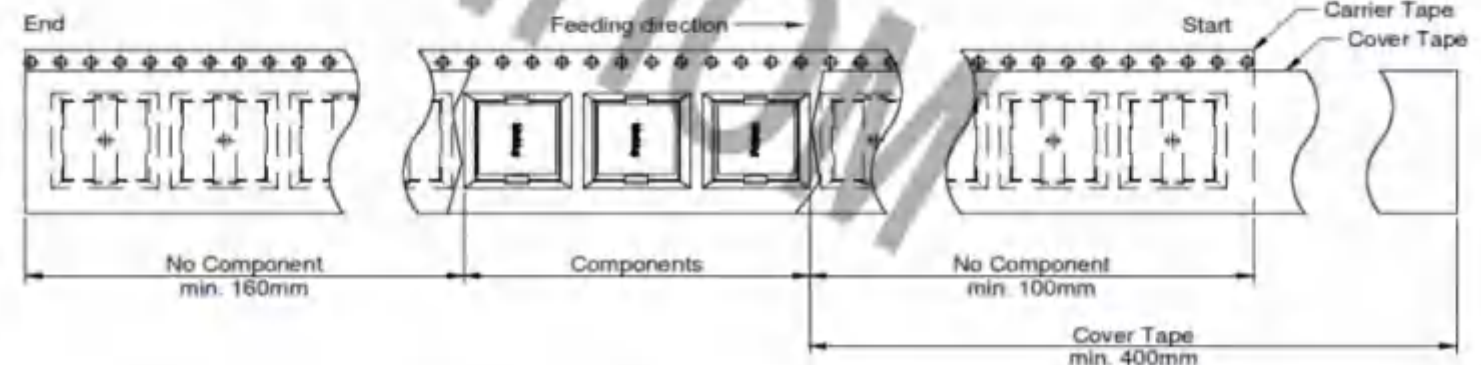


Packaging Information:[mm]

Tape Dimensions



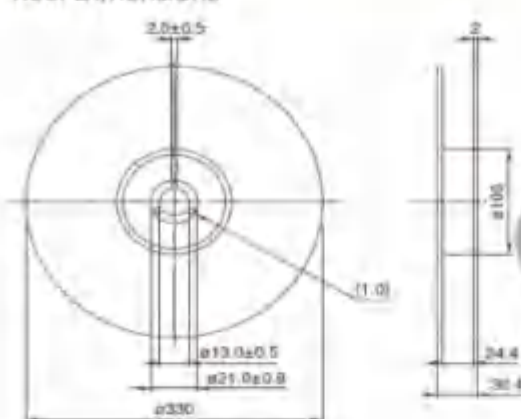
Material	A0(typ.)	B0(typ.)	W(±0.3)	T(ref.)	T1(max.)	T2(typ.)	P0(±0.1)	P1(±0.1)	P2(±0.1)	D0(+0.1/-0.0)	E1(±0.1)	E2(min.)	F(±0.1)
Polystyrene	11.60	12.00	24.00	0.40	0.10	9.70	4.00	20.00	2.00	1.50	1.75	22.25	11.50



Technical Data

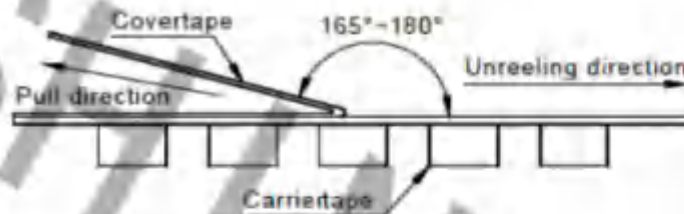
HCB 121109R30 Series

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:

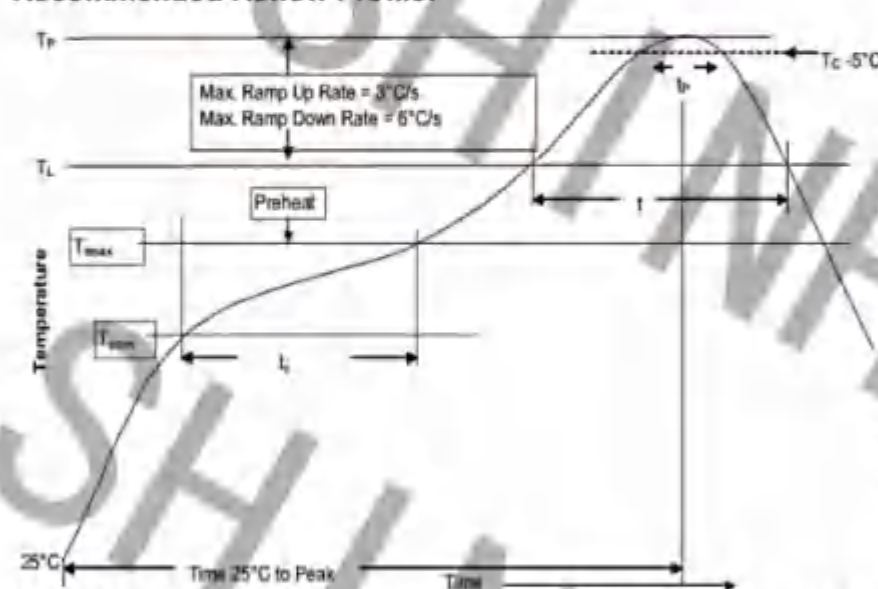


Table 1 - Standard SnPb Solder (T_c)

Package Thickness	Volume $\text{mm}^3 <350$	Volume $\text{mm}^3 \geq 350$
$<2.5\text{mm}$	235°C	220°C
$\geq 2.5\text{mm}$	220°C	220°C

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

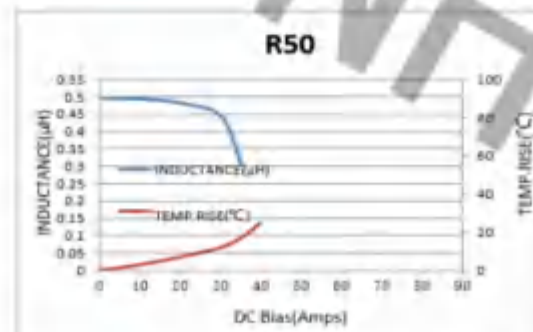
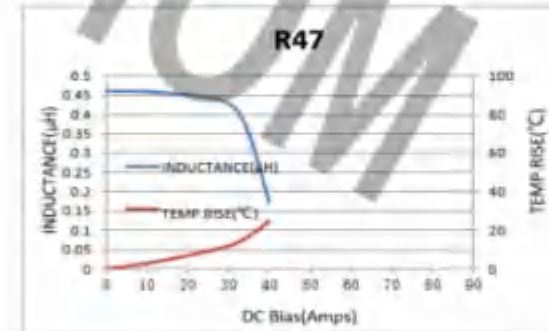
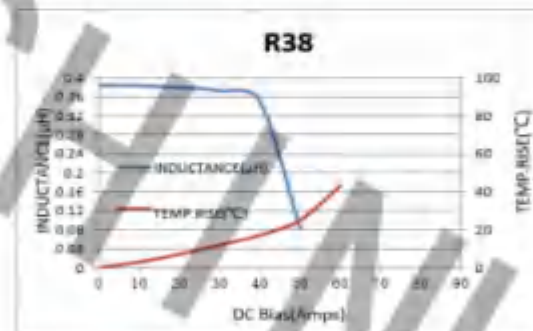
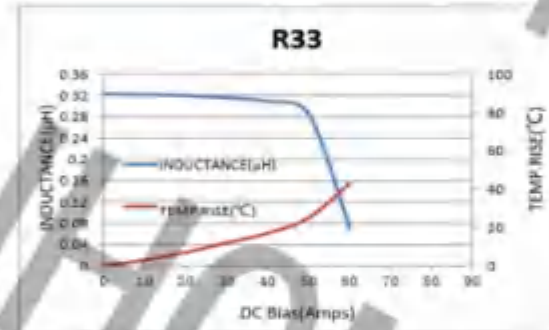
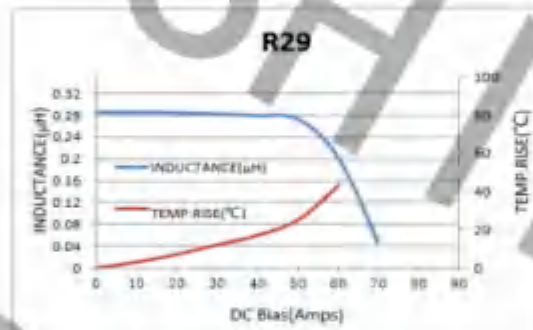
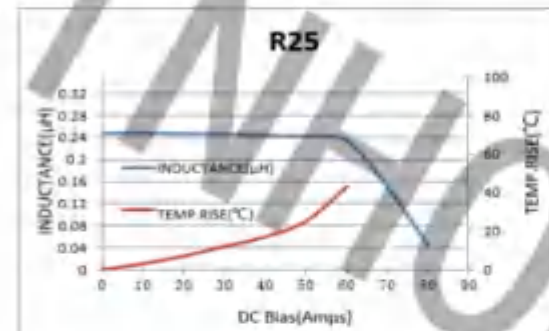
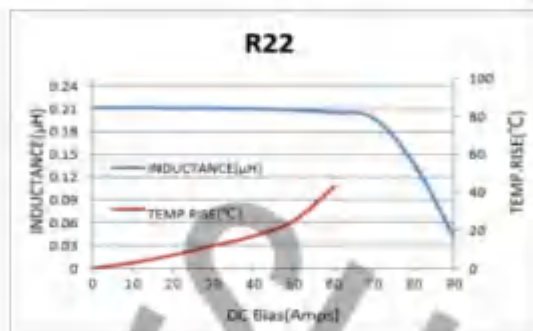
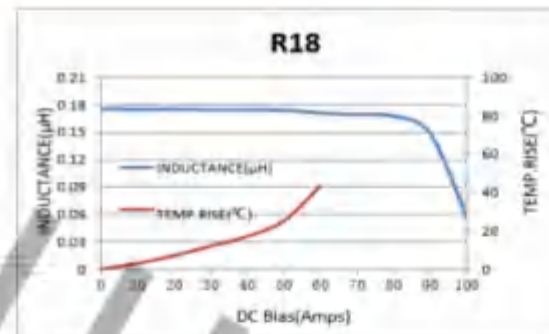
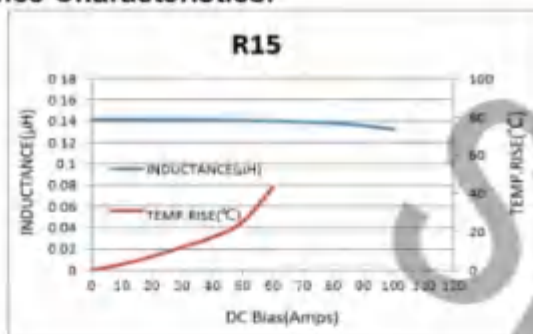
Package Thickness	Volume $\text{mm}^3 <350$	Volume $\text{mm}^3 350 - 2000$	Volume $\text{mm}^3 >2000$
$<1.6\text{mm}$	230°C	260°C	260°C
$1.6 - 2.5\text{mm}$	260°C	250°C	245°C
$>2.5\text{mm}$	250°C	245°C	245°C

Profile Feature	Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak		
• Temperature min. (T_{min})	100°C	150°C
• Temperature max. (T_{max})	150°C	200°C
• Time (T_{min} to T_{max}) (t_s)	60-120 Seconds	60-120 Seconds
Average ramp up rate T_{min} to T_p	$3^{\circ}\text{C/Second Max.}$	$3^{\circ}\text{C/Second Max.}$
Liquidous temperature (T_L)	183°C	217°C
Time at liquidous (t_L)	60-150 Seconds	60-150 Seconds
Peak package body temperature (T_p)*	Table 1	Table 2
Time (t_p)** within 5°C of the specified classification temperature (T_c)	20 Seconds**	30 Seconds**
Average ramp-down rate (T_p to T_{max})	$6^{\circ}\text{C/Second Max.}$	$6^{\circ}\text{C/Second Max.}$
Time 25°C to Peak Temperature	6 Minutes Max.	8 Minutes Max.

* Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.

** Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

Inductance Characteristics:





SMD HIGH CURRENT POWER INDUCTORS LPA 1030 SERIES

FEATURES:

- High current, low loss of iron powder core
- Low profile for machine placement
- Minimize electromagnetic interference
- Suppress common mode noise
- Prevent EMI effect via precise impedance
- Custom design available

COMMON APPLICATIONS:

- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators

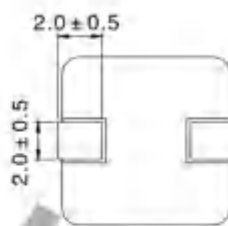
ELECTRICAL CHARACTERISTICS:

Part Number	Codes	Inductance $L_0(\mu H) \pm 20\%$ @0Adc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Max. (mΩ)
LPA1030-R20M	R20	0.2	22.0	50.0	0.9
LPA1030-R33M	R33	0.33	18.0	36.0	2.39
LPA1030-R56M	R56	0.56	18.0	33.0	2.39
LPA1030-R68M	R68	0.68	14.0	21.0	5.27
LPA1030-1R0M	1R0	1.0	14.0	21.0	5.27
LPA1030-1R2M	1R2	1.2	12.0	15.0	7.26
LPA1030-1R5M	1R5	1.5	12.0	18.0	7.26
LPA1030-2R2M	2R2	2.2	9.0	15.0	12.52

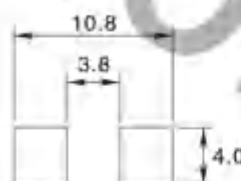
Note: 1. K= $\pm 10\%$, M= $\pm 20\%$, N= $\pm 30\%$

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Land patterns



Winding



Note:

- Test frequency: 100KHz, 0.1V
- Testing Instrument : L:HP4284A, WK3260B, WK3261A
- All test data is referenced to 25°C ambient
- Idc: DC current (A) that will cause an approximate ΔT of 50°C
- Isat: DC current (A) that will cause L_0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating Conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature, part temperature should be verified in the end application.
- Packing: 800PCS/REEL

Note: All specifications subject to change without notice.



SMD HIGH CURRENT POWER INDUCTORS

LPA 1040 SERIES

FEATURES:

- High current, low loss of iron powder core
- Low profile for machine placement
- Minimize electromagnetic interference
- Suppress common mode noise
- Prevent EMI effect via precise impedance
- Custom design available

COMMON APPLICATIONS:

- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators

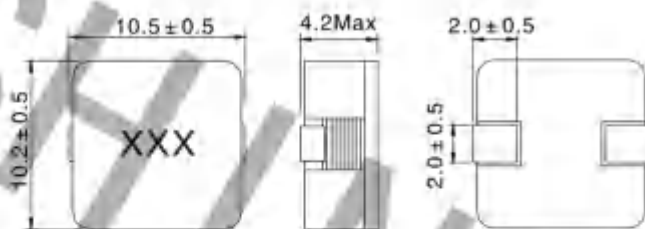
ELECTRICAL CHARACTERISTICS:

Part Number	Codes	Inductance $L_0(\mu H) \pm 20\%$ @0Adc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Max. (mΩ)
LPA1040-R15M	R15	0.15	25.0	60.0	0.64
LPA1040-R30M	R30	0.3	22.0	35.0	1.21
LPA1040-R56M	R56	0.56	20.0	30.0	1.77
LPA1040-1R0M	1R0	1.0	16.0	20.0	3.63
LPA1040-1R5M	1R5	1.5	14.0	17.0	5.83
LPA1040-2R2M	2R2	2.2	11.0	13.0	8.03
LPA1040-2R8M	2R8	2.8	9.5	11.0	11.66
LPA1040-4R3M	4R3	4.3	6.0	8.0	15.51

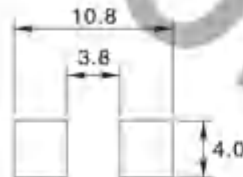
Note: 1. K= $\pm 10\%$, M= $\pm 20\%$, N= $\pm 30\%$

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Land patterns



Winding



Note:

- Test frequency: 100KHz, 0.1V
- Testing Instrument : L:HP4284A, WK3260B, WK3261A
- All test data is referenced to 25°C ambient
- Idc: DC current (A) that will cause an approximate ΔT of 50°C
- Isat: DC current (A) that will cause L_0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating Conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature, part temperature should be verified in the end application.
- Packing: 800PCS/REEL

Note: All specifications subject to change without notice.



SMD HIGH CURRENT POWER INDUCTORS

LPA 1050 SERIES

FEATURES:

- High current, low loss of iron powder core
- Low profile for machine placement
- Minimize electromagnetic interference
- Suppress common mode noise
- Prevent EMI effect via precise impedance
- Custom design available

COMMON APPLICATIONS:

- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators

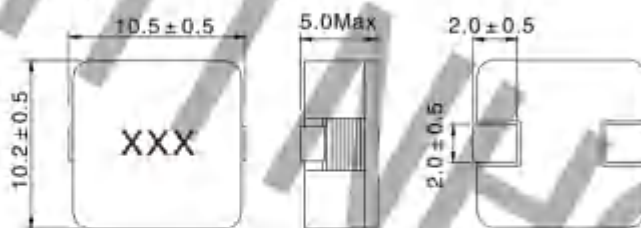
ELECTRICAL CHARACTERISTICS:

Part Number	Codes	Inductance $L_0(\mu H) \pm 20\%$ @0Adc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Max (mΩ)
LPA1050-R16M	R16	0.16	25.0	58.0	0.56
LPA1050-R40M	R40	0.4	24.0	37.0	0.74
LPA1050-R72M	R72	0.72	22.0	35.0	1.43
LPA1050-1R2M	1R2	1.2	20.0	25.0	1.98
LPA1050-1R8M	1R8	1.8	16.0	18.0	3.85
LPA1050-2R4M	2R4	2.4	14.0	17.0	5.23
LPA1050-3R3M	3R3	3.3	12.0	15.0	6.49
LPA1050-4R2M	4R2	4.2	11.0	14.0	7.81
LPA1050-5R5M	5R5	5.5	10.0	12.0	11.33
LPA1050-6R5M	6R5	6.5	8.4	10.0	13.75
LPA1050-7R8M	7R8	7.8	8.0	9.5	14.96
LPA1050-100M	100	10	7.2	8.5	17.93
LPA1050-160M	160	16	5.0	6.5	37.95

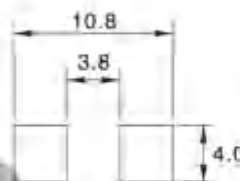
Note: 1. K=±10%, M=±20%, N=±30%

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

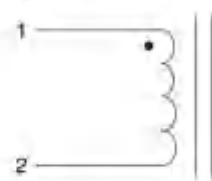
Dimensions(mm)



Land patterns



Winding



Note:

- Test frequency: 100KHz, 0.1V
- Testing Instrument : LHP4284A, WK3260B, WK3261A, WK3265B
- All test data is referenced to 25°C ambient
- Idc: DC current (A) that will cause an approximate ΔT of 50°C
- Isat: DC current (A) that will cause L_0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature, part temperature should be verified in the end application.
- Packing: 800PCS/REEL

Note: All specifications subject to change without notice.



SMD HIGH CURRENT POWER INDUCTORS

LPA 1230 SERIES

FEATURES:

- High current, low loss of iron powder core
- Low profile for machine placement
- Minimize electromagnetic interference
- Suppress common mode noise
- Prevent EMI effect via precise impedance
- Custom design available

COMMON APPLICATIONS:

- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators

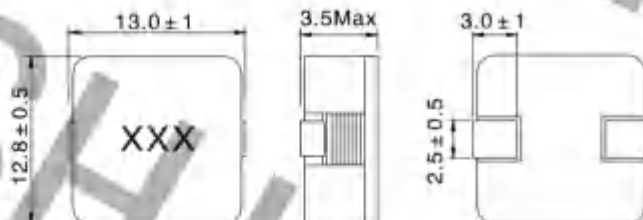
ELECTRICAL CHARACTERISTICS:

Part Number	Codes	Inductance $L_0(\mu H) \pm 20\%$ @0Adc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Max. (mΩ)
LPA1230-R25N	R25	0.25	24.0	60.0	0.83
LPA1230-R68M	R68	0.68	22.0	40.0	1.74
LPA1230-1R2M	1R2	1.2	17.0	28.0	3.14
LPA1230-1R8M	1R8	1.8	14.0	22.0	6.16
LPA1230-2R2M	2R2	2.2	14.0	18.0	6.27
LPA1230-3R3M	3R3	3.3	12.0	14.0	6.91

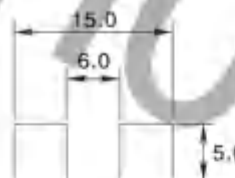
Note: 1. K= $\pm 10\%$, M= $\pm 20\%$, N= $\pm 30\%$

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Land patterns



Winding



Note:

- Test frequency: 100KHz, 0.1V
- Testing Instrument: LHP4284A, WK3260B, WK3261A
- All test data is referenced to 25°C ambient
- Idc: DC current (A) that will cause an approximate ΔT of 50°C
- Isat: DC current (A) that will cause L_0 to drop approximately 30%
- Operating Temperature Range: -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating Conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. part temperature should be verified in The end application.
- Packing: 500PCS/REEL

Note: All specifications subject to change without notice.



SMD HIGH CURRENT POWER INDUCTORS

LPA 1260 SERIES

FEATURES:

- High current, low loss of iron powder core
- Low profile for machine placement
- Minimize electromagnetic interference
- Suppress common mode noise
- Prevent EMI effect via precise impedance
- Custom design available

COMMON APPLICATIONS:

- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators

ELECTRICAL CHARACTERISTICS:

Part Number	Codes	Inductance $L_0(\mu H) \pm 20\%$ @0Adc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Max. (mΩ)
LPA1260-R22M	R22	0.2	32.0	65.0	0.39
LPA1260-R47M	R47	0.47	30.0	50.0	0.74
LPA1260-R82M	R82	0.82	27.0	35.0	0.99
LPA1260-1R3M	1R3	1.3	25.0	25.0	1.08
LPA1260-2R0M	2R0	2.0	23.0	22.0	2.86
LPA1260-2R8M	2R8	2.8	20.0	17.5	3.63
LPA1260-3R7M	3R7	3.7	17.0	16.0	5.39
LPA1260-4R7M	4R7	4.7	13.0	15.0	7.70
LPA1260-6R0M	6R0	6.0	12.0	14.0	9.24
LPA1260-7R3M	7R3	7.3	13.0	12.0	8.49
LPA1260-9R2M	9R2	9.2	12.0	10.5	8.58
LPA1260-110M	110	11.3	11.0	9.5	10.0
LPA1260-130M	130	13.0	10.0	9.0	12.32
LPA1260-150M	150	15.4	9.0	8.0	16.28
LPA1260-220M	120	22.0	6.0	6.5	27.17

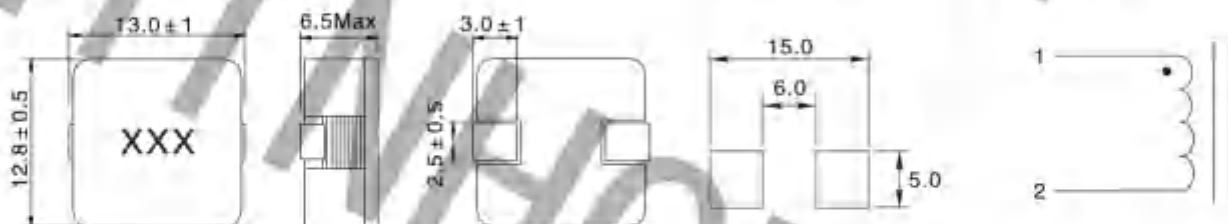
Note: 1, K= $\pm 10\%$, M= $\pm 20\%$, N= $\pm 30\%$

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)

Land patterns

Winding



Note:

- Test frequency: 100KHz, 0.1V
- Testing Instrument : L:HP4284A, WK3260B, WK3261A
- All test data is referenced to 25°C ambient
- Idc: DC current (A) that will cause an approximate ΔT of 50°C
- Isat: DC current (A) that will cause L_0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient temp rise) should not exceed 125°C under worse case operating Conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. part temperature should be verified in the end application.
- Packing: 500PCS/REEL

Note: All specifications subject to change without notice.



SMD HIGH CURRENT POWER INDUCTORS

LPA 1890 SERIES

FEATURES:

- High current, low loss of iron powder core
- Low profile for machine placement
- Minimize electromagnetic interference
- Suppress common mode noise
- Prevent EMI effect via precise impedance
- Custom design available

COMMON APPLICATIONS:

- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators

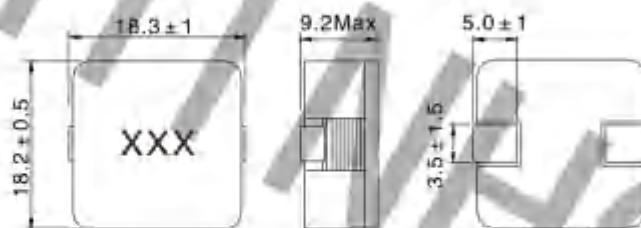
ELECTRICAL CHARACTERISTICS:

Part Number	Codes	Inductance $L_0(\mu H) \pm 20\%$ @0Adc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Max. (mΩ)
LPA1890-R82M	R82	0.82	41.5	65.0	0.58
LPA1890-1R3M	1R3	1.3	34.5	62.0	1.02
LPA1890-1R9M	1R9	1.9	32.5	52.0	1.3
LPA1890-2R6M	2R6	2.6	31.5	50.0	1.71
LPA1890-3R5M	3R5	3.5	22.5	37.0	3.35
LPA1890-4R5M	4R5	4.5	20.5	37.0	3.67
LPA1890-5R6M	5R6	5.6	19.0	33.0	4.0
LPA1890-6R8M	6R8	6.8	18.5	27.0	4.43
LPA1890-100M	100	10	15.0	21.5	7.45
LPA1890-100MT	100	10	16.5	18.5	7.67
LPA1890-150M	150	15	14.0	14.0	10.05
LPA1890-220M	220	22	11.0	11.0	15.77
LPA1890-330M	330	33	8.5	9.0	24.41
LPA1890-470M	470	47	5.8	7.0	36.72

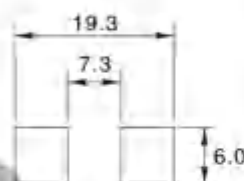
Note: 1. K= $\pm 10\%$, M= $\pm 20\%$, N= $\pm 30\%$

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

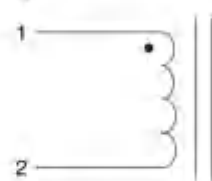
Dimensions(mm)



Land patterns



Winding



Note:

- Test frequency: 100KHz, 0.1V
- Testing Instrument : L:HP4284A, WK3260B, WK3261A
- All test data is referenced to 25°C ambient
- Idc: DC current (A) that will cause an approximate ΔT of 50°C
- Isat: DC current (A) that will cause L_0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient) temp rise) should not exceed 125°C under worse case operating Conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. part temperature should be verified in The end application.
- Packing: 250PCS/REEL

Note: All specifications subject to change without notice.



SMD HIGH CURRENT POWER INDUCTORS

LPA 7030 SERIES

FEATURES:

- High current, low loss of iron powder core
- Low profile for machine placement
- Minimize electromagnetic interference
- Suppress common mode noise
- Prevent EMI effect via precise impedance
- Custom design available

COMMON APPLICATIONS:

- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators

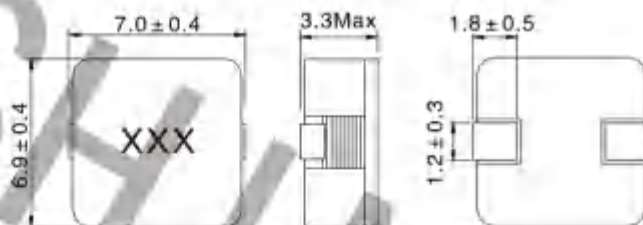
ELECTRICAL CHARACTERISTICS:

Part Number	Codes	Inductance $L_0(\mu H) \pm 20\%$ @0Adc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Max. (mΩ)
LPA7030-R13M	R13	0.13	22	48	1.0
LPA7030-R24M	R24	0.24	18	40	1.98
LPA7030-R52M	R52	0.52	14	20	4.07
LPA7030-R95M	R95	0.95	11	13	6.82
LPA7030-1R2M	1R2	1.15	8.5	13	9.46
LPA7030-1R5M	1R5	1.5	7.5	12	13.97
LPA7030-2R0M	2R0	2.0	6.5	9	15.62

Note: 1. K= $\pm 10\%$, M= $\pm 20\%$, N= $\pm 30\%$

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Land patterns



Winding



Note:

- Test frequency: 100KHz, 0.1V
- Testing Instrument : L:HP4284A, WK3260B, WK3261A
- All test data is referenced to 25°C ambient
- Idc: DC current (A) that will cause an approximate ΔT of 50°C
- Isat: DC current (A) that will cause L_0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature, part temperature should be verified in the end application.
- Packing: 1000PCS/REEL

Note: All specifications subject to change without notice.



SMD HIGH CURRENT POWER INDUCTORS

LPA 7040 SERIES

FEATURES:

- High current, low loss of iron powder core
- Low profile for machine placement
- Minimize electromagnetic interference
- Suppress common mode noise
- Prevent EMI effect via precise impedance
- Custom design available

COMMON APPLICATIONS:

- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators

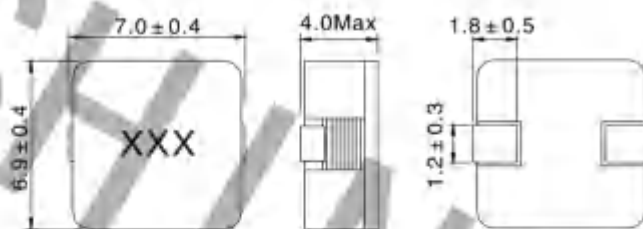
ELECTRICAL CHARACTERISTICS:

Part Number	Codes	Inductance $L_0(\mu H) \pm 20\%$ @0Adc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Max. (mΩ)
LPA7040-R22M	R22	0.22	21.0	32.0	1.21
LPA7040-R40M	R40	0.4	19.0	25.0	2.04
LPA7040-R68M	R68	0.68	17.0	20.0	3.41
LPA7040-1R0M	1R0	1.0	15.0	19.0	5.06
LPA7040-1R5M	1R5	1.5	11.0	14.0	7.26
LPA7040-2R2M	2R2	2.2	9.0	13.0	12.54
LPA7040-3R3M	3R3	3.3	8.5	11.0	18.92
LPA7040-4R7M	4R7	4.7	6.0	7.0	21.45

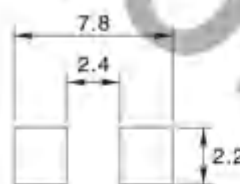
Note: 1. K= $\pm 10\%$, M= $\pm 20\%$, N= $\pm 30\%$

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



Land patterns



Winding



Note:

- Test frequency: 100KHz, 0.1V
- Testing Instrument : L:HP4284A, WK3260B, WK3261A
- All test data is referenced to 25°C ambient
- Idc: DC current (A) that will cause an approximate ΔT of 50°C
- Isat: DC current (A) that will cause L_0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating Conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature, part temperature should be verified in the end application.
- Packing: 1000PCS/REEL

Note: All specifications subject to change without notice.



SMD HIGH CURRENT POWER INDUCTORS

LPA 7050 SERIES

FEATURES:

- High current, low loss of iron powder core
- Low profile for machine placement
- Minimize electromagnetic interference
- Suppress common mode noise
- Prevent EMI effect via precise impedance
- Custom design available

COMMON APPLICATIONS:

- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators

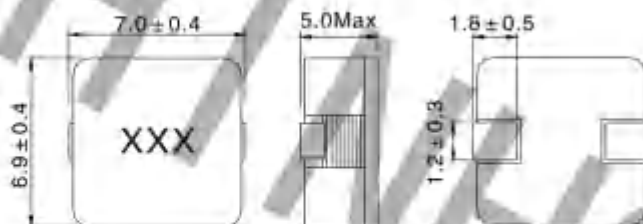
ELECTRICAL CHARACTERISTICS:

Part Number	Codes	Inductance $L_0(\mu H) \pm 20\%$ @0Adc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Max. (mΩ)
LPA7050-R24M	R24	0.24	20.0	28.0	1.1
LPA7050-R47M	R47	0.47	18.0	20.0	1.49
LPA7050-R76M	R76	0.76	15.5	15.0	2.48
LPA7050-1R1M	1R1	1.1	15.0	13.0	3.47
LPA7050-1R5M	1R5	1.5	13.0	11.0	4.73
LPA7050-2R0M	2R0	2.0	11.5	9.0	6.44
LPA7050-3R3M	3R3	3.3	9.0	8.0	9.90
LPA7050-4R9M	4R9	4.9	6.5	6.5	15.95
LPA7050-6R5M	6R5	6.5	6.0	6.0	23.65
LPA7050-7R6M	7R6	7.6	4.2	4.8	33.22
LPA7050-8R5M	8R5	8.5	4.0	4.5	35.75
LPA7050-100M	100	10	3.5	4.0	36.30

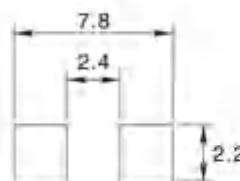
Note: 1. K= $\pm 10\%$, M= $\pm 20\%$, N= $\pm 30\%$

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

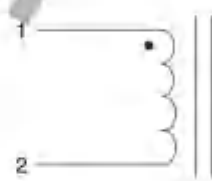
Dimensions(mm)



Land patterns



Winding



Note:

- Test frequency: 100KHz, 0.1V
- Testing Instrument : LHP4284A, WK3260B, WK3261A, WK3265B
- All test data is referenced to 25°C ambient
- Idc: DC current (A) that will cause an approximate ΔT of 50°C
- Isat: DC current (A) that will cause L_0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature, part temperature should be verified in the end application.
- Packing: 1000PCS/REEL

Note: All specifications subject to change without notice.