THROUGH-HOLE AXIAL FERRITE BEADS FOR EMI SUPPRESSION

RH SERIES

FEATURES:

- Ferrite Core
- Ragged construction
- Counter measures for FCC,VDE
- CSA,CE,VCC1
- EMI/RFI suppression
- Small size 、Low Cost

OPTIONS:

- Packaging: Tape & Reel is Standard Bulk packaging available for smaller quantities

APPLICATIONS:

- Noise Filtering
- Amplifiers
- Switching Regulators
- Power Supplies
- Triac Control Circuits
- SCR Control Circuits

STANDARD SPECIFICATIONS

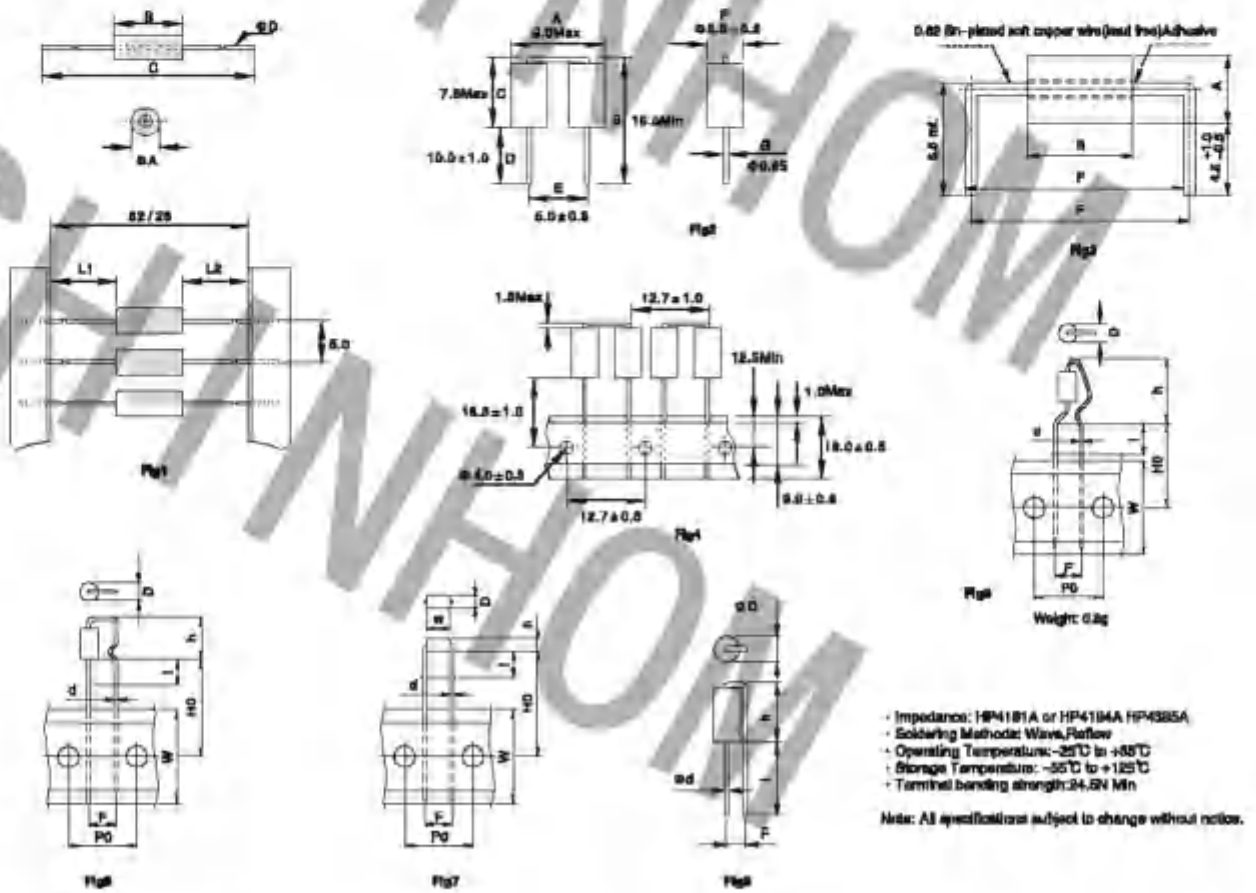
Part Number	Impedance @30MHz (Ω)Min	Impedance @100MHz (Ω)Min	A	B	C	D	L1=L2
RH-3530	25	40	3.5+/-0.2	3.0+/-0.3	62+/-2.0	0.6	1
RH-3545	30	60	3.5+/-0.2	4.5+/-0.3	62+/-2.0	0.6	1
RH-3547	35	60	3.5+/-0.2	4.7+/-0.3	62+/-2.0	0.6	1
RH-3560	50	75	3.5+/-0.2	6.0+/-0.3	62+/-2.0	0.6	1
RH-3575	60	90	3.5+/-0.2	7.5+/-0.3	62+/-2.0	0.6	1
RH-3580	60	100	3.5+/-0.2	8.0+/-0.3	62+/-2.0	0.6	1
RH-3590	80	120	3.5+/-0.2	9.0+/-0.3	62+/-2.0	0.6	1
RH-3512	90	130	3.5+/-0.2	12+/-0.3	62+/-2.0	0.6	1
RH-3514	50	150	3.5+/-0.2	14+/-0.3	62+/-2.0	0.6	1

Note:1. K=±10%,M=±20%

TECHNICAL INFORMATION:

PHYSICAL CHARACTERISTICS:

DIMENSIONS in mm



- Impedance: HP4191A or HP4194A HP4285A
- Soldering Methods: Wave,Reflow
- Operating Temperature: -25℃ to +85℃
- Storage Temperature: -55℃ to +125℃
- Terminal bending strength:24.5N Min

Note: All specifications subject to change without notice.

Beads

Use of low speed signal line

系列	形状	尺寸
SBLxxxxxxG		1005[0402]-4532[1812]

Inpedance Range(Ω)	0~2700	Rated Current(mA)	30~1000

Use of high speed signal line

系列	形状	尺寸
SBLxxxxxxY		1005[0402]-3216[1206]

Inpedance Range(Ω)	0~600	Rated Current(mA)	100~600

Use of high frequency signal line

系列	形状	尺寸
SBLxxxxxxH		1005[0402]-3216[1206]

Inpedance Range(Ω)	0~1200	Rated Current(mA)	100~1000

Use of high speed signal line

系列	形状	尺寸
SBLxxxxxxW		1005[0402]-4532[1812]

Inpedance Range(Ω)	0~2500	Rated Current(mA)	100~6000

Use of high speed signal line

系列	形状	尺寸
SBLxxxxxxM		1005[0402]-4532[1812]

Inpedance Range(Ω)	0~1000	Rated Current(mA)	300~6000

Multilayer Chip Ferrite General Bead SBLxxxxxG Series

Features 特点

- Multilayer monolithic construction yields high reliability
  独石结构、高可靠性
- Excellent solderability and heat resistance for either flow or reflow soldering 良好的可焊性和耐焊性
- Substantial EMI suppression over a wide frequency range 在宽频段有显著的抑制噪声效果

Applications 应用

- Noise suppression in digital equipment such as computer and its peripheral devices, DVD, camera, OA equipments, etc 电脑及周边设备、DVD、照相机、办公设备等噪声控制

Product Identification 产品标识

SBL 3216 09 G 102

① ② ③ ④

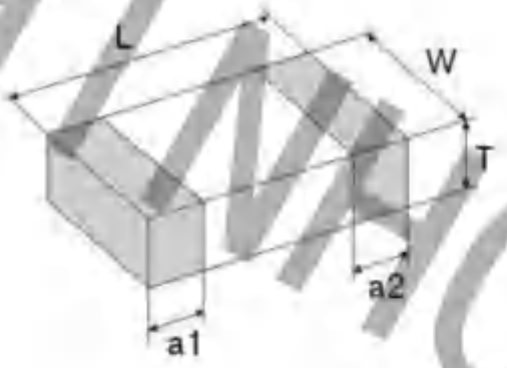
① Series name 系列名称

② Dimension 产品尺寸 L×W×T:【321609: 3.2mm×1.6mm×0.9mm】

③ Material code 材料代码

④ Impedance阻抗:【100=10Ω 101=100Ω 102=1000Ω】

Shapes And Dimensions 外形及尺寸示意图



Type	Dimensions (mm) [inch]			
	L	W	T	a1, a2
100505 [0402]	1.00±0.15 [0.04±0.006]	0.50±0.15 [0.02±0.006]	0.50±0.15 [0.02±0.006]	0.25±0.10 [0.01±0.004]
160808 [0603]	1.60±0.20 [0.063±0.008]	0.80±0.20 [0.031±0.008]	0.80±0.20 [0.031±0.008]	0.30±0.20 [0.012±0.008]
201209 [0805]	2.00±0.20 [0.079±0.008]	1.20±0.20 [0.049±0.008]	0.90±0.20 [0.035±0.008]	0.50±0.30 [0.02±0.012]
321609 [1206]	3.20±0.20 [0.126±0.008]	1.60±0.20 [0.063±0.008]	0.90±0.20 [0.035±0.008]	0.50±0.30 [0.02±0.012]
322513 [1210]	3.20±0.20 [0.126±0.008]	2.50±0.20 [0.098±0.008]	1.30±0.20 [0.051±0.008]	0.50±0.30 [0.02±0.012]
451616 [1806]	4.50±0.20 [0.180±0.008]	1.60±0.20 [0.063±0.008]	1.60±0.20 [0.063±0.008]	0.50±0.30 [0.02±0.012]
453215 [1812]	4.50±0.20 [0.180±0.008]	3.20±0.20 [0.126±0.008]	1.50±0.20 [0.06±0.008]	0.50±0.30 [0.02±0.012]

Electrical Characteristics 电气性能

SBL100505G Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL100505G-000	0~15	100	0.10	300
SBL100505G-050	0~15	100	0.10	300
SBL100505G-070	0~11	100	0.10	300
SBL100505G-090	5~13	100	0.10	300
SBL100505G-110	7~15	100	0.10	300
SBL100505G-150	9~21	100	0.10	300
SBL100505G-190	12~25	100	0.10	300
SBL100505G-260	26±25%	100	0.15	300
SBL100505G-310	31±25%	100	0.20	300
SBL100505G-360	36±25%	100	0.20	300
SBL100505G-600	60±25%	100	0.35	200
SBL100505G-800	80±25%	100	0.40	150
SBL100505G-121	120±25%	100	0.50	150
SBL100505G-151	150±25%	100	0.55	150
SBL100505G-181	180±25%	100	0.60	150
SBL100505G-221	220±25%	100	0.70	100
SBL100505G-301	300±25%	100	0.80	100
SBL100505G-501	500±25%	100	1.10	100
SBL100505G-610	600±25%	100	1.30	100
SBL100505G-801	800±25%	100	1.40	50
SBL100505G-102	1000±25%	100	1.60	25

SBL160808G Series

Part Number	Impedance (Ω)	Z Test Freq (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL160808G-000	0~15	100	0.10	800
SBL160808G-050	0~15	100	0.10	800
SBL160808G-070	0~11	100	0.10	800
SBL160808G-090	5~13	100	0.10	800
SBL160808G-110	7~15	100	0.10	800
SBL160808G-150	9~21	100	0.10	800
SBL160808G-190	12~25	100	0.10	500
SBL160808G-260	26±25%	100	0.10	500
SBL160808G-310	31±25%	100	0.10	500
SBL160808G-600	60±25%	100	0.20	300
SBL160808G-700	70±25%	100	0.20	300
SBL160808G-800	80±25%	100	0.20	300
SBL160808G-101	100±25%	100	0.30	200
SBL160808G-121	120±25%	100	0.30	200
SBL160808G-151	150±25%	100	0.35	200
SBL160808G-181	180±25%	100	0.45	200
SBL160808G-221	220±25%	100	0.45	200

Electrical Characteristics 电气性能

SBL160808G Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL160808G - 301	300±25%	100	0.50	150
SBL160808G - 501	500±25%	100	0.60	150
SBL160808G - 601	600±25%	100	0.60	100
SBL160808G - 801	800±25%	100	0.70	100
SBL160808G - 102	1000±25%	100	0.80	100
SBL160808G - 122	1200±25%	100	0.85	100
SBL160808G - 152	1500±25%	100	0.85	50
SBL160808G - 202	2000±25%	100	1.10	50
SBL160808G - 222	2200±25%	100	1.20	50
SBL160808G - 252	2500±25%	100	1.30	50

SBL201209G Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL201209G-000	0~15	100	0.08	900
SBL201209G-050	0~15	100	0.08	900
SBL201209G-070	0~11	100	0.08	900
SBL201209G-090	5~13	100	0.10	900
SBL201209G-110	7~15	100	0.10	900
SBL201209G-150	9~21	100	0.10	900
SBL201209G-190	12~25	100	0.10	900
SBL201209G-260	26±25%	100	0.10	900
SBL201209G-310	31±25%	100	0.10	900
SBL201209G-360	36±25%	100	0.10	900
SBL201209G-600	60±25%	100	0.15	900
SBL201209G-700	70±25%	100	0.18	500
SBL201209G-800	80±25%	100	0.18	500
SBL201209G-101	100±25%	100	0.18	400
SBL201209G-121	120±25%	100	0.20	400
SBL201209G-151	150±25%	100	0.20	400
SBL201209G-181	180±25%	100	0.20	300
SBL201209G-221	220±25%	100	0.20	300
SBL201209G-301	300±25%	100	0.35	300
SBL201209G-501	500±25%	100	0.40	300
SBL201209G-601	600±25%	100	0.40	300
SBL201209G-801	800±25%	100	0.45	200
SBL201209G-102	1000±25%	100	0.45	200
SBL201209G-122	1200±25%	100	0.60	100
SBL201209G-152	1500±25%	100	0.70	100
SBL201209G-202	2000±25%	100	0.90	50
SBL201209G-222	2200±25%	100	1.00	50
SBL201209G-252	2500±25%	100	1.20	50
SBL201209G-272	2700±25%	100	1.40	30

Electrical Characteristics 电气性能

SBL321609G Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL321609G-000	0~15	100	0.10	1000
SBL321609G-050	0~15	100	0.10	1000
SBL321609G-070	0~11	100	0.10	1000
SBL321609G-090	5~13	100	0.10	1000
SBL321609G-110	7~15	100	0.10	1000
SBL321609G-150	9~21	100	0.10	1000
SBL321609G-190	12~25	100	0.10	1000
SBL321609G-260	26±25%	100	0.10	1000
SBL321609G-310	31±25%	100	0.10	1000
SBL321609G-600	60±25%	100	0.15	1000
SBL321609G-700	70±25%	100	0.15	1000
SBL321609G-800	80±25%	100	0.15	1000
SBL321609G-101	100±25%	100	0.25	1000
SBL321609G-121	120±25%	100	0.25	1000
SBL321609G-151	150±25%	100	0.30	400
SBL321609G-181	180±25%	100	0.30	400
SBL321609G-221	220±25%	100	0.35	400
SBL321609G-301	300±25%	100	0.40	400
SBL321609G-501	500±25%	100	0.45	300
SBL321609G-601	600±25%	100	0.45	300
SBL321609G-801	800±25%	100	0.55	300
SBL321609G-102	1000±25%	100	0.55	300
SBL321609G-122	1200±25%	100	0.60	100
SBL321609G-202	2000±25%	50	1.00	50

SBL322513G Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL322513G-110	7~15	100	0.10	1000
SBL322513G-190	12~25	100	0.10	1000
SBL322513G-260	26±25%	100	0.10	1000
SBL322513G-310	31±25%	100	0.10	1000
SBL322513G-600	60±25%	100	0.15	1000
SBL322513G-700	70±25%	100	0.20	1000
SBL322513G-800	80±25%	100	0.20	400
SBL322513G-900	90±25%	100	0.20	400
SBL322513G-101	100±25%	100	0.20	400
SBL322513G-121	120±25%	100	0.20	400
SBL322513G-151	150±25%	100	0.30	400
SBL322513G-181	180±25%	100	0.40	400
SBL322513G-221	220±25%	100	0.40	400

Electrical Characteristics 电气性能

SBL322513G Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL322513G-301	300±25%	100	0.40	400
SBL322513G-501	500±25%	100	0.40	300
SBL322513G-601	600±25%	100	0.40	300
SBL322513G-801	800±25%	100	0.40	300
SBL322513G-102	1000±25%	100	0.40	300

SBL451616G Series

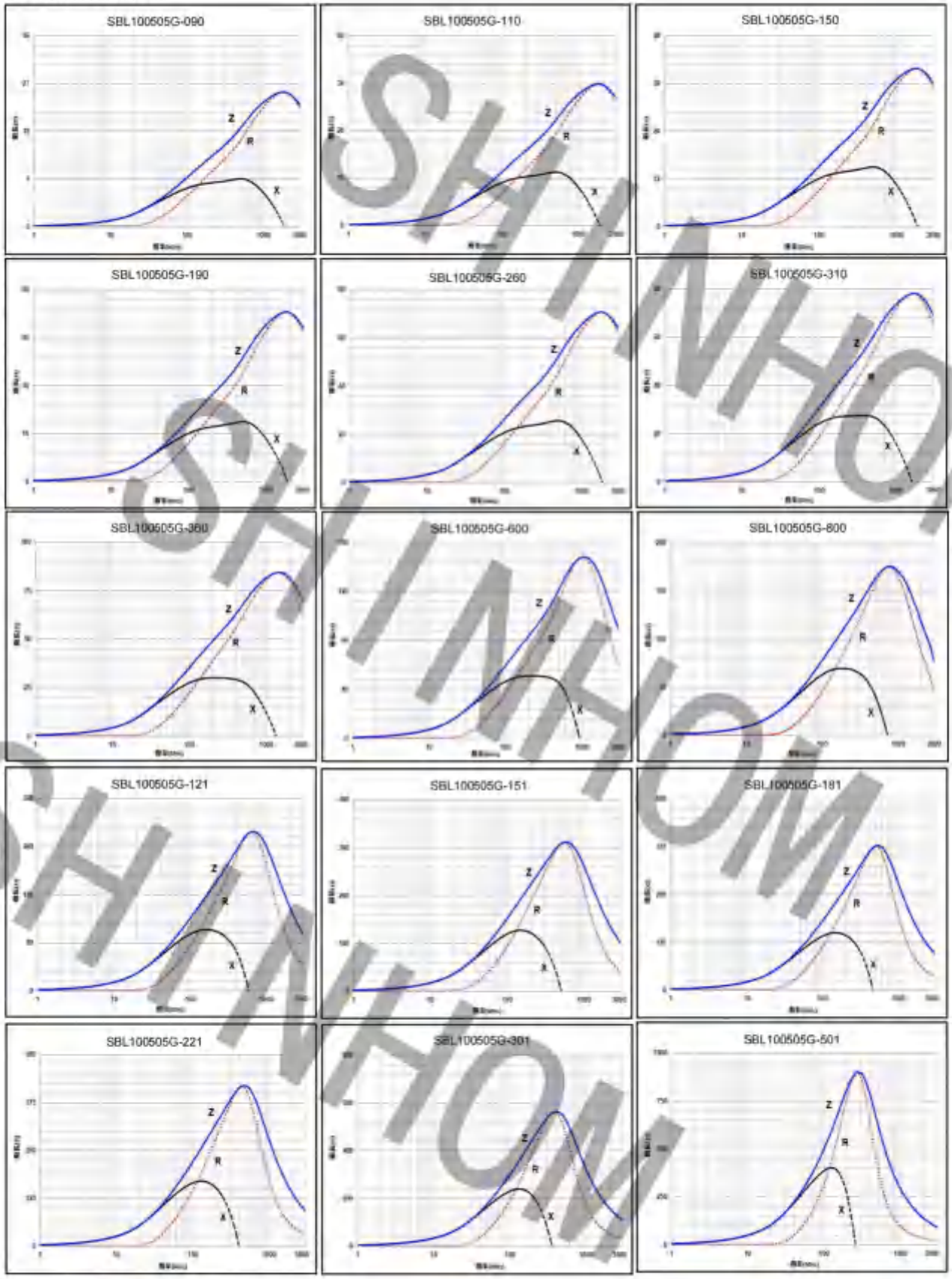
Part Number	Impedance (Ω)	Z Test Freq (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL451616G-190	12~25	100	0.10	1000
SBL451616G-260	26±25%	100	0.10	1000
SBL451616G-310	31±25%	100	0.15	1000
SBL451616G-600	60±25%	100	0.20	1000
SBL451616G-750	75±25%	100	0.30	1000
SBL451616G-800	80±25%	100	0.30	1000
SBL451616G-900	90±25%	100	0.35	1000
SBL451616G-121	120±25%	100	0.40	500
SBL451616G-151	150±25%	100	0.40	500
SBL451616G-221	220±25%	100	0.45	500
SBL451616G-301	300±25%	100	0.45	500
SBL451616G-501	500±25%	100	0.50	200
SBL451616G-601	600±25%	100	0.50	200
SBL451616G-801	800±25%	100	0.55	200

SBL453215G Series

Part Number	Impedance (Ω)	Z Test Freq (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL453215G-300	30±25%	100	0.15	1000
SBL453215G-310	31±25%	100	0.15	1000
SBL453215G-380	38±25%	100	0.15	1000
SBL453215G-600	60±25%	100	0.20	1000
SBL453215G-700	70±25%	100	0.20	1000
SBL453215G-800	80±25%	100	0.20	1000
SBL453215G-900	90±25%	100	0.20	500
SBL453215G-101	100±25%	100	0.20	500
SBL453215G-121	120±25%	100	0.25	500
SBL453215G-151	150±25%	100	0.25	500
SBL453215G-221	220±25%	100	0.30	300
SBL453215G-301	300±25%	100	0.30	300
SBL453215G-601	600±25%	100	0.40	200

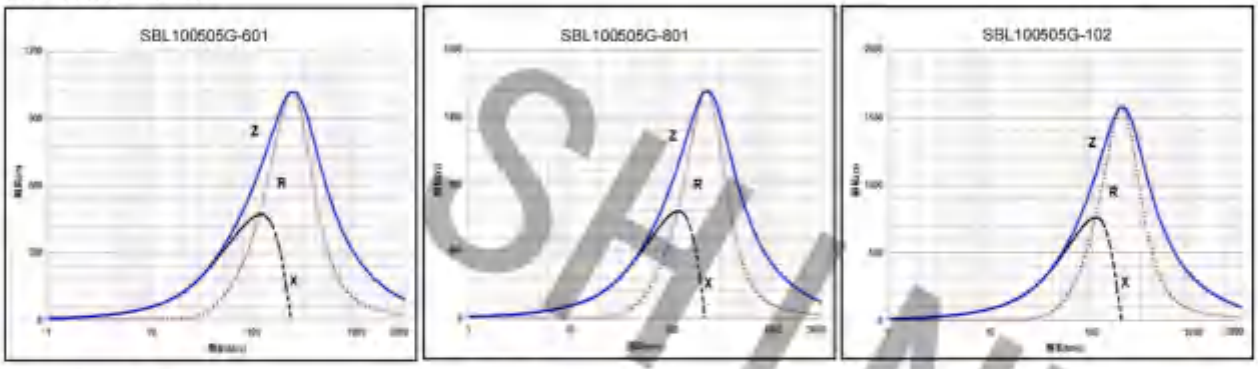
Impedance Frequency Characteristics 阻抗频率性能

SBL100505G Series

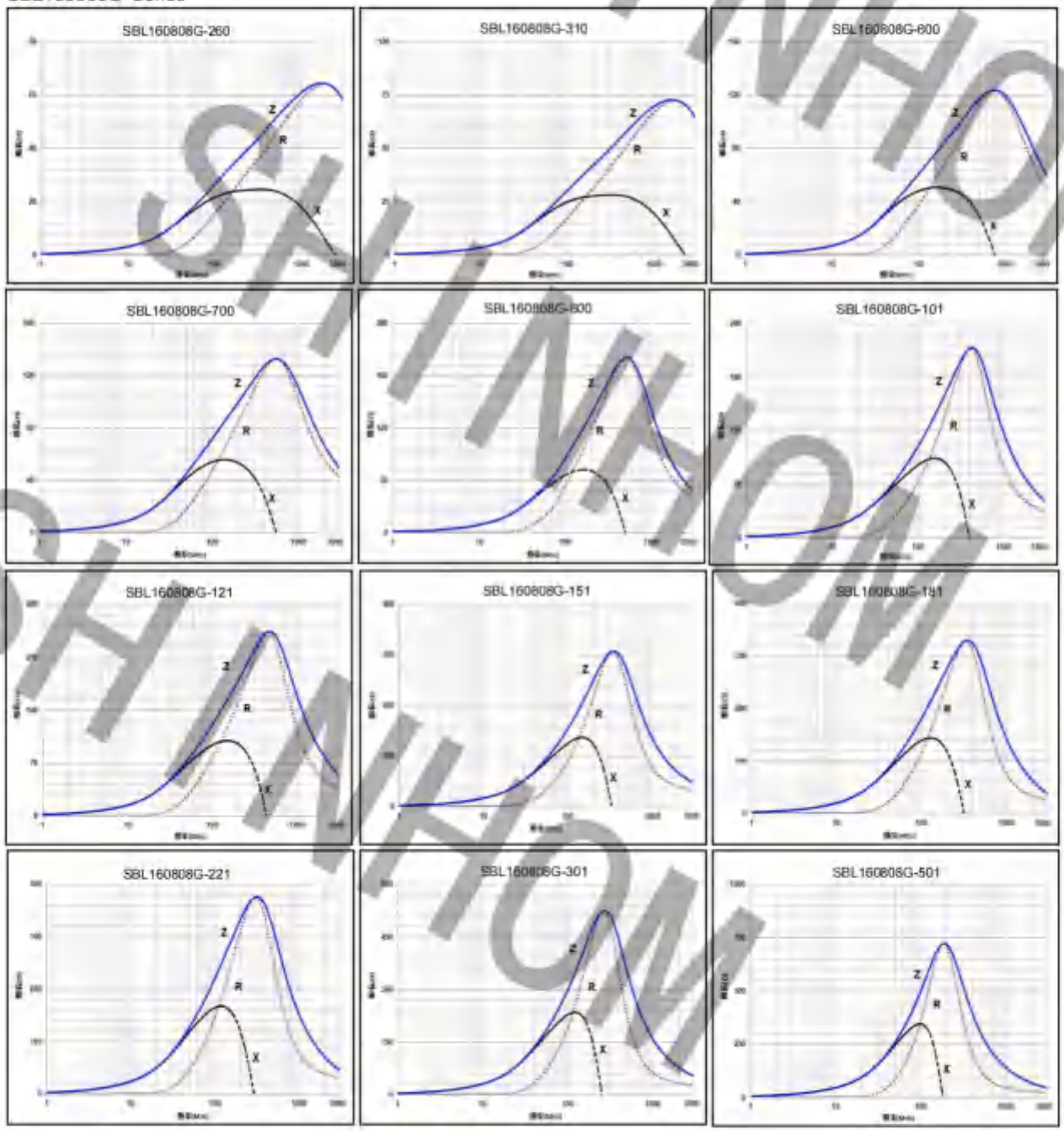


Impedance Frequency Characteristics 阻抗频率性能

SBL100505G Series

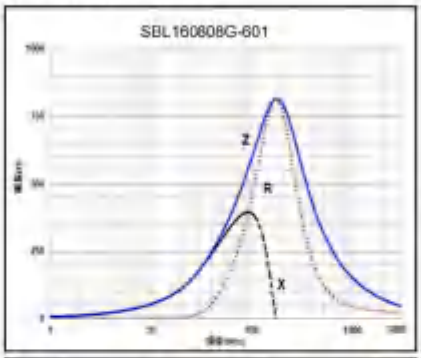


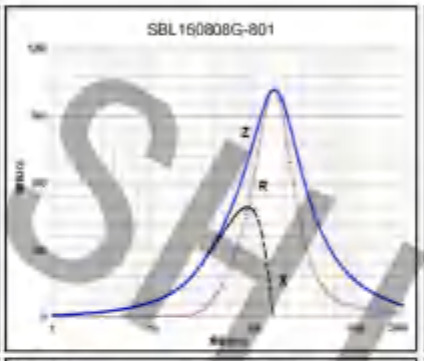
SBL160808G Series

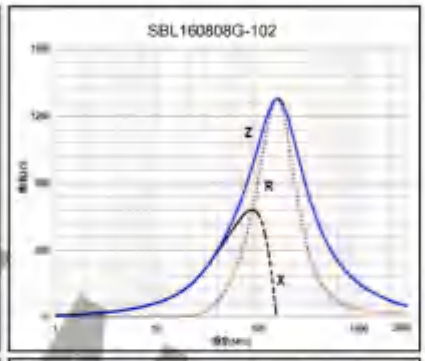


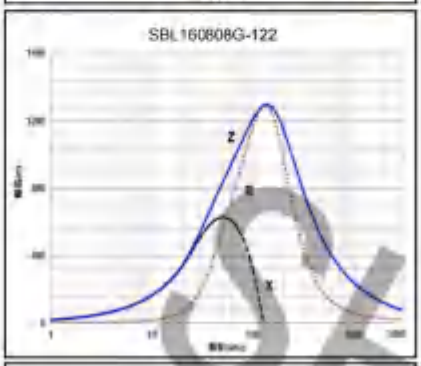
Impedance Frequency Characteristics 阻抗频率性能

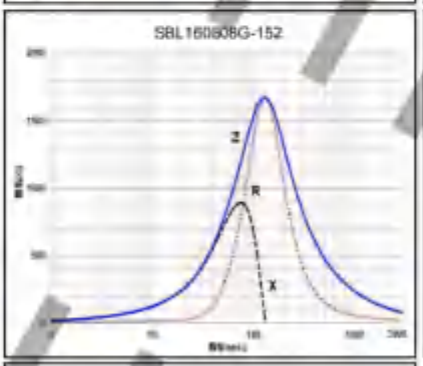
SBL160808G Series

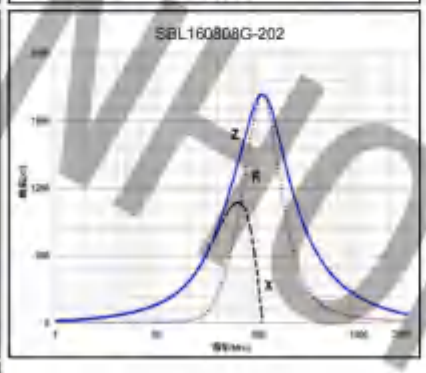


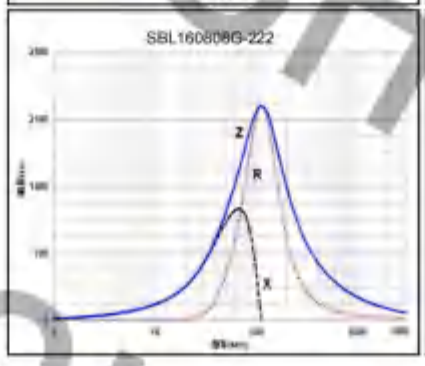


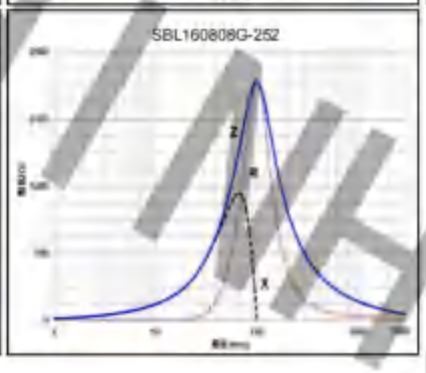




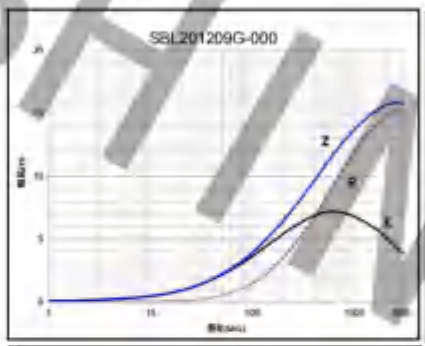


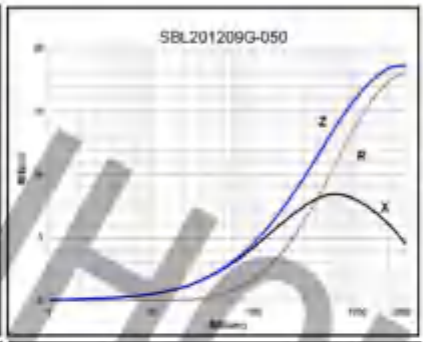


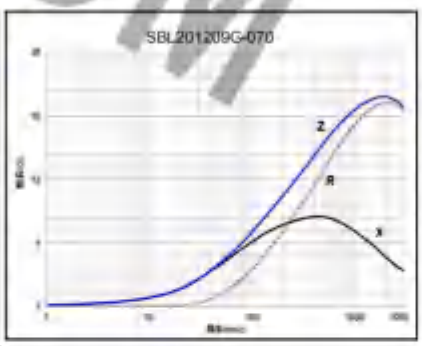


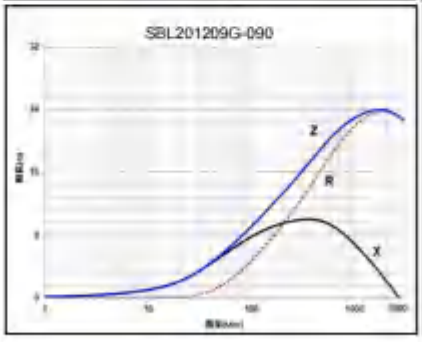


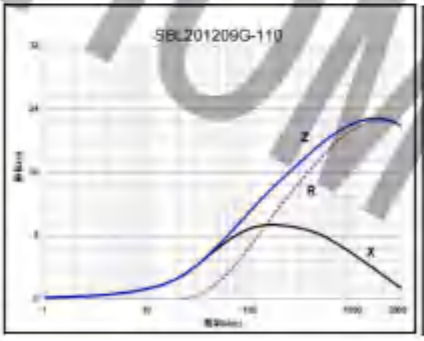
SBL201209G Series

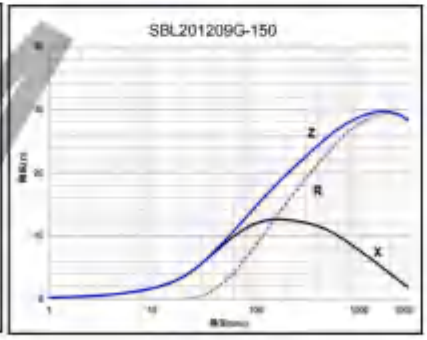






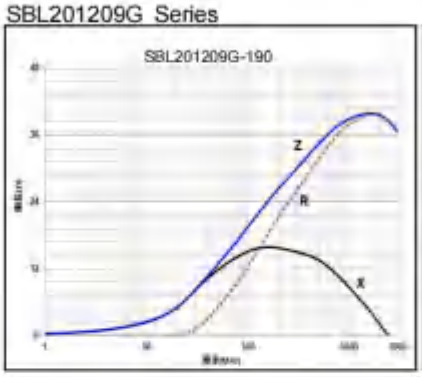


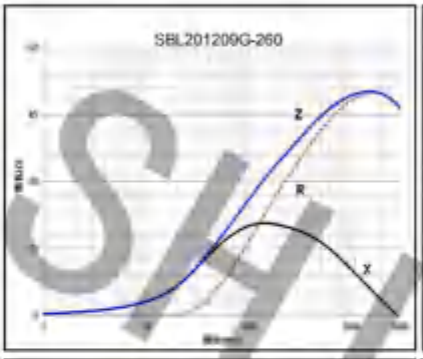


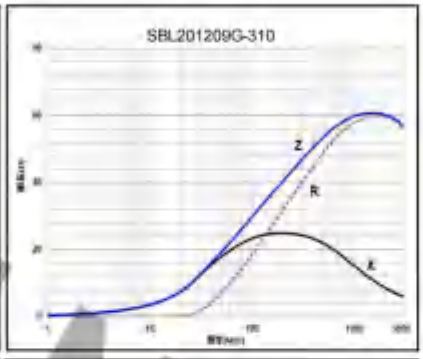


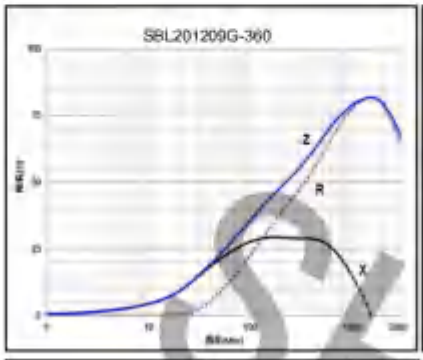
Impedance Frequency Characteristics 阻抗频率性能

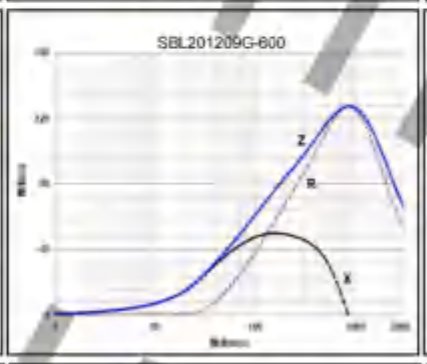
SBL201209G Series

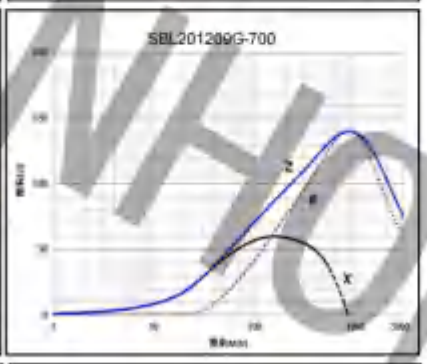


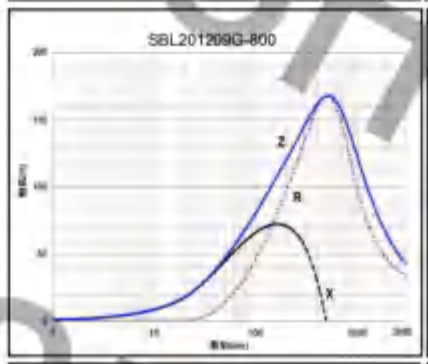


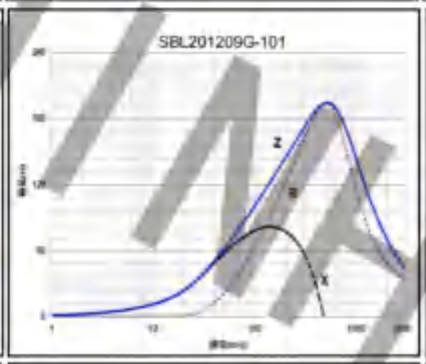


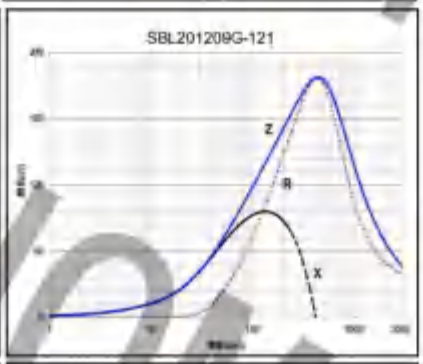


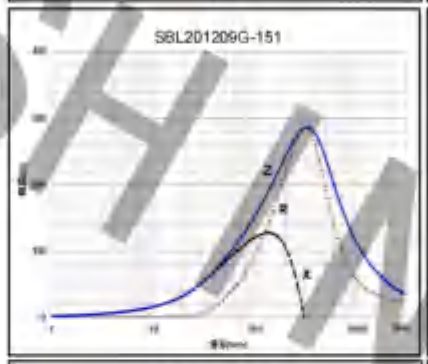


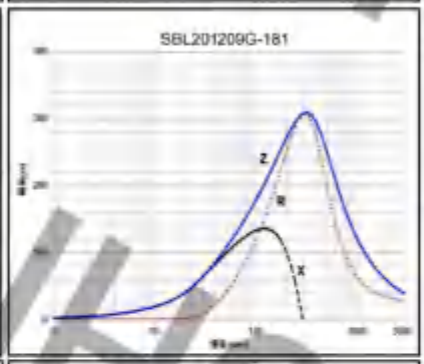


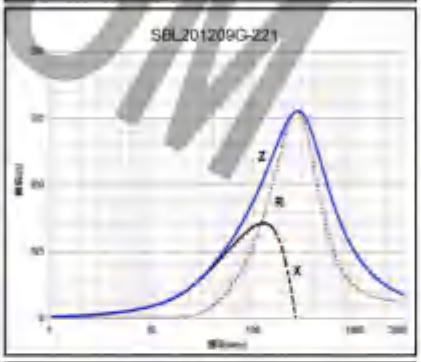


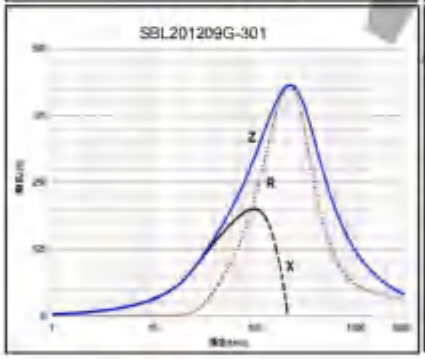


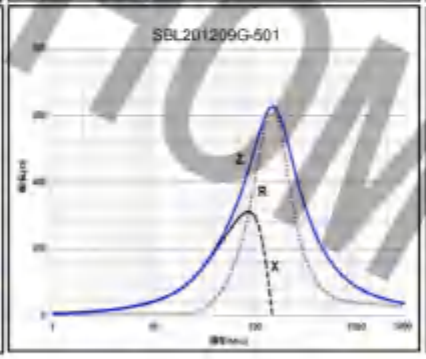


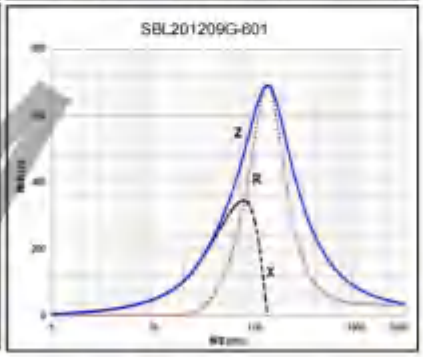






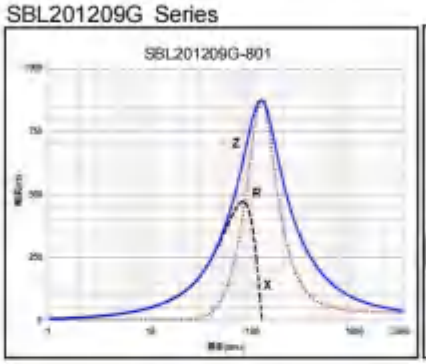


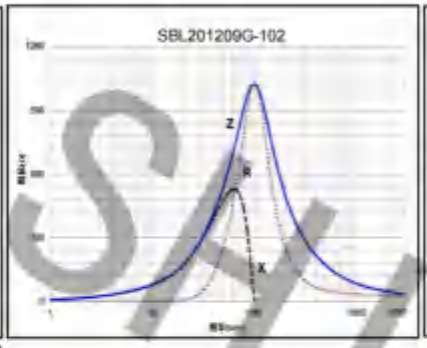


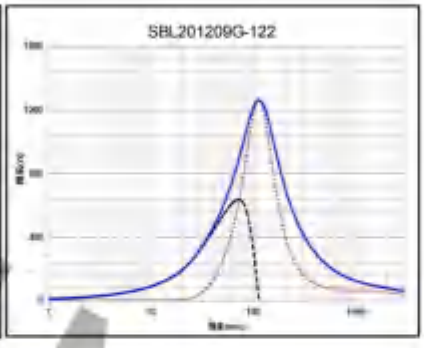


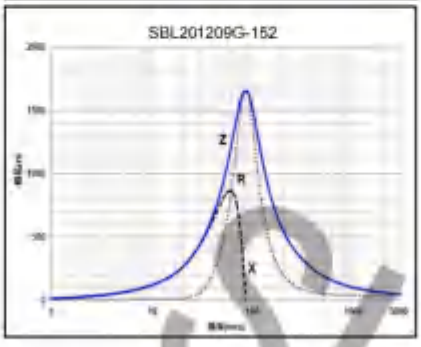
Impedance Frequency Characteristics 阻抗频率性能

SBL201209G Series

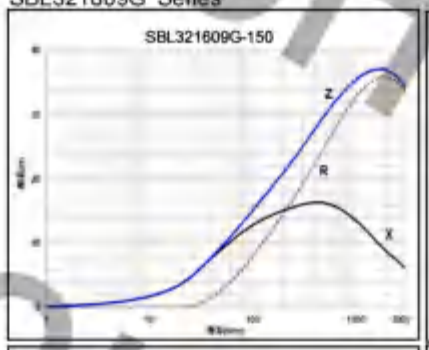


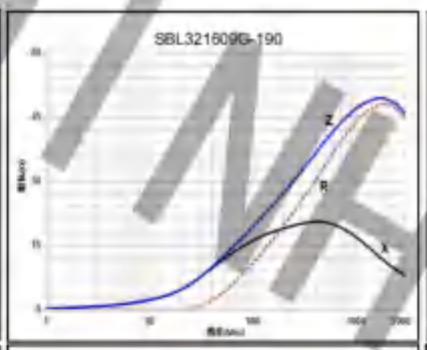


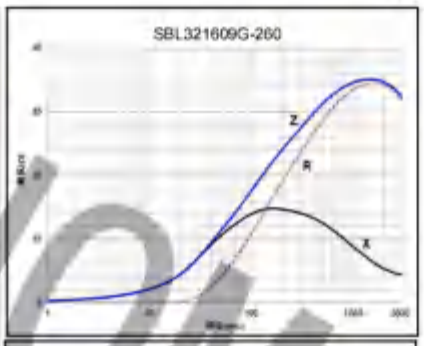


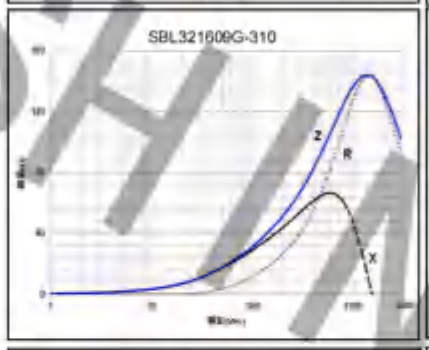


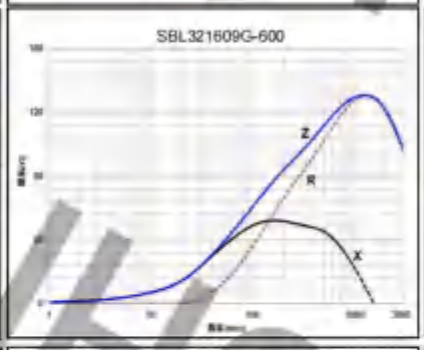
SBL321609G Series

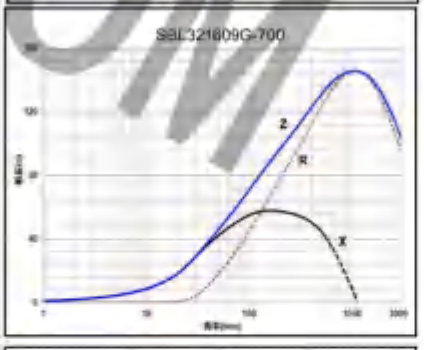


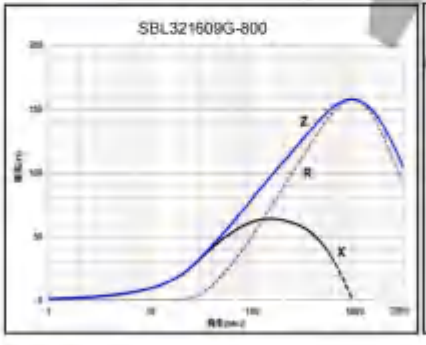


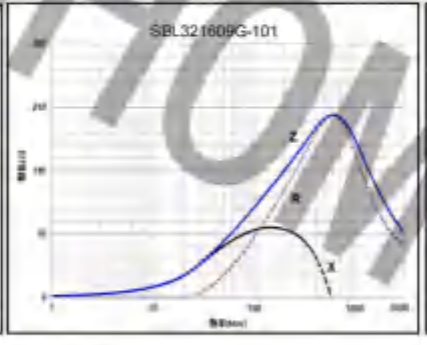


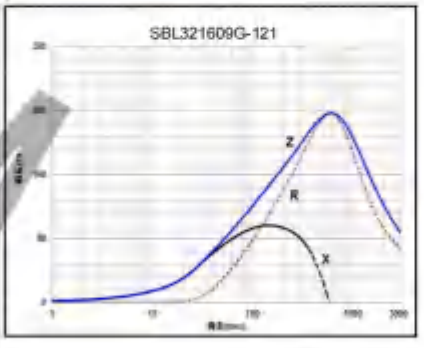






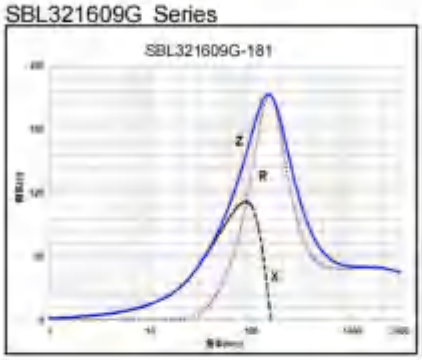


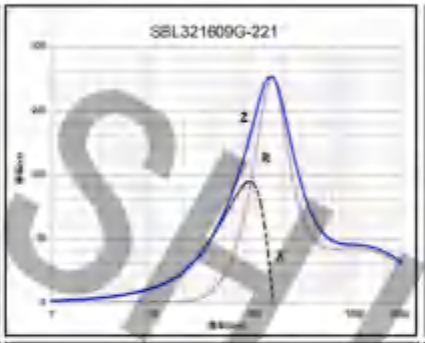


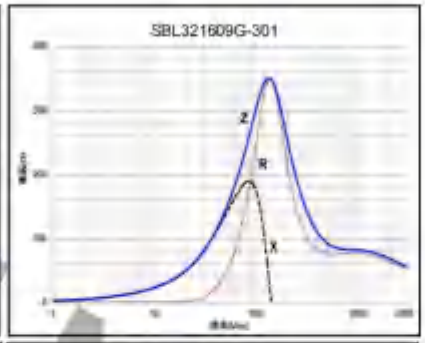


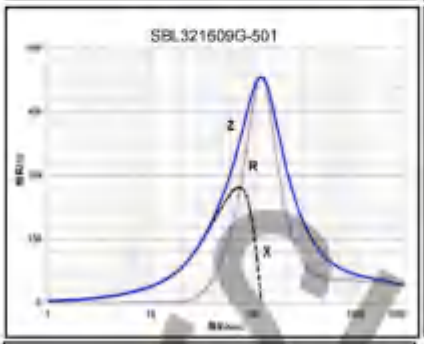
Impedance Frequency Characteristics 阻抗频率性能

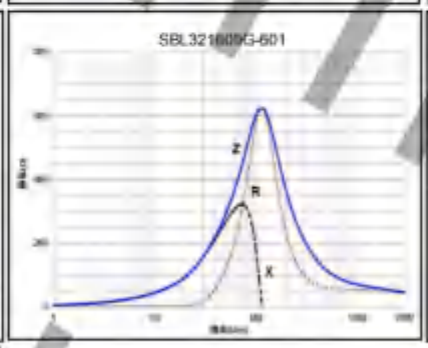
SBL321609G Series

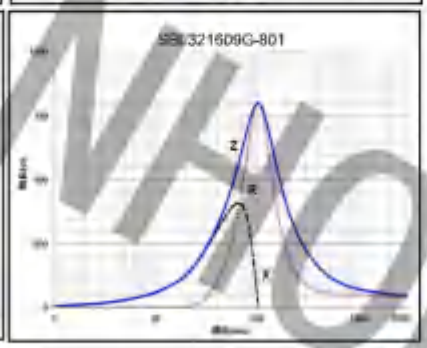


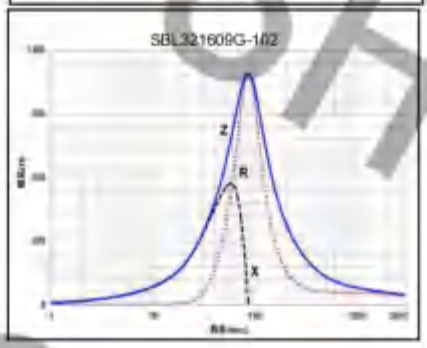




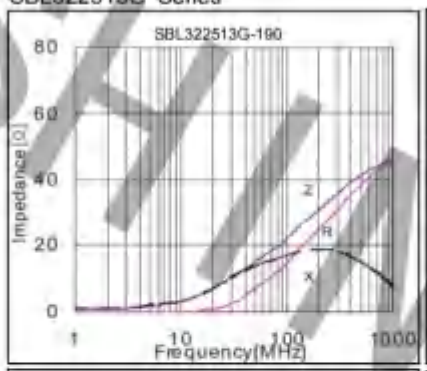


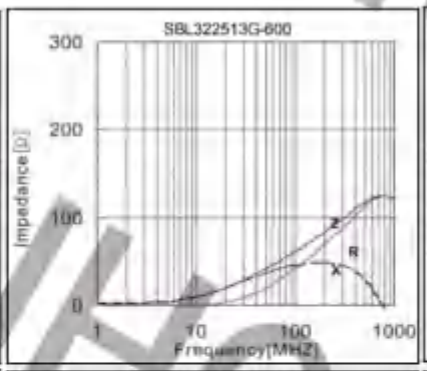


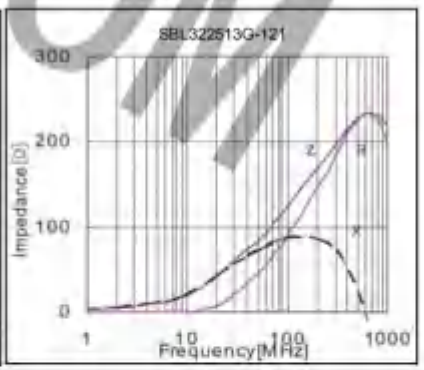


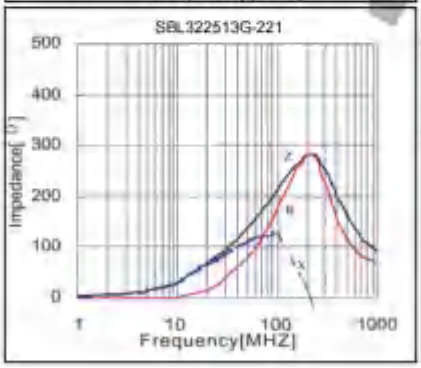


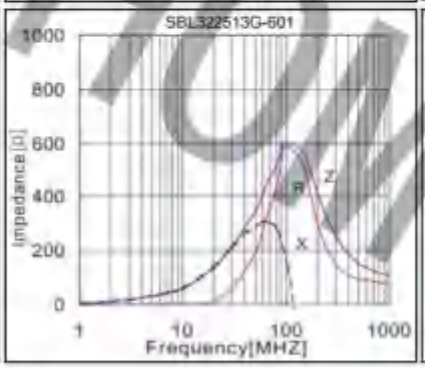
SBL322513G Series

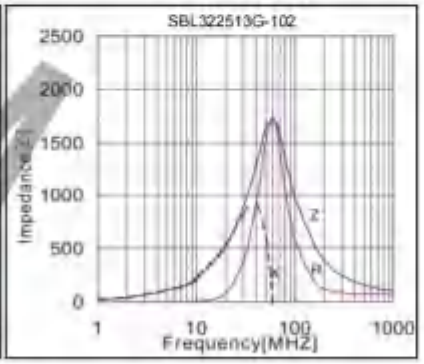






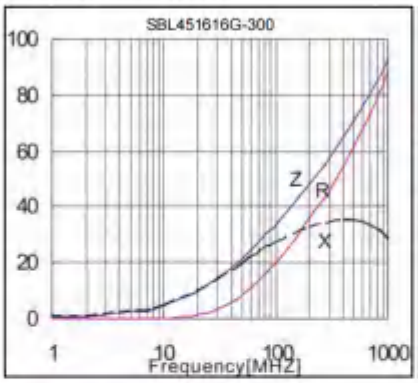


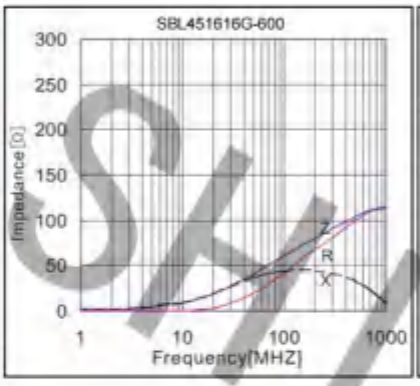


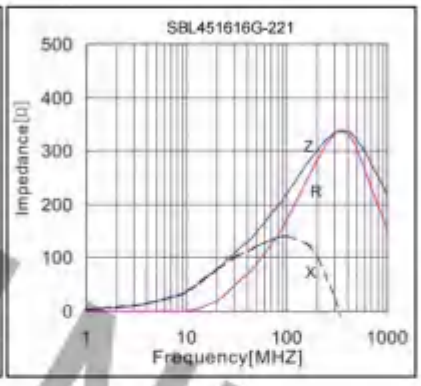


Impedance Frequency Characteristics 阻抗频率性能

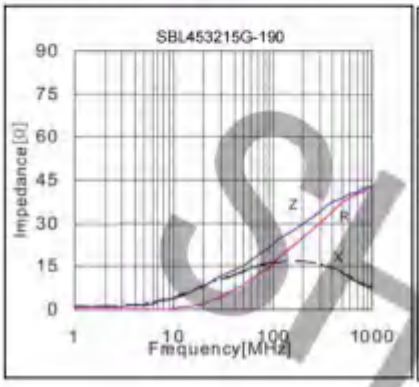
SBL451616G Series

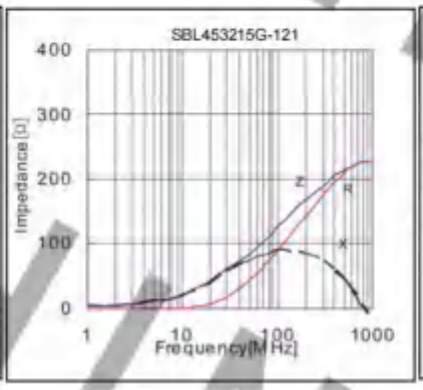


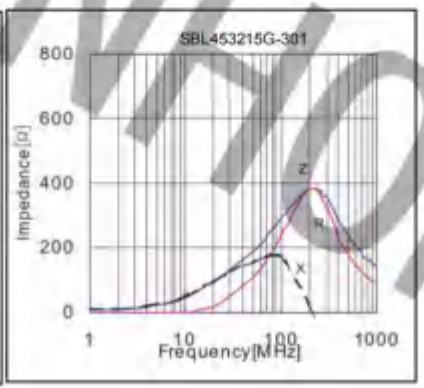




SBL453215G Series







Multilayer Chip High Frequency Bead SBLxxxx Series

Features 特点

- Multilayer monolithic construction yields high reliability
  独石结构、高可靠性
- High frequency noise countermeasure
  对高频噪声有显著抑制
- Suitable for ultra high speed circuit
  应用于超高频电路

Applications 应用

- Computers, mobile communication system products 电脑，移动通讯系统
- Noise suppressing in ultra high speed circuit 超高速电路的噪声控制

Product Identification 产品标识

SBL 321 609 H 121

① ② ③ ④

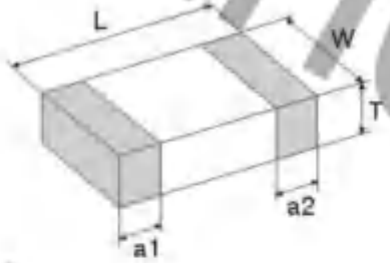
① Series name 系列名称

② Dimension 产品尺寸 L×W×T:【321609: 3.2mm×1.6mm×0.9mm】

③ Material code 材料代码

④ Impedance阻抗:【100=10Ω 121=120Ω 102=1000Ω】

Shapes And Dimensions 外形及尺寸示意图



Type	Dimensions (mm) [inch]			
	L	W	T	a1, a2
100505 [0402]	1.00±0.15 [0.04±0.006]	0.50±0.15 [0.02±0.006]	0.50±0.15 [0.02±0.006]	0.25±0.10 [0.01±0.004]
160808 [0603]	1.60±0.20 [0.063±0.008]	0.80±0.20 [0.031±0.008]	0.80±0.20 [0.031±0.008]	0.30±0.20 [0.012±0.008]
201209 [0805]	2.00±0.20 [0.079±0.008]	1.20±0.20 [0.049±0.008]	0.90±0.20 [0.035±0.008]	0.50±0.30 [0.02±0.012]
321609 [1206]	3.20±0.20 [0.126±0.008]	1.60±0.20 [0.063±0.008]	0.90±0.20 [0.035±0.008]	0.50±0.30 [0.02±0.012]

Electrical Characteristics 电气性能

SBL100505H Series

Part Number	Impedance (Ω)	Z Test Freq (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL100505H-310	31±25%	100	0.20	300
SBL100505H-600	60±25%	100	0.35	200
SBL100505H-800	80±25%	100	0.40	200
SBL100505H-121	120±25%	100	0.50	150
SBL100505H-181	180±25%	100	0.60	150
SBL100505H-301	300±25%	100	0.80	100
SBL100505H-501	500±25%	100	1.1	100
SBL100505H-601	600±25%	100	1.3	100

SBL160808H Series

Part Number	Impedance (Ω)	Z Test Freq (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL160808H-000	0~15	100	0.15	600
SBL160808H-050	0~15	100	0.15	600
SBL160808H-070	0~11	100	0.15	600
SBL160808H-090	5~13	100	0.15	500
SBL160808H-110	7~15	100	0.15	500
SBL160808H-150	9~21	100	0.15	500
SBL160808H-190	12~25	100	0.15	500
SBL160808H-310	31±25%	100	0.15	500
SBL160808H-600	60±25%	100	0.15	500
SBL160808H-800	80±25%	100	0.20	300
SBL160808H-121	120±25%	100	0.20	200
SBL160808H-151	150±25%	100	0.30	200
SBL160808H-221	220±25%	100	0.40	200
SBL160808H-301	300±25%	100	0.50	150
SBL160808H-501	500±25%	100	0.60	100
SBL160808H-601	600±25%	100	0.60	100
SBL160808H-801	800±25%	100	0.70	100
SBL160808H-102	1000±25%	100	0.90	100
SBL160808H-122	1200±25%	100	0.90	100

Electrical Characteristics 电气性能

SBL201209H Series

Part Number	Impedance (Ω)	Z Test Freq (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL201209-000	0~15	100	0.15	1000
SBL201209-050	0~15	100	0.15	1000
SBL201209-070	0~11	100	0.15	1000
SBL201209-090	5~13	100	0.15	1000
SBL201209-110	7~15	100	0.15	1000
SBL201209-150	9~21	100	0.15	1000
SBL201209-190	12~25	100	0.15	1000
SBL201209-260	26±25%	100	0.15	1000
SBL201209-310	31±25%	100	0.15	1000
SBL201209-700	70±25%	100	0.25	400
SBL201209-800	80±25%	100	0.25	400
SBL201209-121	120±25%	100	0.25	400
SBL201209-151	150±25%	100	0.25	400
SBL201209-221	220±25%	100	0.30	400
SBL201209-301	300±25%	100	0.35	400
SBL201209-501	500±25%	100	0.40	200
SBL201209-601	600±25%	100	0.45	200
SBL201209-801	800±25%	100	0.50	180
SBL201209-102	1000±25%	100	0.60	180
SBL201209-122	1200±25%	100	0.60	100

SBL321609H Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL321609H-000	0~15	100	0.10	1000
SBL321609H-050	0~15	100	0.10	1000
SBL321609H-070	0~11	100	0.10	1000
SBL321609H-090	5~13	100	0.10	1000
SBL321609H-110	7~15	100	0.10	1000
SBL321609H-150	9~21	100	0.10	1000
SBL321609H-190	12~25	100	0.10	1000
SBL321609H-260	26±25%	100	0.10	1000
SBL321609H-310	31±25%	100	0.10	1000
SBL321609H-600	60±25%	100	0.15	1000
SBL321609H-700	70±25%	100	0.15	1000
SBL321609H-800	80±25%	100	0.15	1000

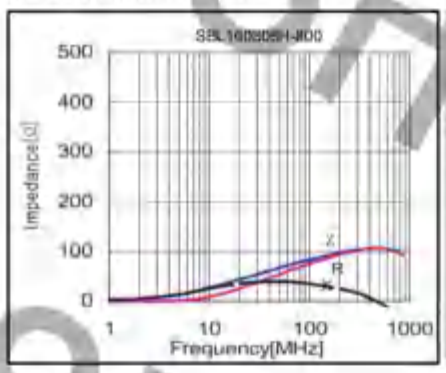
Electrical Characteristics 电气性能

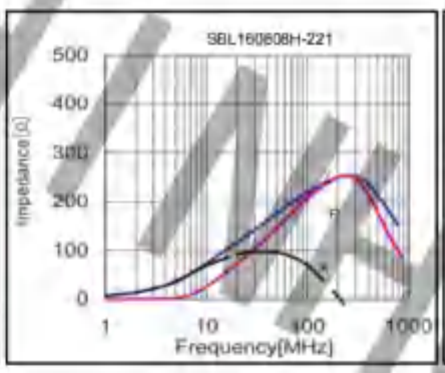
SBL321609H Series

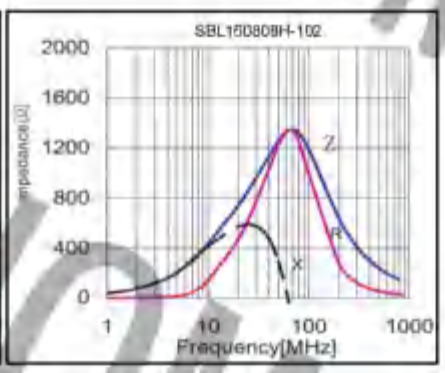
Part Number	Impedance (Ω)	Z Test Freq (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL321609H-900	90±25%	100	0.15	1000
SBL321609H-121	120±25%	100	0.20	1000
SBL321609H-151	150±25%	100	0.25	300
SBL321609H-221	220±25%	100	0.25	300
SBL321609H-301	300±25%	100	0.25	300
SBL321609H-501	500±25%	100	0.30	200
SBL321609H-601	600±25%	100	0.35	200
SBL321609H-801	800±25%	100	0.50	200

Impedance Frequency Characteristics 阻抗频率性能

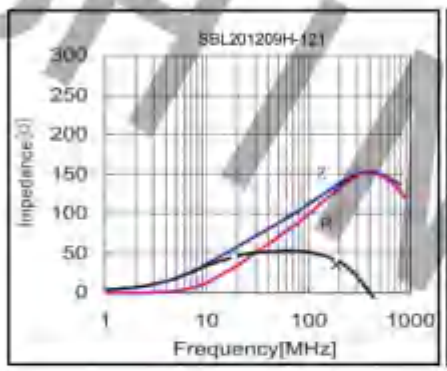
SBL160808H Series

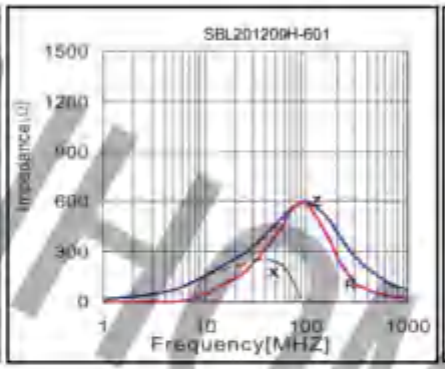


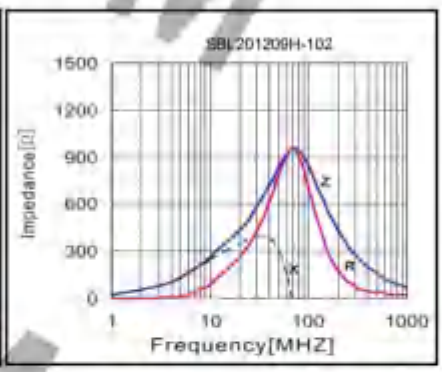




SBL201209H Series







Multilayer Chip Power Bead SBLxxxxxxM Series

Features 特点

- Multilayer monolithic construction yields high reliability

独石结构、高可靠性

- A unique terminal electrode structure ensures high permissible current, 6A max.

特别的设计可承受最大 6A 的电流

- High impedance over a vide frequency range

在较宽的频段具有高阻抗

Applications 应用

- Video equipment, audio equipment 视频音频设备
- Automotive electrical equipment 电气自动化设备
- Communication equipment 通讯设备
- OA equipment and other OA 设备及其它领域

Product Identification 产品标识

SBL 2 01209 M 121

① ② ③ ④

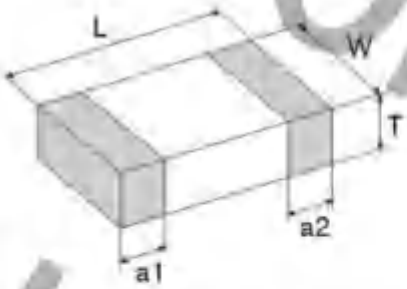
① Series name 系列名称

② Dimension 产品尺寸L×W×T:【201209: 2.0mm×1.2 mm×0.9mm】

③ Material code 材料代码

④ Impedance 阻抗:【100=10Ω 101=100Ω 102=1000Ω】

Shapes And Dimensions 外形及尺寸示意图



Type	Dimensions (mm) [inch]			
	L	W	T	a1, a2
100505 [0402]	1.00±0.15 [0.04±0.006]	0.50±0.15 [0.02±0.006]	0.50±0.15 [0.02±0.006]	0.25±0.10 [0.01±0.004]
160808 [0603]	1.60±0.20 [0.063±0.008]	0.80±0.20 [0.031±0.008]	0.80±0.20 [0.031±0.008]	0.30±0.20 [0.012±0.008]
201209 [0805]	2.00±0.20 [0.079±0.008]	1.20±0.20 [0.049±0.008]	0.90±0.20 [0.035±0.008]	0.50±0.30 [0.02±0.012]
321609 [1206]	3.20±0.20 [0.126±0.008]	1.60±0.20 [0.063±0.008]	0.90±0.20 [0.035±0.008]	0.50±0.30 [0.02±0.012]
322513 [1210]	3.20±0.20 [0.126±0.008]	2.50±0.20 [0.098±0.008]	1.30±0.20 [0.051±0.008]	0.50±0.30 [0.02±0.012]
451616 [1806]	4.50±0.20 [0.180±0.008]	1.60±0.20 [0.063±0.008]	1.60±0.20 [0.063±0.008]	0.50±0.30 [0.02±0.012]
453215 [1812]	4.50±0.20 [0.180±0.008]	3.20±0.20 [0.126±0.008]	1.50±0.20 [0.06±0.008]	0.50±0.30 [0.02±0.012]

Electrical Characteristics 电气性能

SBL100505M Series

Part Number	Impedance (Ω)	Z Test Freq (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL100505M- 000	0~15	100	0.05	1800
SBL100505M- 050	0~15	100	0.05	1800
SBL100505M- 070	0~11	100	0.05	1800
SBL100505M- 090	5~13	100	0.05	1800
SBL100505M- 110	7~15	100	0.05	1800
SBL100505M- 150	9~21	100	0.05	1800
SBL100505M- 190	12~25	100	0.06	1500
SBL100505M- 300	30±25%	100	0.08	1300
SBL100505M- 600	60±25%	100	0.10	1000
SBL100505M- 121	120±25%	100	0.15	800
SBL100505M- 151	150±25%	100	0.20	700
SBL100505M- 201	200±25%	100	0.25	700
SBL100505M- 221	220±25%	100	0.30	600
SBL100505M- 301	300±25%	100	0.30	600
SBL100505M- 601	600±25%	100	0.50	500
SBL100505M- 801	800±25%	100	0.65	300

SBL160808M Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL160808M-000	0~15	100	0.02	6000
SBL160808M-050	0~15	100	0.02	6000
SBL160808M-070	0~11	100	0.02	6000
SBL160808M-090	5~13	100	0.02	6000
SBL160808M-110	7~15	100	0.03	5000
SBL160808M-150	9~21	100	0.03	5000
SBL160808M-190	12~25	100	0.03	5000
SBL160808M-300	30±25%	100	0.03	4000
SBL160808M-600	60±25%	100	0.04	3000
SBL160808M-101	100±25%	100	0.06	2500
SBL160808M-121	120±25%	100	0.065	2000
SBL160808M-181	180±25%	100	0.09	1500
SBL160808M-221	220±25%	100	0.12	1500
SBL160808M-301	300±25%	100	0.18	1500
SBL160808M-501	500±25%	100	0.18	1200
SBL160808M-601	600±25%	100	0.18	1200

Electrical Characteristics 电气性能

SBL201209M Series

Part Number	Impedance (Ω)	Z Test Freq (MHz)	RDC(Ω) Max	Ir(mA) Max.
SBL201209M-000	0~15	100	0.01	6000
SBL201209M-050	0~15	100	0.01	6000
SBL201209M-070	0~11	100	0.01	6000
SBL201209M-090	5~13	100	0.01	6000
SBL201209M-110	7~15	100	0.01	6000
SBL201209M-150	9~21	100	0.01	6000
SBL201209M-190	12~25	100	0.01	6000
SBL201209M-300	30±25%	100	0.01	6000
SBL201209M-600	60±25%	100	0.04	3500
SBL201209M-800	80±25%	100	0.04	3000
SBL201209M-121	120±25%	100	0.05	3000
SBL201209M-181	180±25%	100	0.08	2500
SBL201209M-221	220±25%	100	0.08	2500
SBL201209M-301	300±25%	100	0.08	2500
SBL201209M-601	600±25%	100	0.10	2000
SBL201209M-102	1000±25%	100	0.12	1500

SBL321609M Series

Part Number	Impedance (Ω)	Z Test Freq (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL321609M-000	0~15	100	0.01	6000
SBL321609M-050	0~15	100	0.01	6000
SBL321609M-070	0~11	100	0.01	6000
SBL321609M-090	5~13	100	0.015	6000
SBL321609M-110	7~15	100	0.015	6000
SBL321609M-150	9~21	100	0.015	6000
SBL321609M-190	12~25	100	0.015	6000
SBL321609M-260	26±25%	100	0.015	6000
SBL321609M-280	28±25%	100	0.015	6000
SBL321609M-300	30±25%	100	0.015	6000
SBL321609M-310	31±25%	100	0.025	4000
SBL321609M-500	50±25%	100	0.025	4000
SBL321609M-600	60±25%	100	0.025	4000
SBL321609M-700	70±25%	100	0.035	4000
SBL321609M-800	80±25%	100	0.035	4000
SBL321609M-121	120±25%	100	0.035	4000

Electrical Characteristics 电气性能

SBL321609M Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL321609M-151	150±25%	100	0.045	3000
SBL321609M-221	220±25%	100	0.055	3000
SBL321609M-301	300±25%	100	0.065	2500
SBL321609M-501	500±25%	100	0.085	2500
SBL321609M-601	600±25%	100	0.10	2000
SBL321609M-801	800±25%	100	0.11	2000
SBL321609M-102	1000±25%	100	0.12	2000

SBL451616M Series

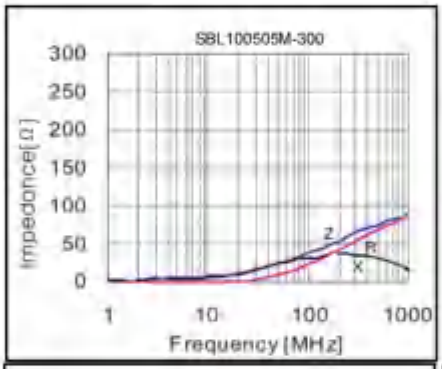
Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL451616M-190	12~25	100	0.01	6000
SBL451616M-260	26±25%	100	0.015	6000
SBL451616M-310	31±25%	100	0.015	6000
SBL451616M-600	60±25%	100	0.015	6000
SBL451616M-750	75±25%	100	0.020	4000
SBL451616M-800	80±25%	100	0.025	3000

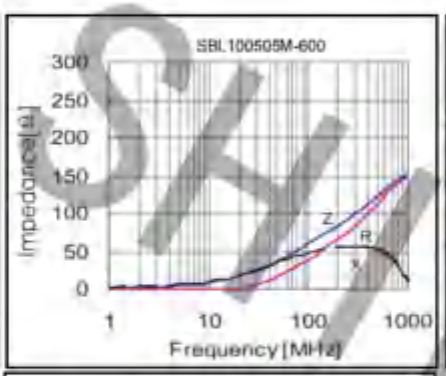
SBL453215M Series

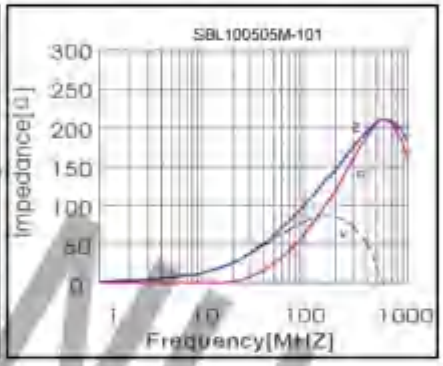
Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL453215M-300	30±25%	100	0.01	6000
SBL453215M-310	31±25%	100	0.01	6000
SBL453215M-380	38±25%	100	0.01	6000
SBL453215M-400	40±25%	100	0.01	6000
SBL453215M-500	50±25%	100	0.01	6000
SBL453215M-600	60±25%	100	0.01	6000
SBL453215M-700	70±25%	100	0.01	6000
SBL453215M-101	100±25%	100	0.02	6000
SBL453215M-181	180±25%	100	0.02	6000
SBL453215M-221	220±25%	100	0.02	6000

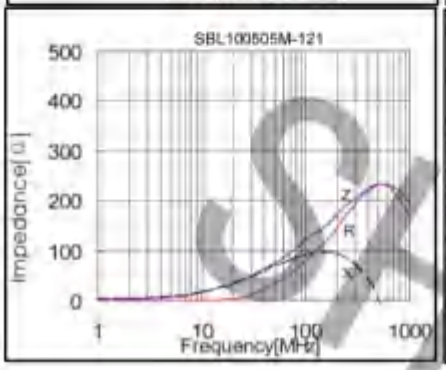
Impedance Frequency Characteristics 阻抗频率性能

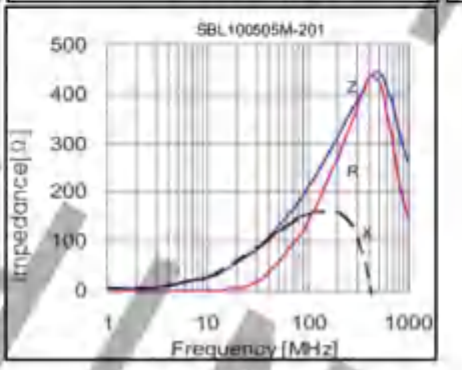
SBL100505M Series



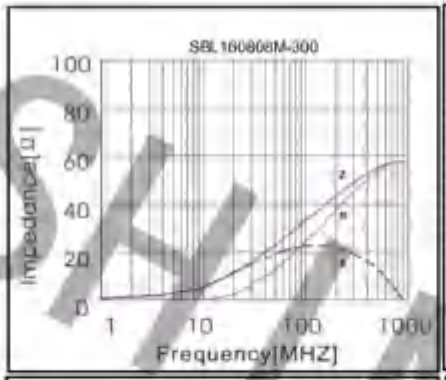


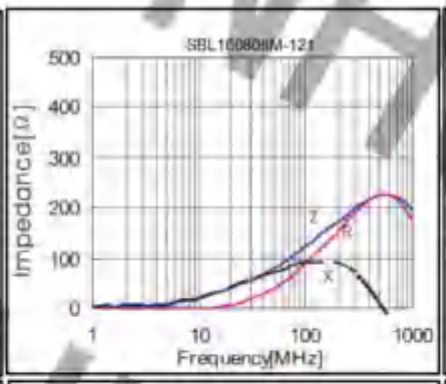


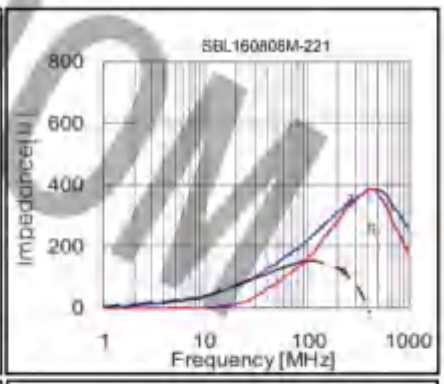


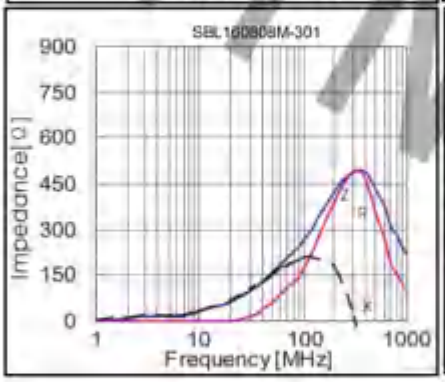


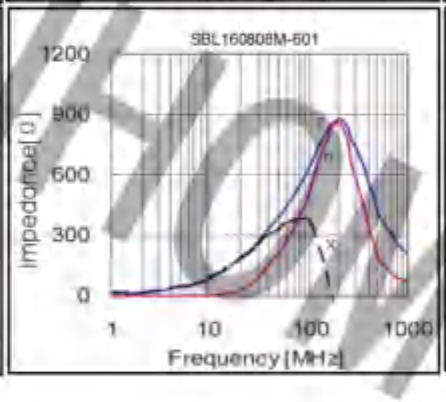
SBL160808M Series

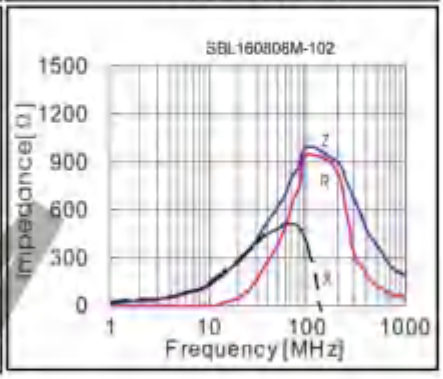






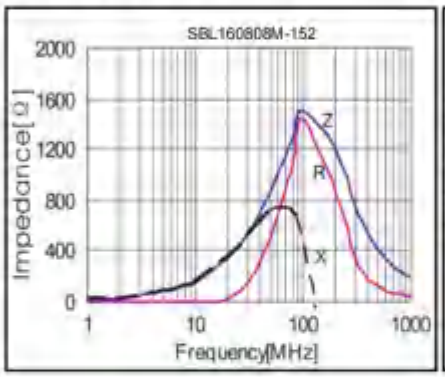


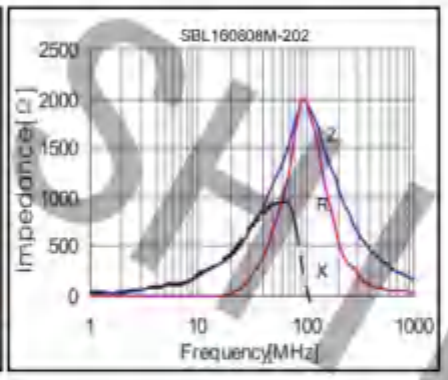




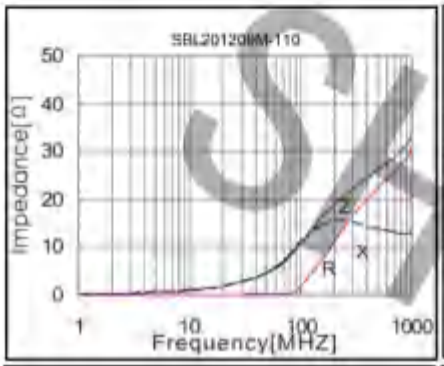
Impedance Frequency Characteristics 阻抗频率性能

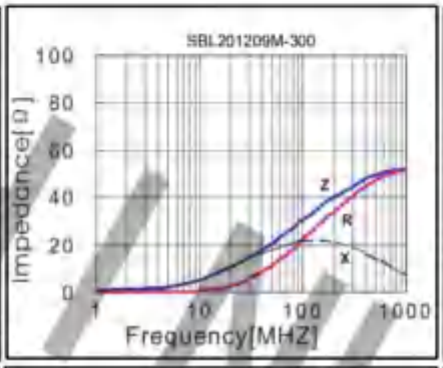
SBL160808M Series

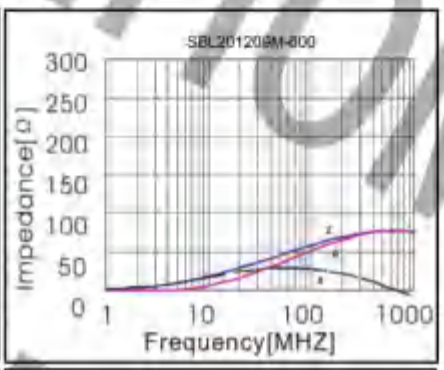


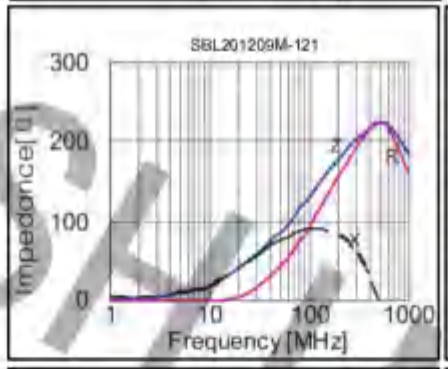


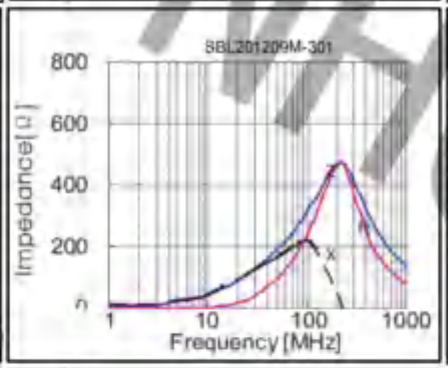
SBL201209M Series

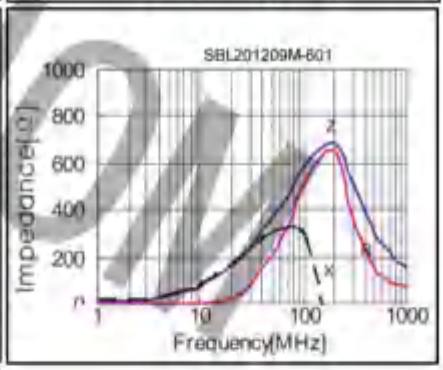


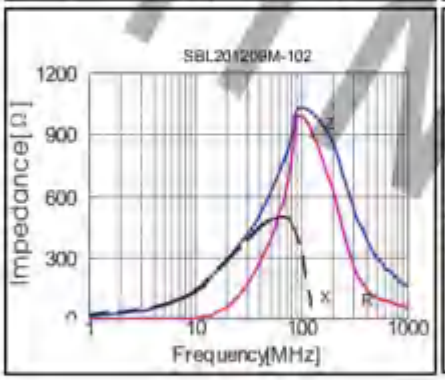


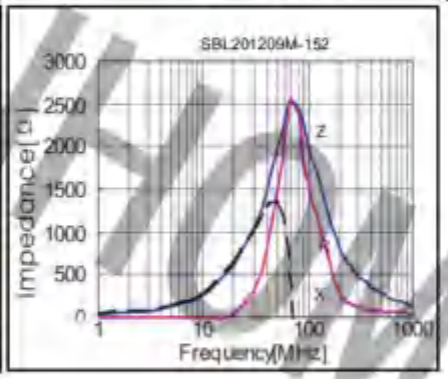












Multilayer Chip Large Current Bead SBLxxxxxxW Series

Features 特点

- Multilayer monolithic construction yields high reliability

独石结构、高可靠性

- A unique terminal electrode structure ensures high permissible current, 6A max.

特别的设计可承受最大 6A 的电流

- High impedance over a vide frequency range

在较宽的频段具有高阻抗

Applications 应用

- Video equipment, audio equipment 视频音频设备
- Automotive electrical equipment 电气自动化设备
- Communication equipment 通讯设备
- OA equipment and other OA 设备及其它领域

Product Identification 产品标识

SBL 20 1209 W 121

① ② ③ ④

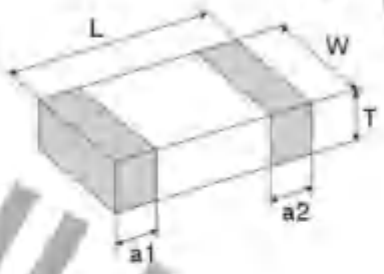
① Series name 系列名称

② Dimension 产品尺寸 L×W×T:【201209: 2.0mm×1.2 mm×0.9mm】

③ Material code 材料代码

④ Impedance 阻抗:【100=10Ω 101=100Ω 102=1000Ω】

Shapes And Dimensions 外形及尺寸示意图



Type	Dimensions (mm) [inch]			
	L	W	T	a1, a2
100505 [0402]	1.00±0.15 [0.04±0.006]	0.50±0.15 [0.02±0.006]	0.50±0.15 [0.02±0.006]	0.25±0.10 [0.01±0.004]
160808 [0603]	1.60±0.20 [0.063±0.008]	0.80±0.20 [0.031±0.008]	0.80±0.20 [0.031±0.008]	0.30±0.20 [0.012±0.008]
201209 [0805]	2.00±0.20 [0.079±0.008]	1.20±0.20 [0.049±0.008]	0.90±0.20 [0.035±0.008]	0.50±0.30 [0.02±0.012]
321609 [1206]	3.20±0.20 [0.126±0.008]	1.60±0.20 [0.063±0.008]	0.90±0.20 [0.035±0.008]	0.50±0.30 [0.02±0.012]
322513 [1210]	3.20±0.20 [0.126±0.008]	2.50±0.20 [0.098±0.008]	1.30±0.20 [0.051±0.008]	0.50±0.30 [0.02±0.012]
451616 [1806]	4.50±0.20 [0.180±0.008]	1.60±0.20 [0.063±0.008]	1.60±0.20 [0.063±0.008]	0.50±0.30 [0.02±0.012]
453215 [1812]	4.50±0.20 [0.180±0.008]	3.20±0.20 [0.126±0.008]	1.50±0.20 [0.06±0.008]	0.50±0.30 [0.02±0.012]

Electrical Characteristics 电气性能

SBL100505W Series

Part Number	Impedance (Ω)	Z Test Freq (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL100505W-000	0~15	100	0.04	800
SBL100505W-050	0~15	100	0.04	800
SBL100505W-070	0~11	100	0.04	800
SBL100505W-090	5~13	100	0.04	800
SBL100505W-110	7~15	100	0.04	800
SBL100505W-150	9~21	100	0.04	800
SBL100505W-190	12~25	100	0.06	700
SBL100505W-260	26±25%	100	0.06	700
SBL100505W-310	31±25%	100	0.08	700
SBL100505W-360	36±25%	100	0.15	600
SBL100505W-600	60±25%	100	0.15	600
SBL100505W-800	80±25%	100	0.20	450
SBL100505W-121	120±25%	100	0.25	450
SBL100505W-151	150±25%	100	0.25	450
SBL100505W-181	180±25%	100	0.40	300
SBL100505W-221	220±25%	100	040	300
SBL100505W-301	300±25%	100	0.50	300
SBL100505W-501	500±25%	100	0.65	200
SBL100505W-601	600±25%	100	0.70	200
SBL100505W-801	800±25%	100	0.90	200
SBL100505W-102	1000±25%	100	1.00	200

SBL160808W Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL160808W-000	0~15	100	0.08	1000
SBL160808W-050	0~15	100	0.08	1000
SBL160808W-070	0~11	100	0.08	1000
SBL160808W-090	5~13	100	0.08	1000
SBL160808W-110	7~15	100	0.08	1000
SBL160808W-150	9~21	100	0.08	1000
SBL160808W-190	12~25	100	0.08	1000
SBL160808W-260	26±25%	100	0.08	1000
SBL160808W-300	30±25%	100	0.08	1000
SBL160808W-310	31±25%	100	0.08	1000
SBL160808W-600	60±25%	100	0.12	1000
SBL160808W-800	80±25%	100	0.20	1000
SBL160808W-101	100±25%	100	0.20	1000
SBL160808W-121	120±25%	100	0.20	1000

Electrical Characteristics 电气性能

SBL160808W Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max	Ir(mA) Max.
SBL160808W-151	150±25%	100	0.25	1000
SBL160808W-181	180±25%	100	0.25	1000
SBL160808W-221	220±25%	100	0.30	1000
SBL160808W-301	300±25%	100	0.30	1000
SBL160808W-501	500±25%	100	0.40	1000
SBL160808W-601	600±25%	100	0.40	1000
SBL160808W-801	800±25%	100	0.55	500
SBL160808W-102	1000±25%	100	0.55	500
SBL160808W-122	1200±25%	100	0.65	500
SBL160808W-152	1500±25%	100	0.75	400
SBL160808W-182	1800±25%	100	0.75	400
SBL160808W-202	2000±25%	100	0.90	400

SBL201209W Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max	Ir(mA) Max.
SBL201209W-000	0~15	100	0.03	3000
SBL201209W-050	0~15	100	0.03	3000
SBL201209W-070	0~11	100	0.03	3000
SBL201209W-090	5~13	100	0.03	3000
SBL201209W-110	7~15	100	0.03	3000
SBL201209W-150	9~21	100	0.03	3000
SBL201209W-190	12~25	100	0.03	3000
SBL201209W-300	30±25%	100	0.05	3000
SBL201209W-310	31±25%	100	0.05	3000
SBL201209W-360	36±25%	100	0.06	3000
SBL201209W-600	60±25%	100	0.06	3000
SBL201209W-800	80±25%	100	0.08	2500
SBL201209W-101	100±25%	100	0.10	2500
SBL201209W-121	120±25%	100	0.10	2000
SBL201209W-151	150±25%	100	0.10	2000
SBL201209W-181	180±25%	100	0.15	2000
SBL201209W-201	200±25%	100	0.15	2000
SBL201209W-221	220±25%	100	0.15	2000
SBL201209W-301	300±25%	100	0.20	2000
SBL201209W-501	500±25%	100	0.25	1500
SBL201209W-601	600±25%	100	0.25	1500
SBL201209W-801	800±25%	100	0.30	800
SBL201209W-102	1000±25%	100	0.30	800
SBL201209W-122	1200±25%	100	0.45	500
SBL201209W-252	2500±25%	50	0.60	100

Electrical Characteristics 电气性能

SBL321609W Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max	Ir(mA) Max
SBL321609W-000	0~15	100	0.04	4000
SBL321609W-050	0~15	100	0.04	4000
SBL321609W-070	0~11	100	0.04	4000
SBL321609W-090	5~13	100	0.05	4000
SBL321609W-110	7~15	100	0.05	4000
SBL321609W-150	9~21	100	0.05	3000
SBL321609W-190	12~25	100	0.05	3000
SBL321609W-000	26±25%	100	0.05	3000
SBL321609W-050	28±25%	100	0.05	3000
SBL321609W-070	30±25%	100	0.07	3000
SBL321609W-090	31±25%	100	0.08	3000
SBL321609W-110	50±25%	100	0.10	3000
SBL321609W-150	60±25%	100	0.10	3000
SBL321609W-190	70±25%	100	0.10	3000
SBL321609W-000	80±25%	100	0.10	3000
SBL321609W-050	100±25%	100	0.10	3000
SBL321609W-070	120±25%	100	0.10	3000
SBL321609W-090	150±25%	100	0.15	2500
SBL321609W-110	180±25%	100	0.20	2500
SBL321609W-150	220±25%	100	0.20	2500
SBL321609W-190	300±25%	100	0.20	2000
SBL321609W-000	500±25%	100	0.20	2000
SBL321609W-050	600±25%	100	0.25	2000
SBL321609W-070	800±25%	100	0.25	2000
SBL321609W-090	1000±25%	100	0.30	2000
SBL321609W-110	1200±25%	100	0.35	1000
SBL321609W-150	1500±25%	50	0.45	500
SBL321609W-190	1800±25%	50	0.60	500
SBL321609W-190	2000±25%	50	0.70	300

SBL322513W Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL322513W-110	7~15	100	0.05	5000
SBL322513W-190	12~25	100	0.05	5000
SBL322513W-260	26±25%	100	0.05	5000
SBL322513W-310	31±25%	100	0.05	5000
SBL322513W-600	60±25%	100	0.06	4000
SBL322513W-700	70±25%	100	0.08	3000
SBL322513W-800	80±25%	100	0.08	3000
SBL322513W-900	90±25%	100	0.08	3000
SBL322513W-121	120±25%	100	0.10	3000
SBL322513W-151	150±25%	100	0.10	3000

Electrical Characteristics 电气性能

SBL322513W Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max	Ir(mA) Max
SBL322513W-181	180±25%	100	0.15	3000
SBL322513W-221	220±25%	100	0.15	3000
SBL322513W-301	300±25%	100	0.15	3000
SBL322513W-501	500±25%	100	0.15	2000
SBL322513W-601	600±25%	100	0.20	2000
SBL322513W-801	800±25%	100	0.25	2000
SBL322513W-102	1000±25%	100	0.30	2000

SBL451616W Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL451616W-190	12~25	100	0.015	6000
SBL451616W-260	26±25%	100	0.05	3000
SBL451616W-310	31±25%	100	0.05	3000
SBL451616W-600	60±25%	100	0.06	3000
SBL451616W-750	75±25%	100	0.06	3000
SBL451616W-800	80±25%	100	0.08	3000
SBL451616W-900	90±25%	100	0.10	3000
SBL451616W-121	120±25%	100	0.10	3000
SBL451616W-151	150±25%	100	0.10	3000
SBL451616W-221	220±25%	100	0.15	2000
SBL451616W-301	300±25%	100	0.20	2000
SBL451616W-501	500±25%	100	0.25	1000
SBL451616W-601	600±25%	100	0.30	1000

SBL453215W Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL453215W-300	30±25%	100	0.06	5000
SBL453215W-310	31±25%	100	0.06	5000
SBL453215W-380	38±25%	100	0.06	5000
SBL453215W-400	40±25%	100	0.06	4000
SBL453215W-500	50±25%	100	0.06	4000
SBL453215W-600	60±25%	100	0.06	4000
SBL453215W-700	70±25%	100	0.06	4000
SBL453215W-800	80±25%	100	0.08	4000
SBL453215W-900	90±25%	100	0.08	4000
SBL453215W-101	100±25%	100	0.08	4000
SBL453215W-121	120±25%	100	0.08	4000
SBL453215W-151	150±25%	100	0.10	3000
SBL453215W-181	180±25%	100	0.12	3000
SBL453215W-201	200±25%	100	0.12	3000
SBL453215W-221	220±25%	100	0.15	2000

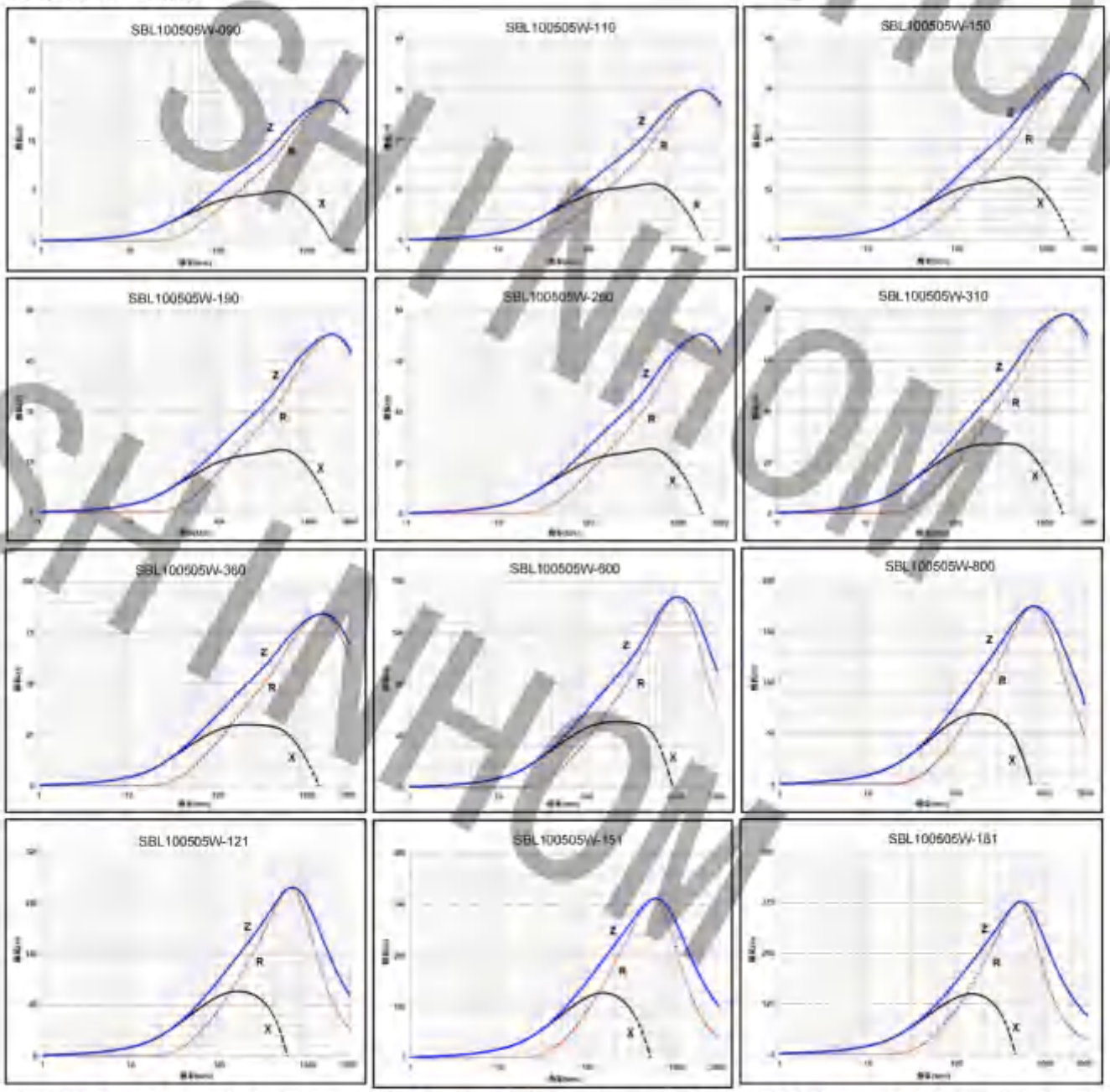
Electrical Characteristics 电气性能

SBL453215W Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL453215W-301	300±25%	100	0.15	2000
SBL453215W-401	400±25%	100	0.20	1000
SBL453215W-501	500±25%	100	0.20	1000
SBL453215W-601	600±25%	100	0.25	1000
SBL453215W-801	800±25%	100	0.30	1000
SBL453215W-102	1000±25%	100	0.35	800

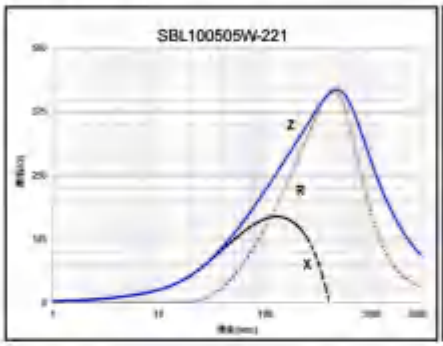
Impedance Frequency Characteristics 阻抗频率性能

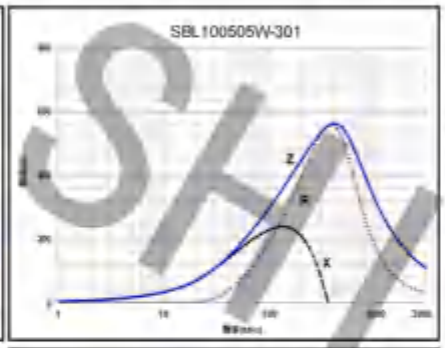
SBL100505W Series

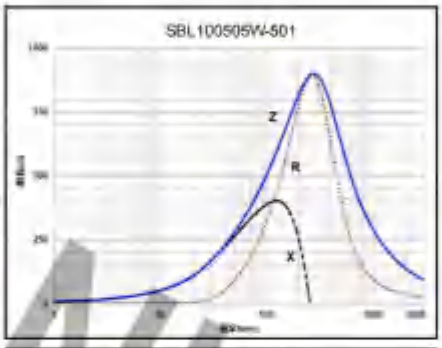


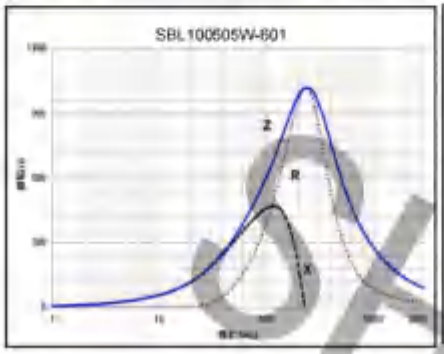
Impedance Frequency Characteristics 阻抗频率性能

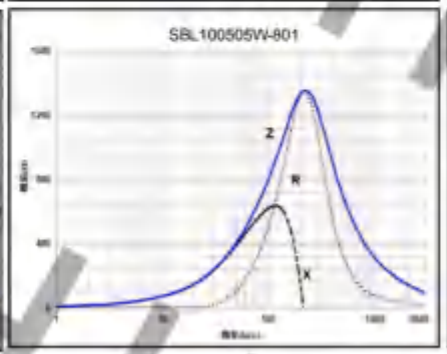
SBL100505W Series

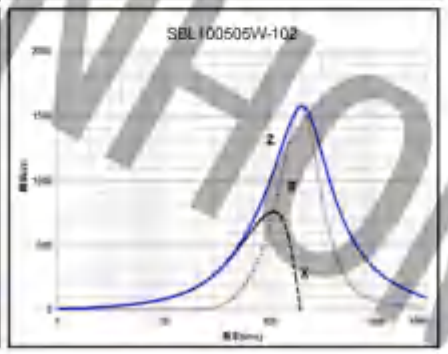




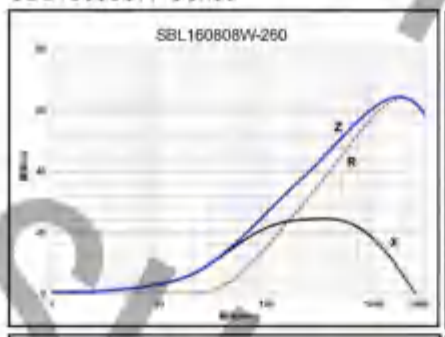


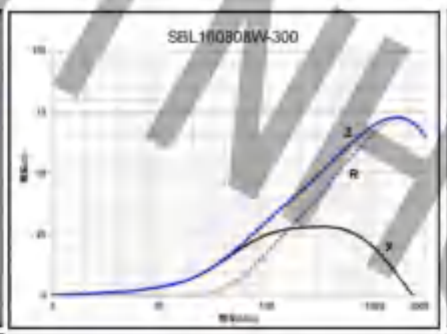


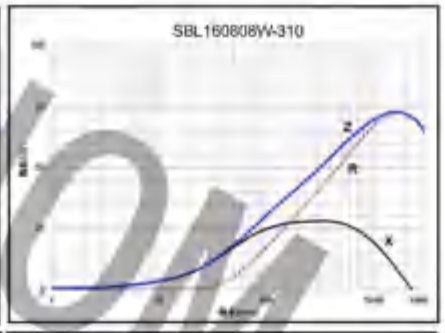


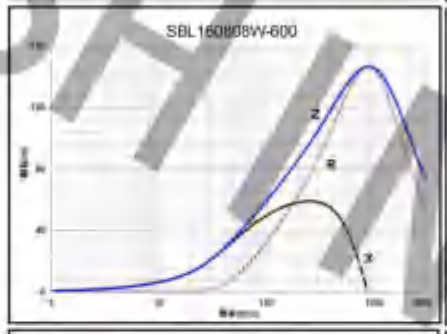


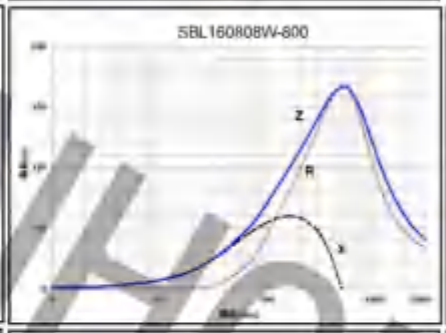
SBL160808W Series

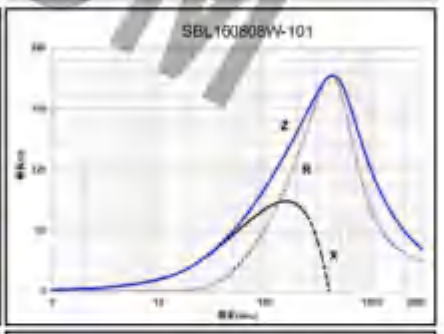


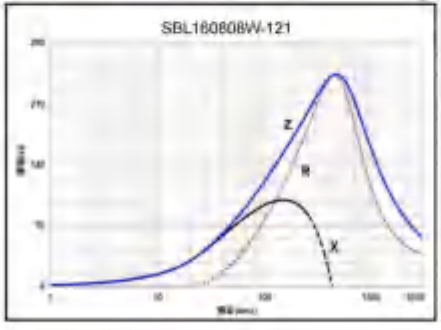


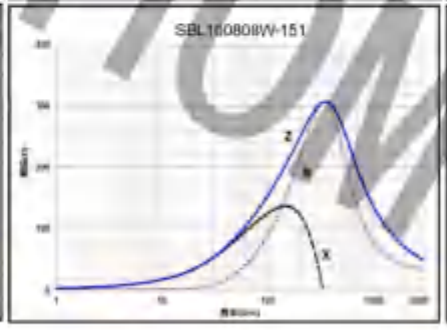


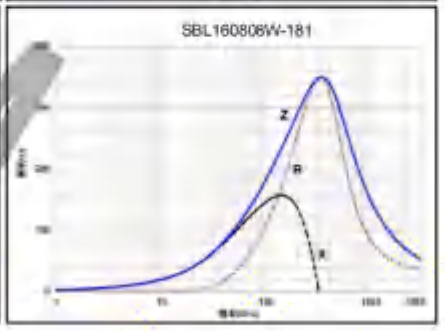






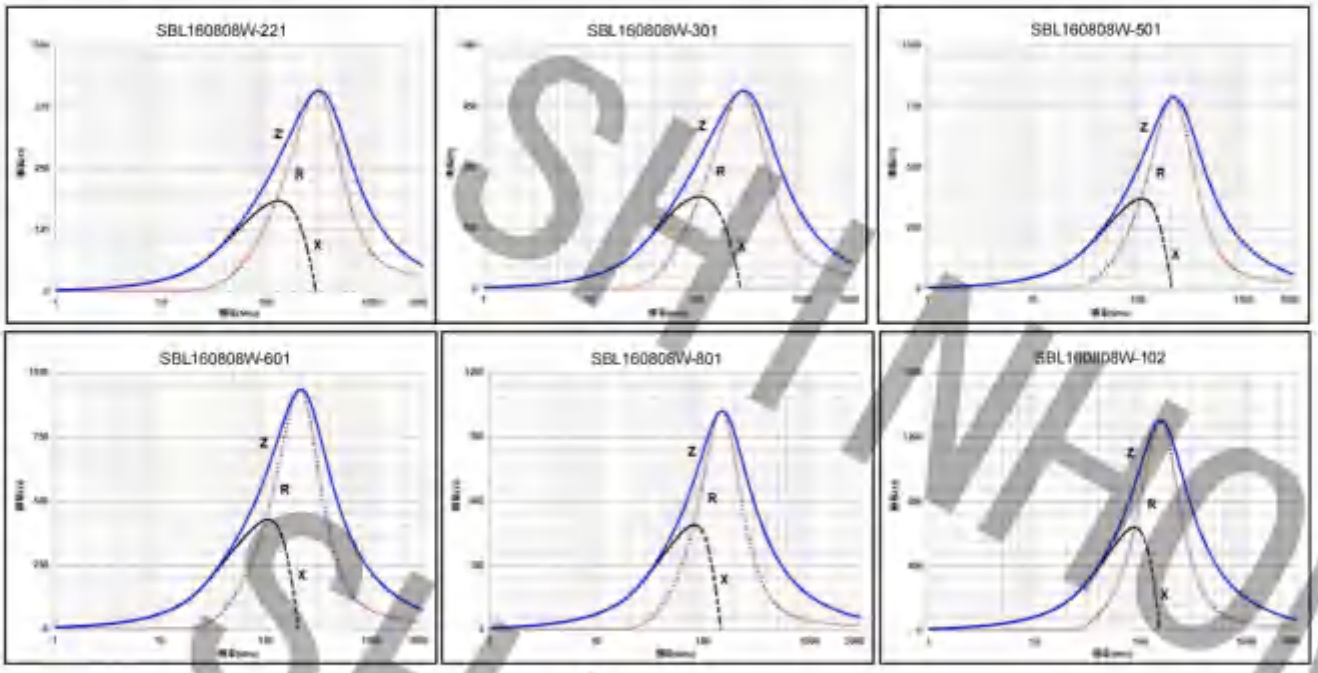




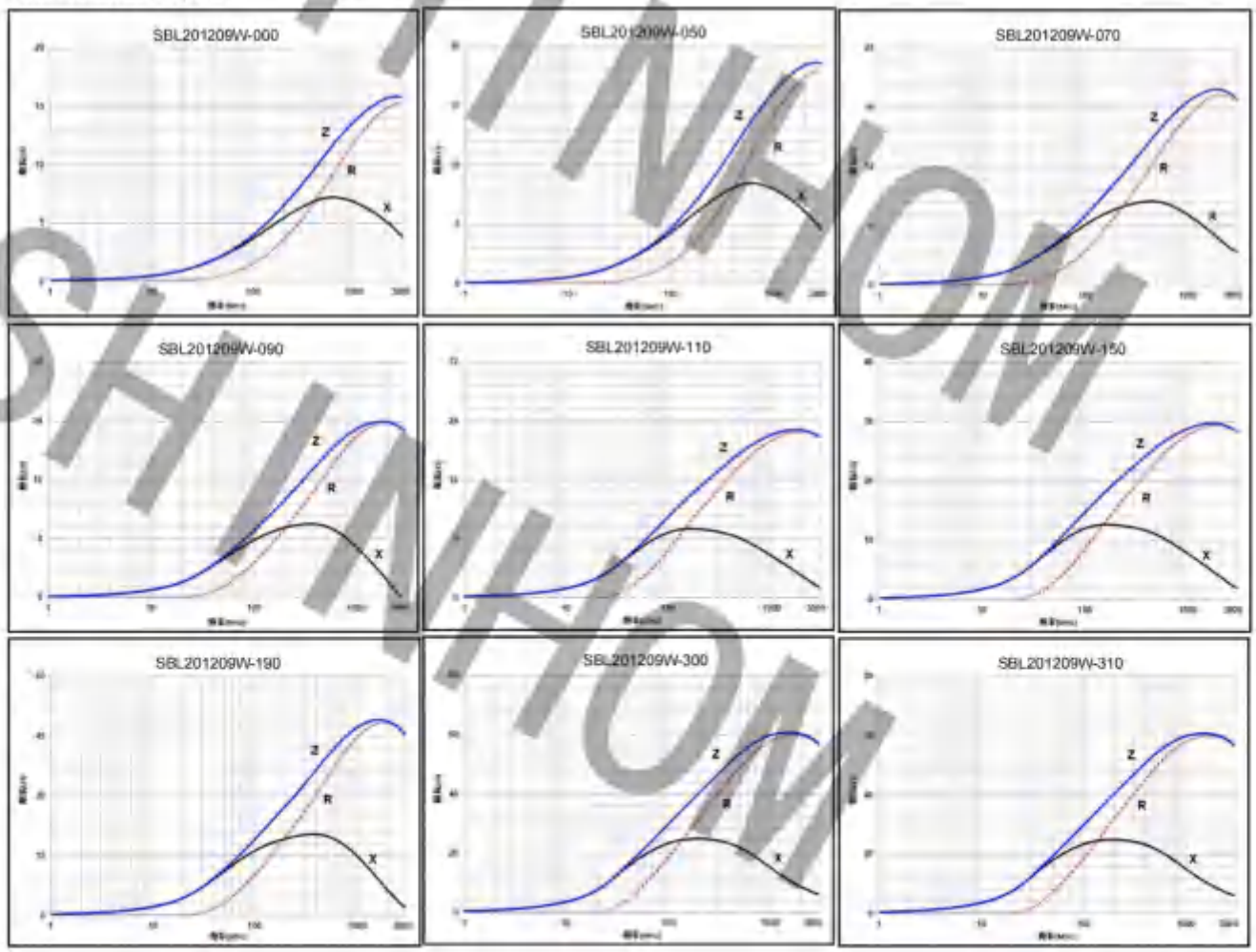


Impedance Frequency Characteristics 阻抗频率性能

SBL160808W Series

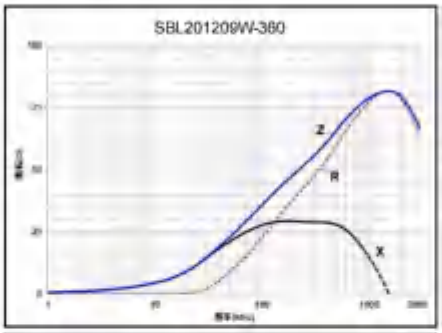


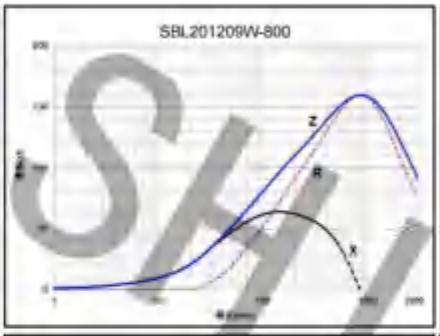
SBL201209W Series

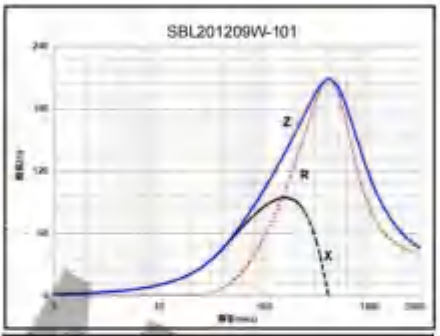


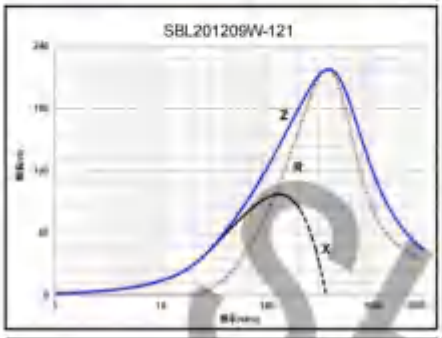
Impedance Frequency Characteristics 阻抗频率性能

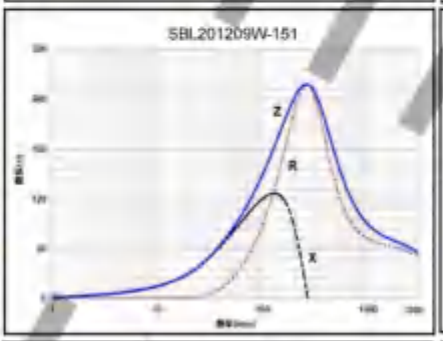
SBL201209W Series

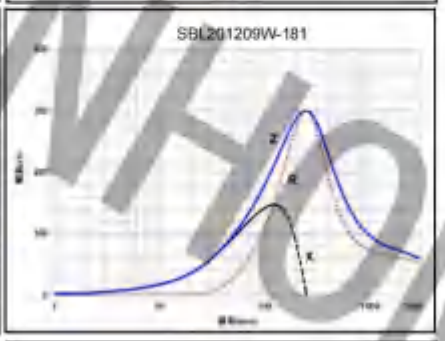


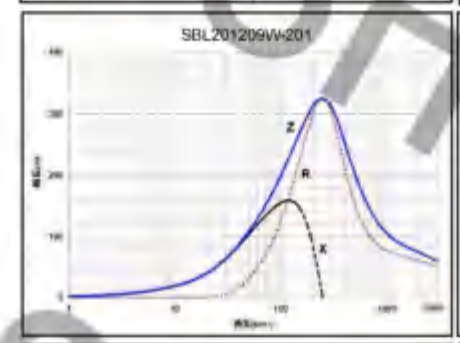


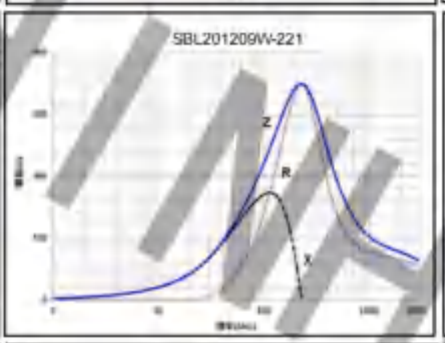


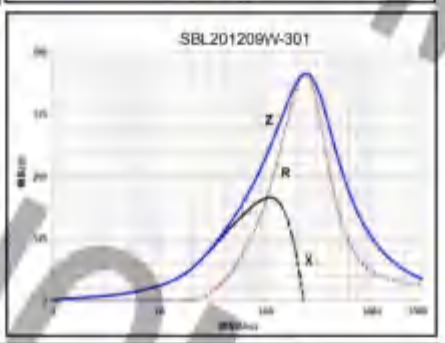


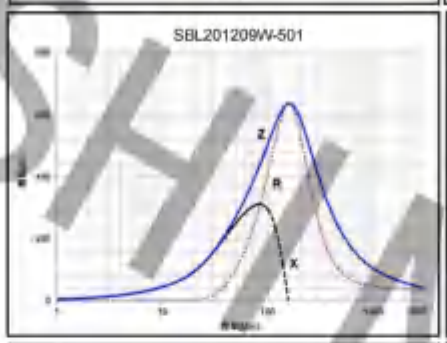


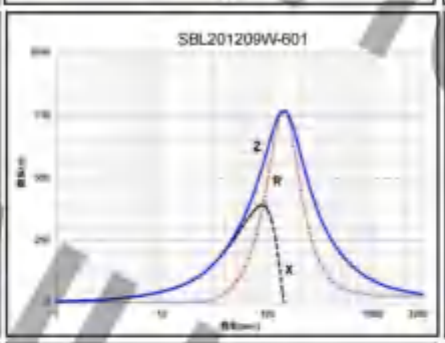


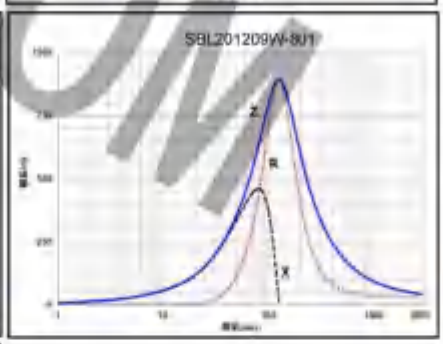


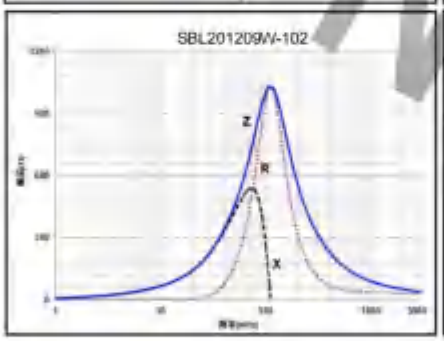


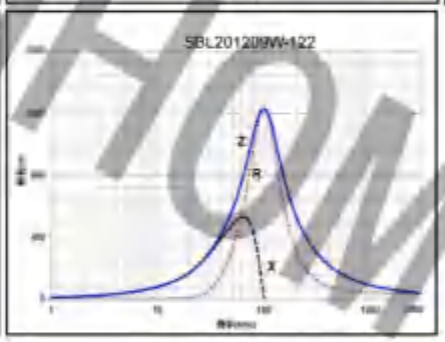






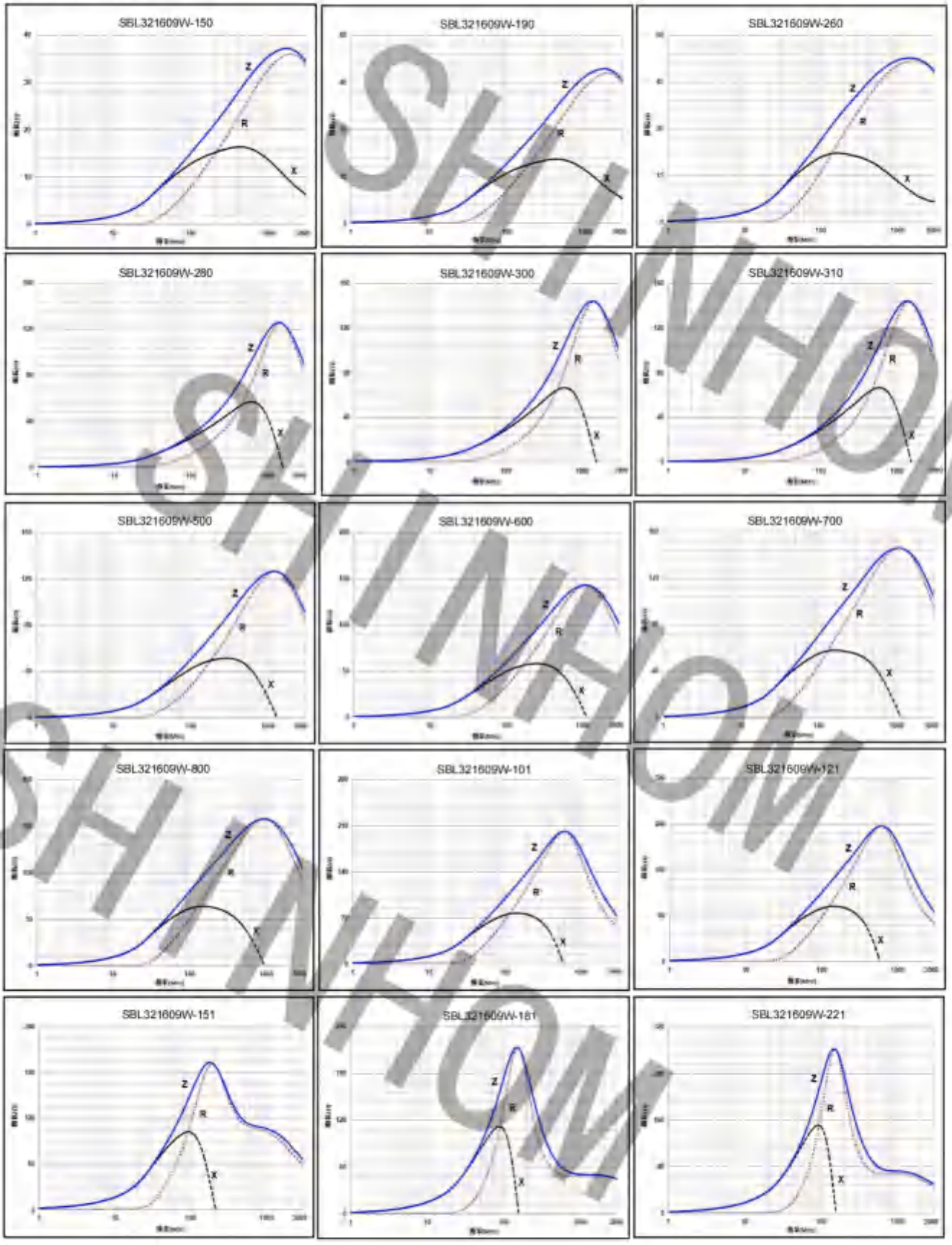






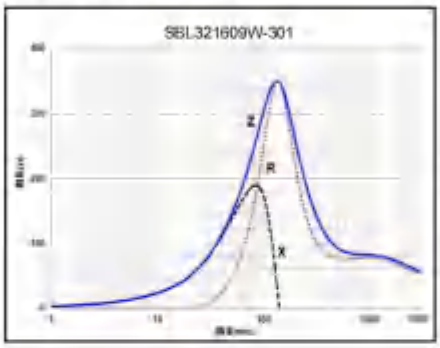
Impedance Frequency Characteristics 阻抗频率性能

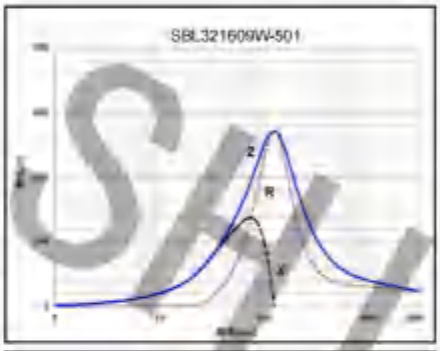
SBL321609W Series

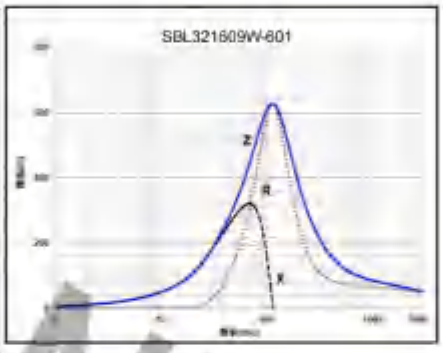


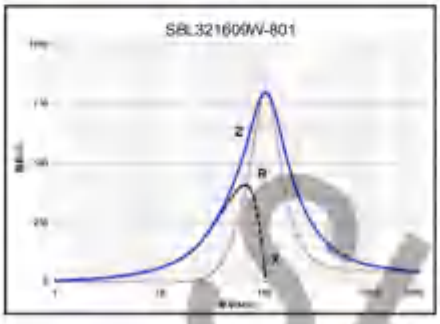
Impedance Frequency Characteristics 阻抗频率性能

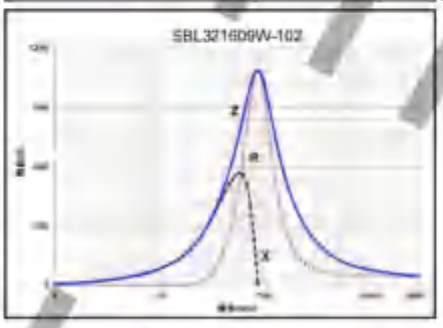
SBL321609W Series



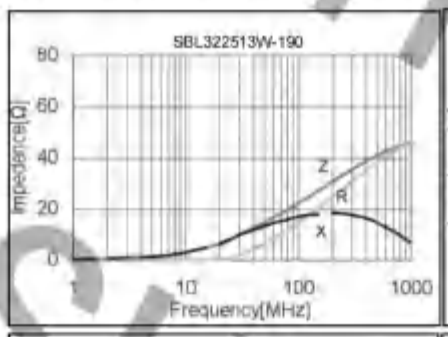


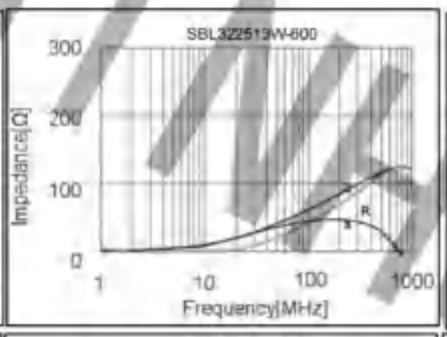


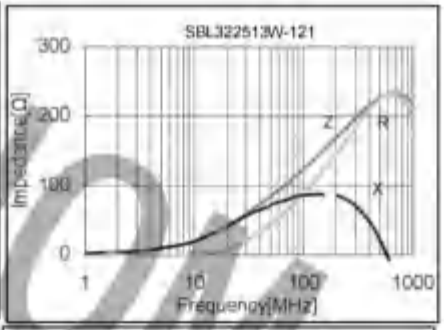


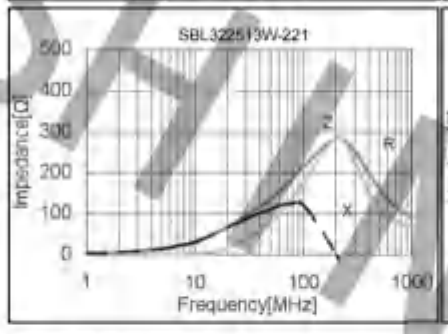


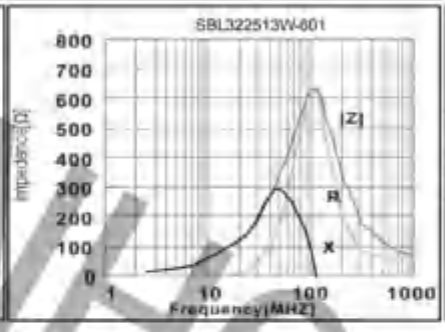
SBL322513W Series

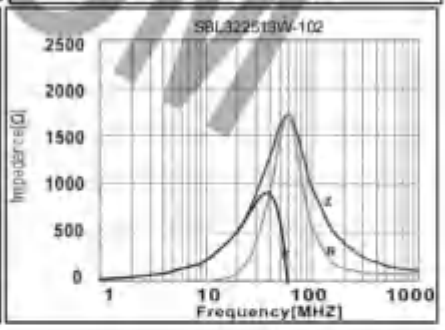




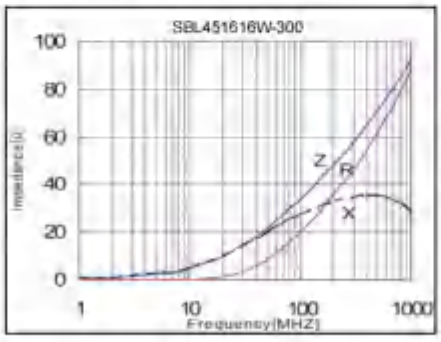


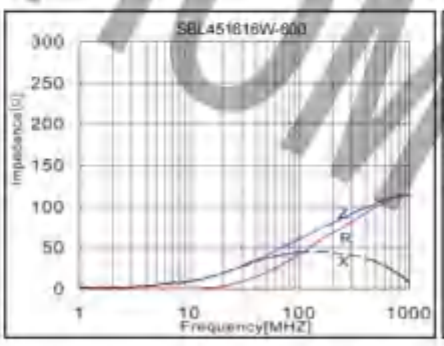


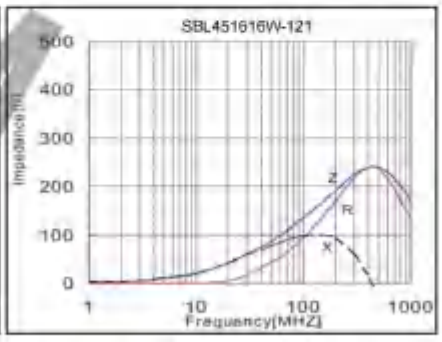




SBL451616W Series

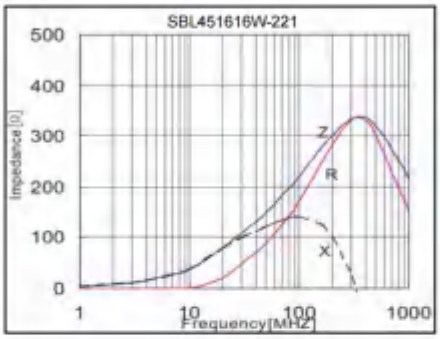




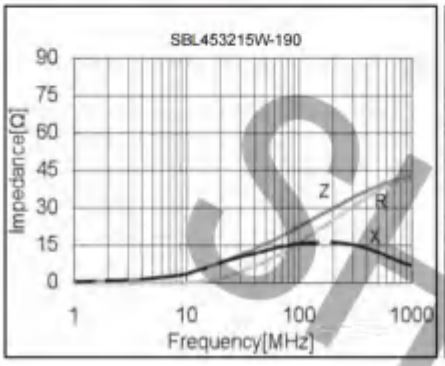


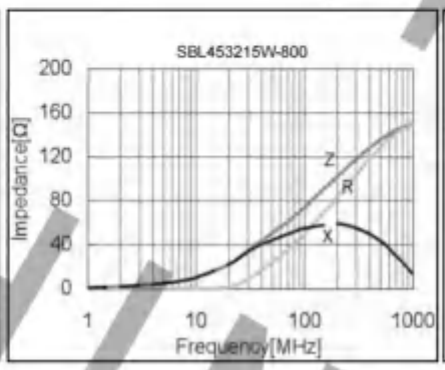
Impedance Frequency Characteristics 阻抗频率性能

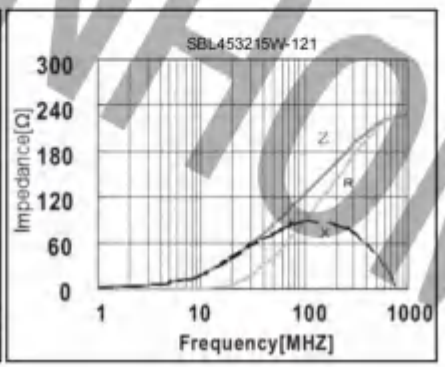
SBL451616W Series



SBL453215W Series







Multilayer Chip Sharp Bead SBLxxxxxxY Series

Features 特点

- Multilayer monolithic construction yields high reliability
  独石结构、高可靠性
- Has sharp impedance characteristics at desirable frequency 在指定的频段具有高阻抗
- Substantial EMI suppression over a wide frequency range 在宽频段有显著的抑制噪声效果
- Does not affect the signal frequency
  对信号频段无影响

Applications 应用

- Computers and peripherals 电脑及外设
- Digital cameras, TV set 数字电视，数码相机
- Communication equipment 通讯设备

Product Identification 产品标识

SBL 2 01209 Y 12 1

① ② ③ ④

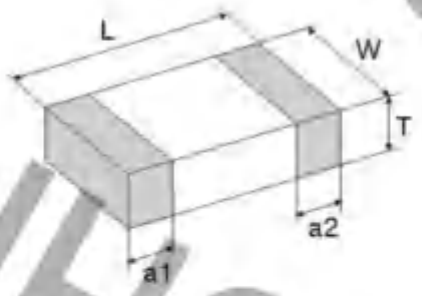
① Series name 系列名称

② Dimension 产品尺寸L×W×T：【201209: 2.0mm×1.2 mm×0.9mm】

③ Material code 材料代码

④ Impedance 阻抗：【100=10Ω 121=120Ω 102=1000Ω】

Shapes And Dimensions 外形及尺寸示意图



Type	Dimensions (mm) [inch]			
	L	W	T	a1, a2
100505 [0402]	1.00±0.15 [0.04±0.006]	0.50±0.15 [0.02±0.006]	0.50±0.15 [0.02±0.006]	0.25±0.10 [0.01±0.004]
160808 [0603]	1.60±0.20 [0.063±0.008]	0.80±0.20 [0.031±0.008]	0.80±0.20 [0.031±0.008]	0.30±0.20 [0.012±0.008]
201209 [0805]	2.00±0.20 [0.079±0.008]	1.20±0.20 [0.049±0.008]	0.90±0.20 [0.035±0.008]	0.50±0.30 [0.02±0.012]
321609 [1206]	3.20±0.20 [0.126±0.008]	1.60±0.20 [0.063±0.008]	0.90±0.20 [0.035±0.008]	0.50±0.30 [0.02±0.012]

Electrical Characteristics 电气性能

SBL100505Y Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL100505Y-000	0~15	100	0.10	300
SBL100505Y-050	0~15	100	0.10	300
SBL100505Y-070	0~11	100	0.10	300
SBL100505Y-090	5~13	100	0.10	300
SBL100505Y-110	7~15	100	0.10	300
SBL100505Y-150	9~21	100	0.10	300
SBL100505Y-190	12~25	100	0.10	300
SBL100505Y-310	31±25%	100	0.20	300
SBL100505Y-600	60±25%	100	0.35	200
SBL100505Y-800	80±25%	100	0.40	200
SBL100505Y-121	120±25%	100	0.50	150
SBL100505Y-151	150±25%	100	0.55	150
SBL100505Y-181	180±25%	100	0.60	150
SBL100505Y-221	220±25%	100	0.70	150
SBL100505Y-301	300±25%	100	0.80	100
SBL100505Y-501	500±25%	100	1.10	100
SBL100505Y-601	600±25%	100	1.30	100

SBL160808Y Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max	Ir(mA) Max.
SBL160808Y-000	0~15	100	0.10	600
SBL160808Y-050	0~15	100	0.10	600
SBL160808Y-070	0~11	100	0.10	600
SBL160808Y-090	5~13	100	0.10	500
SBL160808Y-110	7~15	100	0.20	500
SBL160808Y-150	9~21	100	0.20	500
SBL160808Y-190	12~25	100	0.20	500
SBL160808Y-310	31±25%	100	0.25	400
SBL160808Y-600	60±25%	100	0.30	300
SBL160808Y-800	80±25%	100	0.30	300

Electrical Characteristics 电气性能

SBL160808Y Series

Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL160808Y-121	120±25%	100	0.35	200
SBL160808Y-151	150±25%	100	0.35	200
SBL160808Y-221	220±25%	100	0.40	200
SBL160808Y-301	300±25%	100	0.50	200
SBL160808Y-501	500±25%	100	0.60	200
SBL160808Y-601	600±25%	100	0.70	200

SBL201209Y Series

Part Number	Impedance (Ω)	Z Test Freq (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL201209Y-000	0~15	100	0.15	600
SBL201209Y-050	0~15	100	0.15	600
SBL201209Y-070	0~11	100	0.15	600
SBL201209Y-090	5~13	100	0.15	600
SBL201209Y-110	7~15	100	0.15	600
SBL201209Y-150	9~21	100	0.15	600
SBL201209Y-190	12~25	100	0.15	600
SBL201209Y-260	26±25%	100	0.20	600
SBL201209Y-310	31±25%	100	0.20	600
SBL201209Y-700	70±25%	100	0.25	600
SBL201209Y-800	80±25%	100	0.25	600
SBL201209Y-121	120±25%	100	0.25	600
SBL201209Y-151	150±25%	100	0.25	600
SBL201209Y-221	220±25%	100	0.30	600
SBL201209Y-301	300±25%	100	0.30	600
SBL201209Y-501	500±25%	100	0.35	400
SBL201209Y-601	600±25%	100	0.40	400

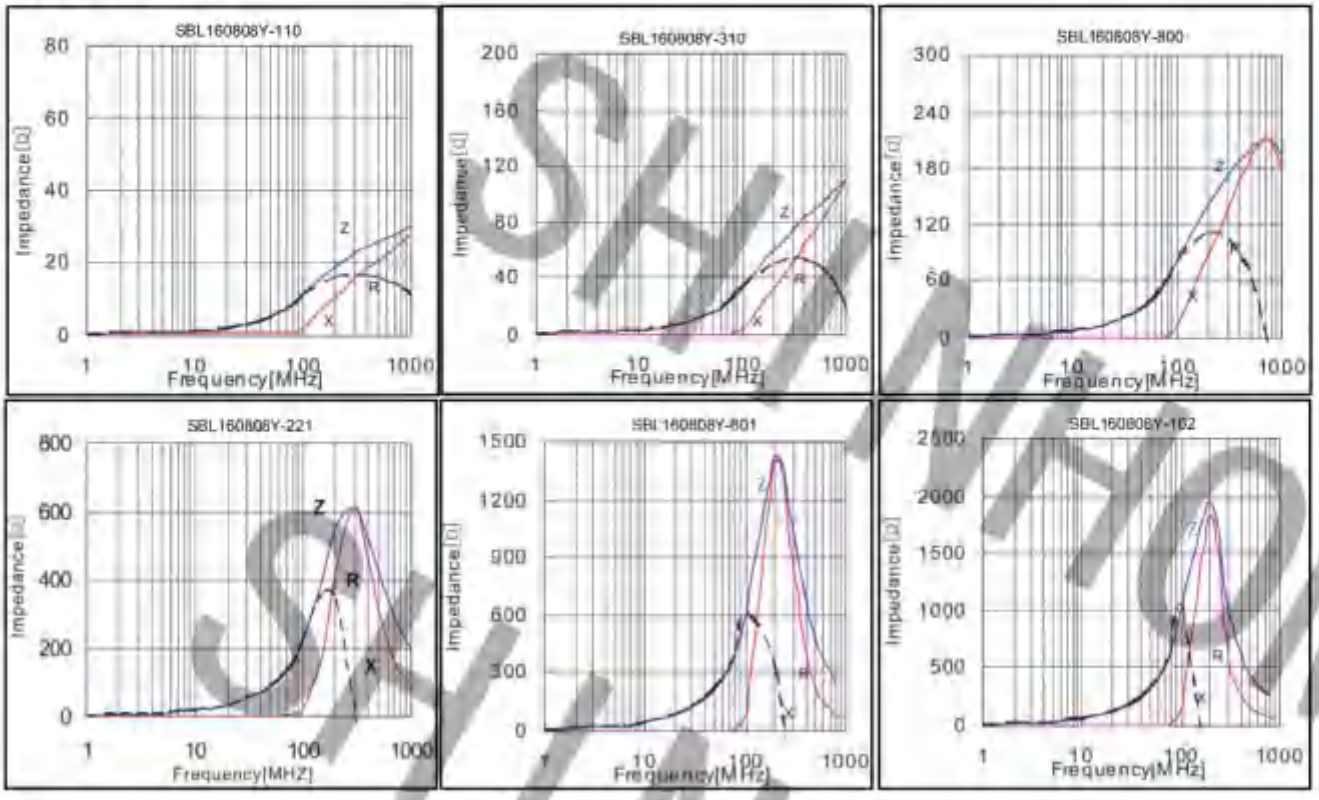
Electrical Characteristics 电气性能

SBL321609Y Series

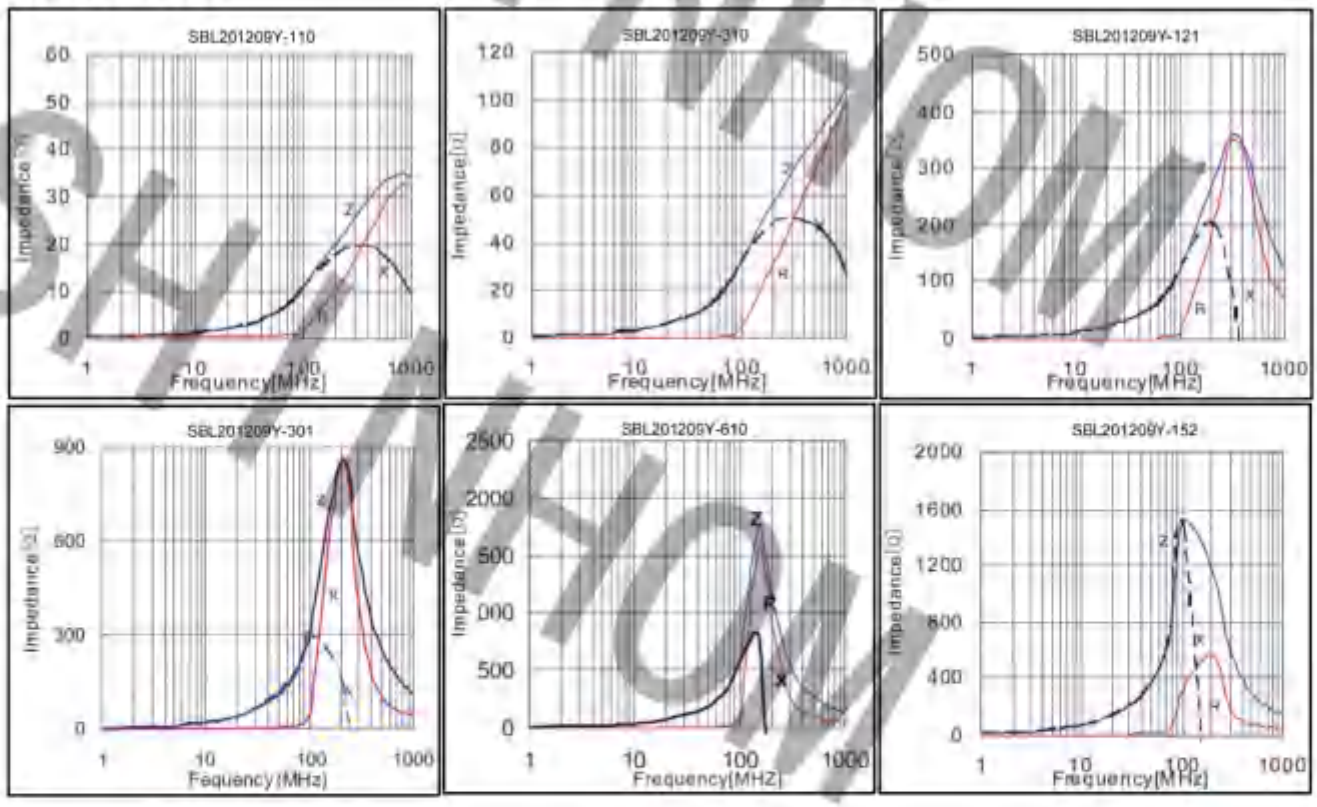
Part Number	Impedance (Ω)	Z Test Freq. (MHz)	RDC(Ω) Max.	Ir(mA) Max.
SBL321609Y-000	0~15	100	0.10	500
SBL321609Y-050	0~15	100	0.10	500
SBL321609Y-070	0~11	100	0.10	500
SBL321609Y-090	5~13	100	0.10	500
SBL321609Y-110	7~15	100	0.10	500
SBL321609Y-150	9~21	100	0.10	500
SBL321609Y-190	12~25	100	0.10	500
SBL321609Y-260	26±25%	100	0.10	500
SBL321609Y-310	31±25%	100	0.10	500
SBL321609Y-600	60±25%	100	0.20	400
SBL321609Y-700	70±25%	100	0.20	400
SBL321609Y-800	80±25%	100	0.20	400
SBL321609Y-900	90±25%	100	0.20	400
SBL321609Y-121	120±25%	100	0.20	400
SBL321609Y-151	150±25%	100	0.20	400
SBL321609Y-221	220±25%	100	0.20	400
SBL321609Y-301	300±25%	100	0.25	400
SBL321609Y-501	500±25%	100	0.30	300
SBL321609Y-601	600±25%	100	0.30	300

Impedance Frequency Characteristics 阻抗频率性能

SBL160808Y Series

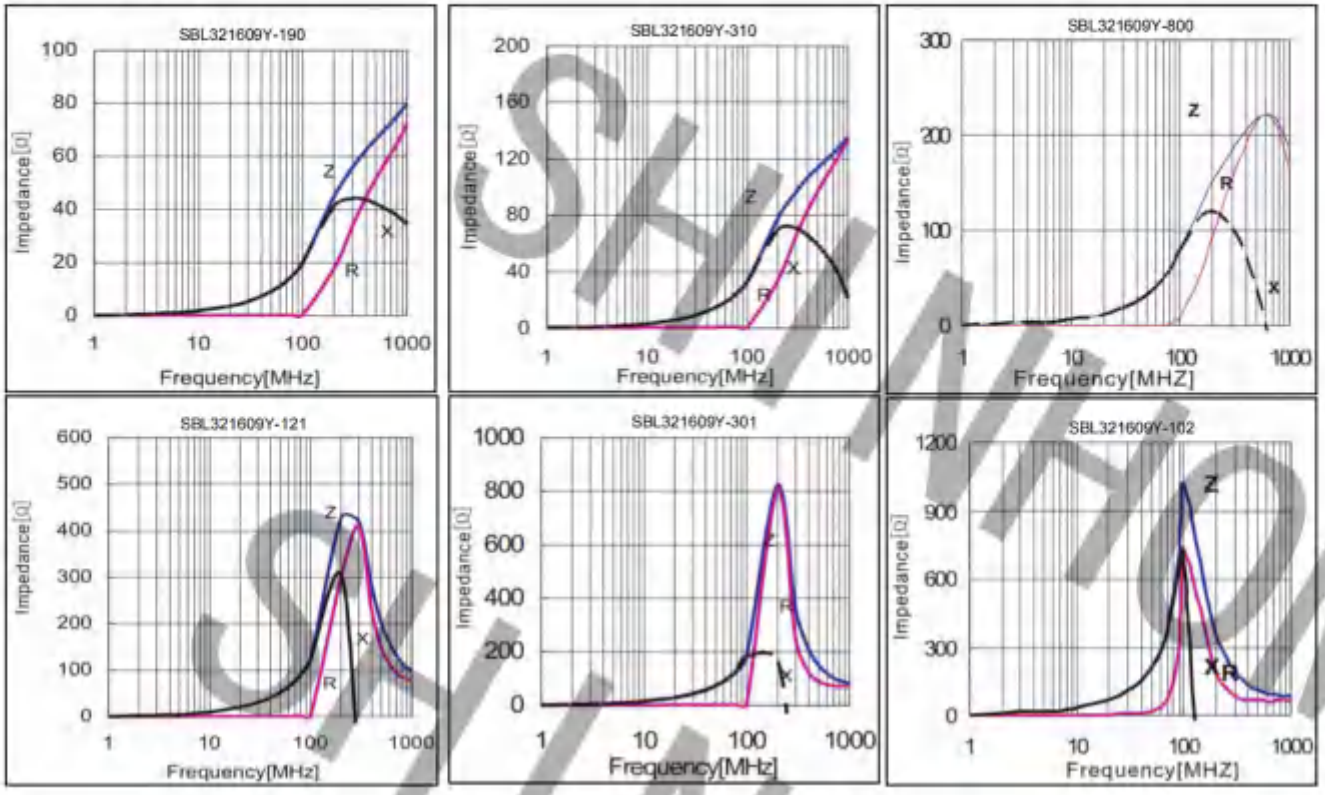


SBL201209Y Series



Impedance Frequency Characteristics 阻抗频率性能

SBL321609Y Series



Multilayer Chip Ferrite Ultra-High Current Beads

Feature

A unique terminal electrode structure ensures permissible current 6.0A(max).

High impedance and EMI suppression effective over a wide frequency range.

Suitable reflow and wave soldering.

Application

Noise suppression in power lines or extra-large current signal lines of electrical equipment such as communication equipment, computers and LCD TVs.

Part Number

SBL	201209	U	121	T
①	②	③	④	⑤

① Product Code

SBL	Multilayer Chip Ferrite Ultra-High Current Beads

② Dimensions (mm) (L×W×T)

060303	0.6×0.3×0.3
100505	1.0×0.5×0.5
160808	1.6×0.8×0.8
201209	2.0×1.2×0.9
321609	3.2×1.6×0.9
322513	3.2×2.5×1.3
451616	4.5×1.6×1.6
453215	4.5×3.2×1.5

③ Material Code

U
X

④ Impedance (Ω)

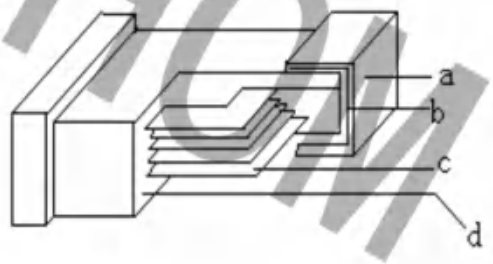
Exampie	
110	11
121	120
102	1000

⑤ Packaging Style

T	Tape&Reel
B	Bulk

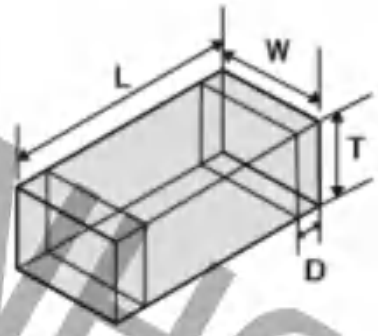
Product Structure

a. Ni/Sn plating
b. Ag layer
c. Inner electrode
d. Body



Dimension

Part No	L(mm)	W(mm)	T(mm)	D(mm)
060303 (0201)	0.6±0.03 (0.020± 0.003)	0.3±0.03 (0.010± 0.003)	0.3±0.03 (0.010± 0.003)	0.15±0.05 (0.010± 0.002)
100505 (0402)	1.0± 0.15 (0.040± 0.006)	0.5± 0.15 (0.020± 0.006)	0.5± 0.15 (0.020± 0.006)	0.25± 0.1 (0.010± 0.004)
160808 (0603)	1.6± 0.20 (0.063± 0.008)	0.8± 0.20 (0.031± 0.008)	0.8± 0.20 (0.031± 0.008)	0.3± 0.2 (0.01± 0.008)
201209 (0805)	2.0± 0.20 (0.079± 0.008)	1.2± 0.20 (0.047± 0.008)	0.9± 0.20 (0.035± 0.008)	0.5± 0.3 (0.020± 0.012)
321609 (1206)	3.2± 0.20 (0.126± 0.008)	1.6± 0.20 (0.063± 0.008)	0.9± 0.20 (0.035± 0.008)	0.5± 0.3 (0.020± 0.012)
322513 (1210)	3.2± 0.20 (0.126± 0.008)	2.5± 0.20 (0.098± 0.008)	1.3± 0.20 (0.051± 0.008)	0.5± 0.3 (0.020± 0.012)
451616 (1806)	4.5± 0.20 (0.186± 0.008)	1.6± 0.20 (0.063± 0.008)	1.6± 0.20 (0.063± 0.008)	0.5± 0.3 (0.020± 0.012)
453215 (1812)	4.5± 0.20 (0.186± 0.008)	3.2± 0.20 (0.126± 0.008)	1.5± 0.20 (0.060± 0.008)	0.5± 0.3 (0.020± 0.012)



Electrical Characteristics

Impedance testing conditions: E4982A or equivalent, test voltage 50mV ± 5mV, Temperature 15°C~35°C， Humidity 25%~75%.

RDC Testing conditions：RM3542A or equivalent, Temperature 15°C~35°C， Humidity 25%~75%.

Rated current：Apply the rated current, and the surface temperature rise of the product shall not exceed 40°C.

0603 Type

Part NO	Tolerance	Impedance(Ω)	Test frequency(MHz)	DCR (Ω)Max	Ir (mA)Max
SBL060303X-220T	±25%	22	100	0.040	1800
SBL060303X-330T	±25%	33	100	0.055	1500
SBL060303X-800T	±25%	80	100	0.130	1000
SBL060303X-121T	±25%	120	100	0.160	900

1005 Type

Part NO	Tolerance	Impedance(Ω)	Test frequency(MHz)	DCR (Ω)Max	Ir (mA)Max
SBL100505U-000T	0~15Ω	0	100	0.02	2000
SBL100505U-050T	0~15Ω	5	100	0.02	2000
SBL100505U-070T	0~11Ω	7	100	0.02	2000

Part NO	Tolerance	Impedance(Ω)	Test frequency(MHz)	DCR (Ω)Max	Ir (mA)Max
SBL100505U-090T	5～13Ω	9	100	0.02	2000
SBL100505U-100T	7～15Ω	10	100	0.02	2000
SBL100505U-110T	7～15Ω	11	100	0.02	2000
SBL100505U-150T	9～21Ω	15	100	0.02	2000
SBL100505U-190T	12～25Ω	19	100	0.035	1800
SBL100505U-260T	±25%	26	100	0.06	1800
SBL100505U-300T	±25%	30	100	0.06	1500
SBL100505U-600T	±25%	60	100	0.10	1300
SBL100505U-750T	±25%	75	100	0.15	1000
SBL100505U-101T	±25%	100	100	0.15	1000
SBL100505U-121T	±25%	120	100	0.15	1000
SBL100505U-151T	±25%	150	100	0.20	700
SBL100505U-181T	±25%	180	100	0.25	700
SBL100505U-201T	±25%	200	100	0.25	700
SBL100505U-221T	±25%	220	100	0.28	700
SBL100505U-301T	±25%	300	100	0.30	600
SBL100505U-331T	±25%	330	100	0.40	500
SBL100505U-471T	±25%	470	100	0.40	500
SBL100505U-501T	±25%	500	100	0.40	500
SBL100505U-601T	±25%	600	100	0.50	500
SBL100505U-801T	±25%	800	100	0.65	300
SBL100505U-102T	±25%	1000	100	0.65	300

1608 Type

Part NO	Tolerance	Impedance(Ω)	Test frequency(MHz)	DCR (Ω)Max	Ir (mA)Max
SBL160808U-000T	0～15Ω	0	100	0.01	6000
SBL160808U-050T	0~15Ω	5	100	0.01	6000
SBL160808U-070T	0~11Ω	7	100	0.01	6000
SBL160808U-090T	5~13Ω	9	100	0.01	6000
SBL160808U-100T	7~15Ω	10	100	0.01	6000
SBL160808U-110T	7~15Ω	11	100	0.01	6000
SBL160808U-150T	9~21Ω	15	100	0.01	6000
SBL160808U-190T	12~25Ω	19	100	0.01	6000
SBL160808U-220T	±25%	22	100	0.03	6000
SBL160808U-260T	±25%	26	100	0.03	5000
SBL160808U-280T	±25%	28	100	0.03	4000
SBL160808U-300T	±25%	30	100	0.03	4000
SBL160808U-310T	±25%	31	100	0.03	4000
SBL160808U-330T	±25%	33	100	0.03	4000
SBL160808U-400T	±25%	40	100	0.03	3500

Part NO	Tolerance	Impedance(Ω)	Test frequency(MHz)	DCR (Ω)Max	Ir (mA)Max
SBL160808U-500T	±25%	50	100	0.04	3000
SBL160808U-600T	±25%	60	100	0.04	3000
SBL160808U-700T	±25%	70	100	0.06	2500
SBL160808U-750T	±25%	75	100	0.06	2500
SBL160808U-800T	±25%	80	100	0.06	2500
SBL160808U-101T	±25%	100	100	0.06	2500
SBL160808U-121T	±25%	120	100	0.065	2000
SBL160808U-151T	±25%	150	100	0.07	1500
SBL160808U-181T	±25%	180	100	0.09	1500
SBL160808U-201T	±25%	200	100	0.10	1500
SBL160808U-221T	±25%	220	100	0.12	1500
SBL160808U-301T	±25%	300	100	0.15	1500
SBL160808U-331T	±25%	330	100	0.18	1300
SBL160808U-471T	±25%	470	100	0.18	1300
SBL160808U-501T	±25%	500	100	0.18	1300
SBL160808U-601T	±25%	600	100	0.18	1300
SBL160808U-801T	±25%	800	100	0.30	800
SBL160808U-102T	±25%	1000	100	0.35	700

2012 Type

Part NO	Tolerance	Impedance(Ω)	Test frequency(MHz)	DCR (Ω)Max	Ir (mA)Max
SBL201209U-000T	0～15Ω	0	100	0.01	6000
SBL201209U-050T	0~15Ω	5	100	0.01	6000
SBL201209U-070T	0~11Ω	7	100	0.01	6000
SBL201209U-090T	5~13Ω	9	100	0.01	6000
SBL201209U-100T	7~15Ω	10	100	0.01	6000
SBL201209U-110T	7~15Ω	11	100	0.01	6000
SBL201209U-190T	12~25Ω	19	100	0.01	6000
SBL201209U-220T	±25%	22	100	0.01	6000
SBL201209U-260T	±25%	26	100	0.01	6000
SBL201209U-280T	±25%	28	100	0.01	6000
SBL201209U-300T	±25%	30	100	0.01	6000
SBL201209U-310T	±25%	31	100	0.01	6000
SBL201209U-330T	±25%	33	100	0.01	6000
SBL201209U-360T	±25%	36	100	0.01	6000
SBL201209U-380T	±25%	38	100	0.01	6000
SBL201209U-400T	±25%	40	100	0.03	4000
SBL201209U-500T	±25%	50	100	0.03	4000
SBL201209U-600T	±25%	60	100	0.03	4000
SBL201209U-700T	±25%	70	100	0.04	4000

Part NO	Tolerance	Impedance(Ω)	Test frequency(MHz)	DCR (Ω)Max	Ir (mA)Max
SBL201209U-800T	±25%	80	100	0.04	4000
SBL201209U-900T	±25%	90	100	0.045	4000
SBL201209U-101T	±25%	100	100	0.045	4000
SBL201209U-121T	±25%	120	100	0.045	4000
SBL201209U-151T	±25%	150	100	0.07	3000
SBL201209U-181T	±25%	180	100	0.07	3000
SBL201209U-221T	±25%	220	100	0.07	3000
SBL201209U-301T	±25%	300	100	0.08	2500
SBL201209U-331T	±25%	330	100	0.09	2500
SBL201209U-391T	±25%	390	100	0.09	2500
SBL201209U-501T	±25%	500	100	0.09	2500
SBL201209U-601T	±25%	600	100	0.10	2000
SBL201209U-801T	±25%	800	100	0.12	1500
SBL201209U-102T	±25%	1000	100	0.12	1500
SBL201209U-122T	±25%	1200	100	0.2	800
SBL201209U-152T	±25%	1500	100	0.3	800

3216 Type

Part NO	Tolerance	Impedance(Ω)	Test frequency(MHz)	DCR (Ω)Max	Ir (mA)Max
SBL321609U-000T	0～15Ω	0	100	0.01	6000
SBL321609U-050T	0~15Ω	5	100	0.01	6000
SBL321609U-070T	0~11Ω	7	100	0.01	6000
SBL321609U-090T	5~13Ω	9	100	0.01	6000
SBL321609U-100T	7~15Ω	10	100	0.01	6000
SBL321609U-110T	7~15Ω	11	100	0.01	6000
SBL321609U-150T	9~21Ω	15	100	0.015	6000
SBL321609U-190T	12~25Ω	19	100	0.015	6000
SBL321609U-220T	±25%	22	100	0.015	6000
SBL321609U-260T	±25%	26	100	0.015	6000
SBL321609U-280T	±25%	28	100	0.015	6000
SBL321609U-300T	±25%	30	100	0.015	6000
SBL321609U-310T	±25%	31	100	0.020	5000
SBL321609U-330T	±25%	33	100	0.02	5000
SBL321609U-360T	±25%	36	100	0.02	5000
SBL321609U-380T	±25%	38	100	0.02	5000
SBL321609U-400T	±25%	40	100	0.02	5000
SBL321609U-500T	±25%	50	100	0.02	5000
SBL321609U-600T	±25%	60	100	0.025	5000
SBL321609U-700T	±25%	70	100	0.035	4000
SBL321609U-800T	±25%	80	100	0.035	4000

Part NO	Tolerance	Impedance(Ω)	Test frequency(MHz)	DCR (Ω)Max	Ir (mA)Max
SBL321609U-900T	±25%	90	100	0.035	4000
SBL321609U-101T	±25%	100	100	0.035	4000
SBL321609U-121T	±25%	120	100	0.035	4000
SBL321609U-151T	±25%	150	100	0.045	3000
SBL321609U-181T	±25%	180	100	0.055	3000
SBL321609U-221T	±25%	220	100	0.055	3000
SBL321609U-271T	±25%	270	100	0.06	3000
SBL321609U-301T	±25%	300	100	0.065	2500
SBL321609U-331T	±25%	330	100	0.080	2500
SBL321609U-391T	±25%	390	100	0.080	2500
SBL321609U-501T	±25%	500	100	0.080	2500
SBL321609U-601T	±25%	600	100	0.085	2200
SBL321609U-801T	±25%	800	100	0.11	2100
SBL321609U-102T	±25%	1000	100	0.12	2100

3225 Type

Part NO	Tolerance	Impedance(Ω)	Test frequency(MHz)	DCR (Ω)Max	Ir (mA)Max
SBL322513U-000T	0～15Ω	0	100	0.02	6000
SBL322513U-100T	7~15Ω	10	100	0.02	6000
SBL322513U-110T	7~15Ω	11	100	0.02	6000
SBL322513U-150T	9~21Ω	15	100	0.02	6000
SBL322513U-190T	12~25Ω	19	100	0.02	6000
SBL322513U-220T	±25%	22	100	0.02	6000
SBL322513U-260T	±25%	26	100	0.02	6000
SBL322513U-280T	±25%	28	100	0.02	6000
SBL322513U-300T	±25%	30	100	0.02	6000
SBL322513U-310T	±25%	31	100	0.02	6000
SBL322513U-330T	±25%	33	100	0.02	6000
SBL322513U-360T	±25%	36	100	0.02	6000
SBL322513U-380T	±25%	38	100	0.02	6000
SBL322513U-400T	±25%	40	100	0.02	6000
SBL322513U-500T	±25%	50	100	0.02	6000
SBL322513U-600T	±25%	60	100	0.02	6000
SBL322513U-700T	±25%	70	100	0.02	6000
SBL322513U-800T	±25%	80	100	0.02	6000
SBL322513U-900T	±25%	90	100	0.03	5000
SBL322513U-101T	±25%	100	100	0.03	5000
SBL322513U-121T	±25%	120	100	0.03	5000
SBL322513U-151T	±25%	150	100	0.03	5000
SBL322513U-181T	±25%	180	100	0.06	4000

Part NO	Tolerance	Impedance(Ω)	Test frequency(MHz)	DCR (Ω)Max	Ir (mA)Max
SBL322513U-221T	±25%	220	100	0.06	4000
SBL322513U-301T	±25%	300	100	0.06	4000
SBL322513U-331T	±25%	330	100	0.10	4000
SBL322513U-391T	±25%	390	100	0.10	4000
SBL322513U-501T	±25%	500	100	0.10	4000
SBL322513U-601T	±25%	600	100	0.15	3000
SBL322513U-801T	±25%	800	100	0.20	2500
SBL322513U-102T	±25%	1000	100	0.23	2500

4516 Type

Part NO	Tolerance	Impedance(Ω)	Test frequency(MHz)	DCR (Ω)Max	Ir (mA)Max
SBL451616U-000T	0～15Ω	0	100	0.009	6000
SBL451616U-190T	12~25Ω	19	100	0.009	6000
SBL451616U-220T	±25%	22	100	0.009	6000
SBL451616U-260T	±25%	26	100	0.009	6000
SBL451616U-280T	±25%	28	100	0.009	6000
SBL451616U-300T	±25%	30	100	0.009	6000
SBL451616U-310T	±25%	31	100	0.009	6000
SBL451616U-330T	±25%	33	100	0.009	6000
SBL451616U-360T	±25%	36	100	0.009	6000
SBL451616U-380T	±25%	38	100	0.009	6000
SBL451616U-400T	±25%	40	100	0.009	6000
SBL451616U-500T	±25%	50	100	0.009	6000
SBL451616U-600T	±25%	60	100	0.009	6000
SBL451616U-750T	±25%	75	100	0.02	6000
SBL451616U-800T	±25%	80	100	0.025	3500

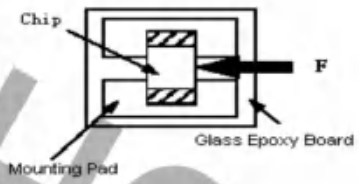
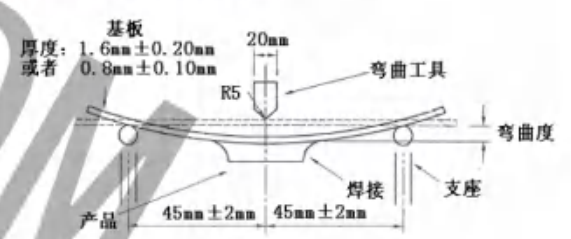
4532 Type

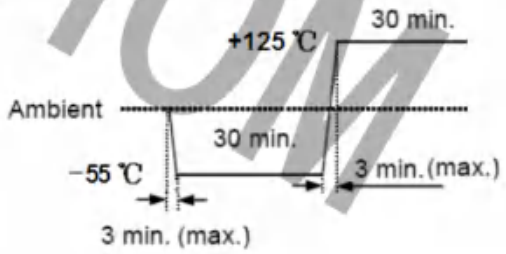
Part NO	Tolerance	Impedance(Ω)	Test frequency(MHz)	DCR (Ω)Max	Ir (mA)Max
SBL453215U-000T	0～15Ω	0	100	0.01	6000
SBL453215U-190T	12~25Ω	19	100	0.01	6000
SBL453215U-220T	±25%	22	100	0.01	6000
SBL453215U-260T	±25%	26	100	0.01	6000
SBL453215U-280T	±25%	28	100	0.01	6000
SBL453215U-300T	±25%	30	100	0.01	6000
SBL453215U-310T	±25%	31	100	0.01	6000
SBL453215U-330T	±25%	33	100	0.01	6000
SBL453215U-360T	±25%	36	100	0.01	6000
SBL453215U-380T	±25%	38	100	0.01	6000

Part NO	Tolerance	Impedance(Ω)	Test frequency(MHz)	DCR (Ω)Max	Ir (mA)Max
SBL453215U-400T	±25%	40	100	0.01	6000
SBL453215U-500T	±25%	50	100	0.01	6000
SBL453215U-600T	±25%	60	100	0.01	6000
SBL453215U-700T	±25%	70	100	0.01	6000
SBL453215U-800T	±25%	80	100	0.02	6000
SBL453215U-900T	±25%	90	100	0.02	6000
SBL453215U-101T	±25%	100	100	0.02	6000
SBL453215U-121T	±25%	120	100	0.02	6000
SBL453215U-151T	±25%	150	100	0.02	6000
SBL453215U-181T	±25%	180	100	0.02	6000
SBL453215U-221T	±25%	220	100	0.02	6000
SBL453215U-501T	±25%	500	100	0.08	4000
SBL453215U-601T	±25%	600	100	0.08	4000

Reliability Test Method

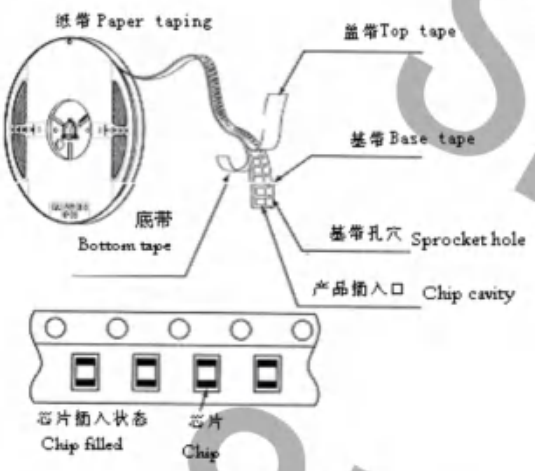
No.	Items	Requirements	Test Methods and Remarks
1	Operating Temperature Range	-55℃～+125℃	Includes product surface temperature rise
2	Solder ability	No mechanical damage. 95% （75% for 0603 series）or more of electrode area shall be coated by new solder.	Preheating temperature:120℃ to 150℃ Preheating time: 60s Solder 96.5%Sn/3.0%Ag/0.5%Cu of the Sn solder. Solder temperature: 245±3℃ Immersion tin depth:10mm Duration : 3±0.3s Dip performance to a flux of about:3 ~ 5 s

No.	Items	Requirements	Test Methods and Remarks
3	Resistance to Soldering Heat	No mechanical damage. Inductance ： Impedance change: within ±30%	Preheating temperature: 120℃ to 150℃ Preheating time: 60s Solder 96.5%Sn/3.0%Ag/0.5%Cu of the Sn solder. Solder temperature: 260℃±5℃ Immersion tin depth:10mm Duration : 10±1s Dip performance to a flux of about:3～5 s
4	Adhesion of electrode	The termination and body should be no damage.	Applied force: 2N force for 0603 series；5N force for 1005 series；7N force for 1608 series；10N force for 2012、3216 series. 15N force for 3225、4532 series. Keep time ： 10±1S 
5	Low temperature resistance	No mechanical damage. Impedance change: within ±30%	Temperature:-55±2℃ Testing time: 1000^{+24}_{0} h
6	Bending strength	No mechanical damage	Testing board: glass epoxy-resin substrate For （1±0.5） mm/s compression speed, curvature: 2mm, hold time20s±1s 。 

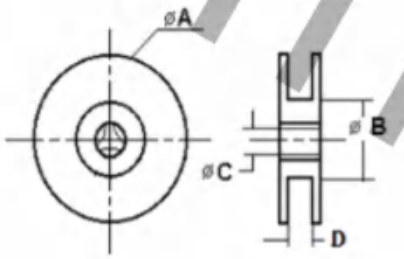
No.	Items	Requirements	Test Methods and Remarks
7	Vibration	No mechanical damage. Impedance change: within ±30%	Amplitude modulation: 1.5mm Test time: A period of 2h in each of 3 mutually perpendicular directions. Frequency range: 10Hz to 55Hz to 10Hz for 1min.
8	High temperature resistance	No mechanical damage. Impedance change: within ±30%	Testing time: 1000^{+24}_{-0} h Temperature: 125±2℃
9	Static Humidity	No mechanical damage. Impedance change: within ±30%	Humidity: 90% to 95% RH Temperature: 60℃±2 ℃ Testing time: 1000^{+24}_{-0} h
10	High temperature load	No mechanical damage. Impedance change: within ±30%	impose current: at room Testing time: 1000^{+24}_{-0} h Temperature: 85±2℃
11	Temperature Shock	No mechanical damage. Impedance change: within ±30%	Temperature: -55℃ for 30±3min +125℃ for 30±3min Number of cycles: 100 
Note: When there are questions concerning, measurement shall be made after 24±2hrs of recovery under the standard condition.			

Packaging

Taping drawings



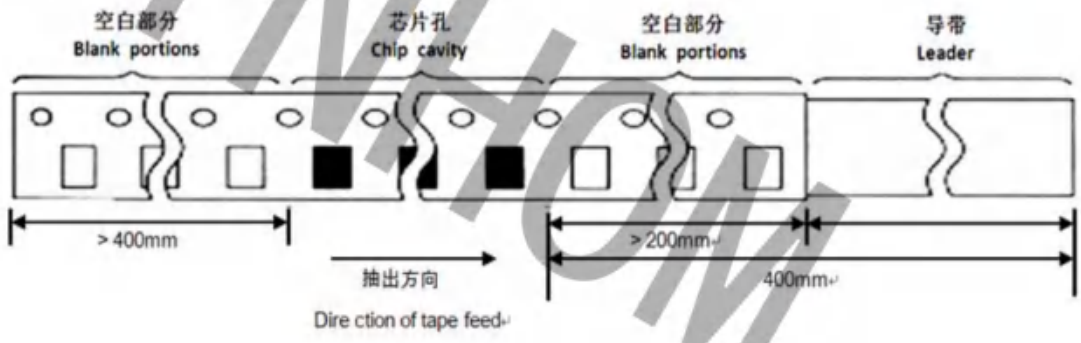
Reel dimensions (Unit: mm)



Size	A	B	C	D
7 inch	178±2.0	60±2.0	13.0±1.0	9.5±2.0
13 inch	330±2.0	100±2.0	13.5±1.0	12.4±2.0

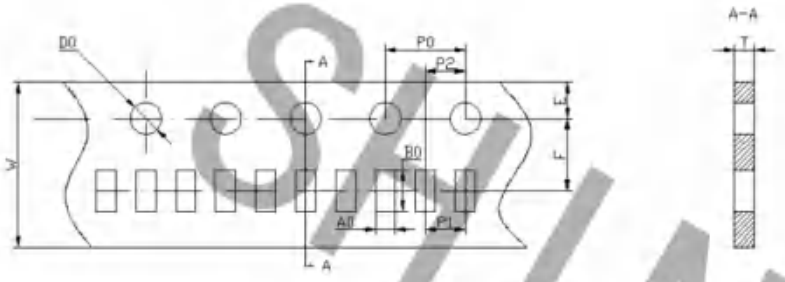
Note: 7 inch is available in 060303, 100505, 160808, 201209, 321609, 322513 sizes, 13 inch is available in 451616、453215 sizes

Leader and blank portion



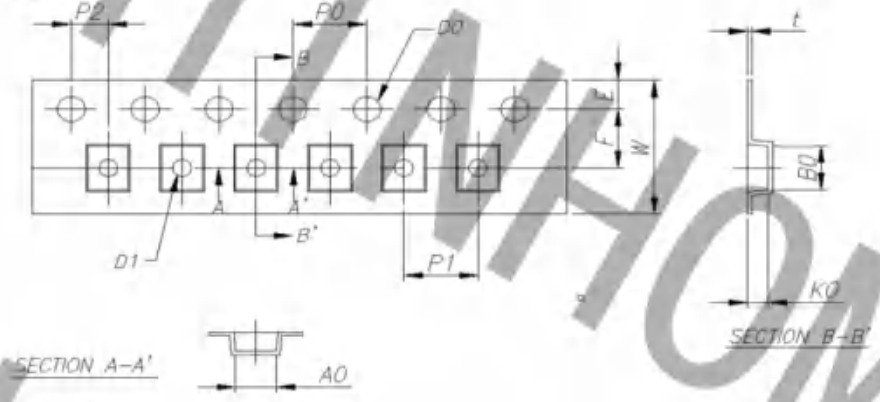
Taping dimensions (Unit: mm)

Paper tape



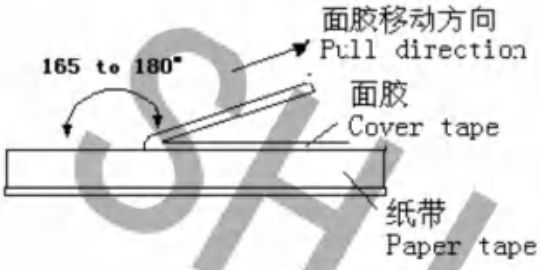
Part NO.	A0	B0	W	F	E	P1	P2	P0	D0	T
060303	0.38±0.03	0.68±0.03	8.00±0.10	3.50±0.05	1.75±0.05	2.00±0.05	2.00±0.05	4.00±0.10	1.55±0.05	0.42±0.03
100505	0.59±0.10	1.12±0.10	8.00±0.20	3.50±0.10	1.75±0.20	2.00±0.10	2.00±0.10	4.00±0.20	1.55±0.10	0.60±0.10
160808	1.05±0.20	1.85±0.20	8.00±0.20	3.50±0.10	1.75±0.20	4.00±0.20	2.00±0.10	4.00±0.20	1.55±0.10	0.95±0.10
201209	1.45±0.20	2.35±0.20	8.00±0.20	3.50±0.10	1.75±0.20	4.00±0.20	2.00±0.10	4.00±0.20	1.55±0.10	0.95±0.10
321609	1.90±0.20	3.46±0.20	8.00±0.20	3.50±0.10	1.75±0.20	4.00±0.20	2.00±0.10	4.00±0.20	1.55±0.10	0.95±0.10

Embossed tape



Size	453215	451616	322513	321611	201212
W	12.00+/-0.20	12.00+/-0.20	8.00+/-0.20	8.00+/-0.20	8.00+/-0.2
E	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10
F	5.50+/-0.10	5.50+/-0.10	3.50+/-0.10	3.50+/-0.10	3.50+/-0.10
D0	1.50+/-0.10	1.50+/0.10	1.50+/-0.10	1.50+/-0.10	1.50+/-0.10
D1	1.50+/-0.10	1.50+/-0.10	1.00+/-0.10	1.00+/-0.10	1.00+/-0.10
P0	4.00+/-0.10	4.00+/-0.10	4.00+/-0.10	4.00+/-0.10	4.00+/-0.10
P010	40.0+/-0.20	40.00+/-0.20	40.0+/-0.20	40.0+/-0.20	40.0+/-0.20
P1	8.00+/-0.10	8.00+/-0.10	4.00+/-0.10	4.00+/-0.10	4.00+/-0.10
P2	2.00+/-0.10	2.00+/-0.10	2.0+/-0.05	2.0+/-0.05	2.00+/-0.10
A0	3.66+/-0.10	1.93+/-0.10	2.77+/-0.10	1.88+/-0.10	1.52+/-0.10
B0	4.95+/-0.10	4.95+/-0.10	3.42+/-0.10	3.50+/-0.10	2.41+/-0.10
K0	1.85+/-0.10	1.93+/-0.10	1.55+/-0.10	1.27+/-0.10	1.35+/-0.10
t	0.24+/-0.10	0.24+/-0.10	0.22+/-0.10	0.22+/-0.10	0.23+/-0.10

Peeling off force



Peeling force should be 0.1~0.7N pulling in the direction of arrow.

Speed of peeling off: 300mm/min.

The cover bond should not be damaged and bond the tape when it peeled off.

Packaging number (Unit: Pcs)

Size	453215	451616	322513	321611	321609	201212	201209	160808	100505	060303
REEL	3000	5000	3000	3000	4000	3000	4000	4000	10000	15000
BOX	15000	25000	30000	30000	40000	30000	40000	40000	100000	150000
CASE	45000	75000	180000	180000	240000	180000	240000	240000	600000	900000

Recommend Soldering Conditions

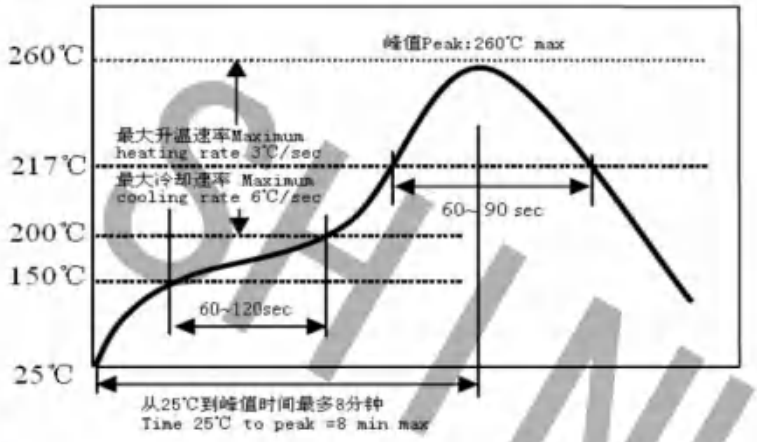
Soldering Conditions

Products can be applied to reflow soldering.

Pre-heating should be in such a way that the temperature difference between solder and ferrite surface is limited to 150°C max. Also cooling into solvent after soldering should be in such way that the temperature difference is limited to 100°C max. Un-enough pre-heating may cause cracks on the ferrite, resulting in the deterioration of product quality.

Products should be soldered within the following allowable range indicated by the slanted line. The excessive soldering conditions may cause the corrosion of the electrode. When soldering is repeated, allowable time is the accumulated time.

Reflow soldering profile



1 Preheat condition: 150 ~200℃/60~120sec
2 Allowed time above 217℃: 60~90sec
3 max temp: 260 ℃
4 max time at max temp: 10 sec
5 Solder paste: Sn/3.0Ag/0.5Cu
6 Allowed Reflow time: 2x max

Iron soldering

Perform soldering at 350℃ on 30W max Time: < 5S

Take care not to apply the tip of the soldering iron to the terminal electrodes

Cleaning

Cleaning Conditions

Cleaning temperature : 60℃ max
Cleaning time: 1 minute min.
Ultrasonic output power: 200W max

Storage Requirements

Storage period

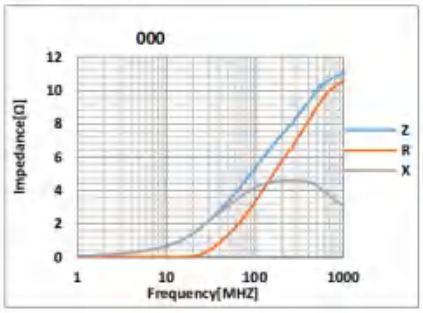
Products which inspected inductor company over 1 year ago should be examined and used, which can be Confirmed with inspection No. marked on the container. Solder ability should be checked if this period is exceeded.

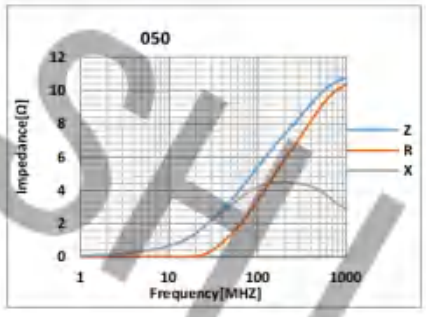
Storage conditions

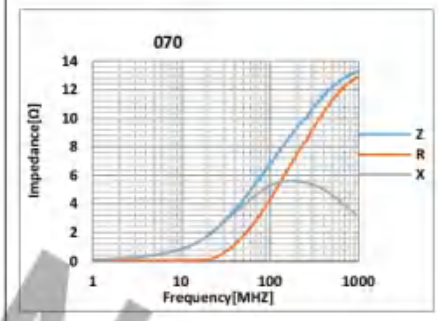
(1) Products should be storage in the warehouse on the following conditions:
Temperature : -10~+40℃ Humidity: 30~70% relative humidity
(2) Don't keep products in corrosive gases such as sulfur, chlorine gas or acid , or it may case oxidization of Electrodes resulting in poor solder ability.
(3) Products should be storaged on the palette for the prevention of the influence from humidity, dust and so on.
(4) Products should be storaged in the warehouse without heat shock, vibration, direct sunlight and so on.
(5) Products should be storaged under the airtight packaged condition.

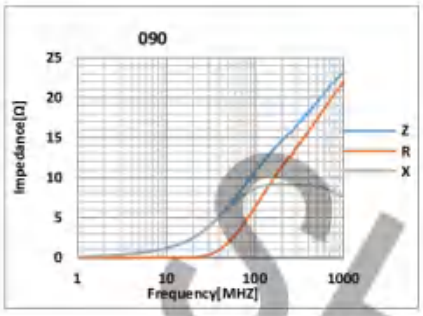
Product Characteristic Curve

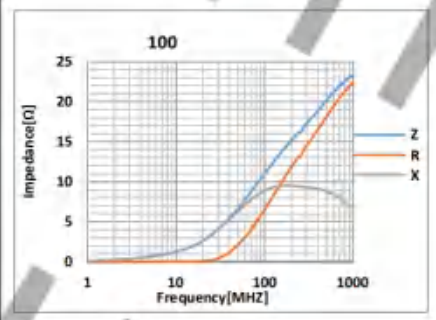
SBL1005 Type

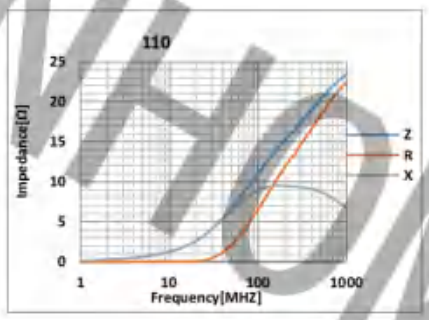


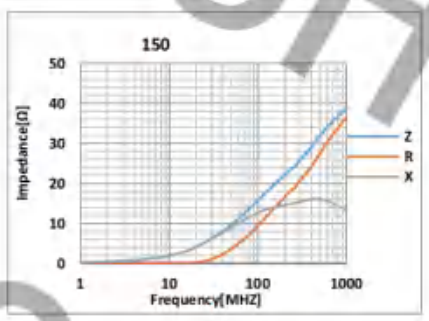


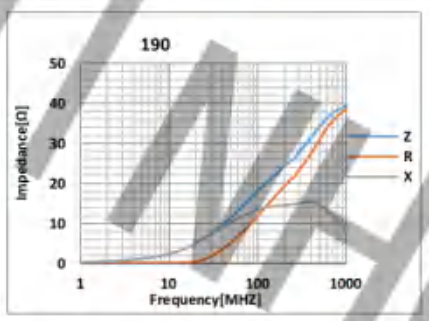


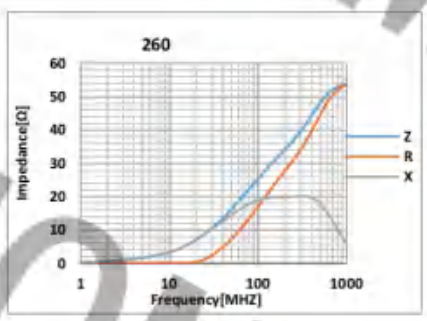


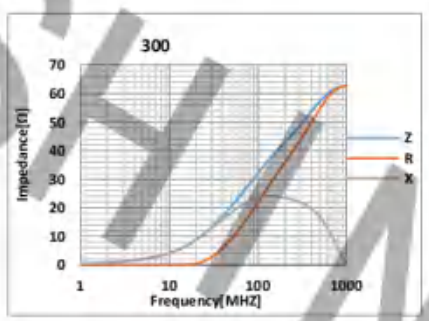


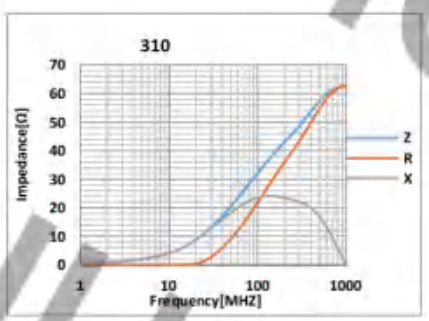


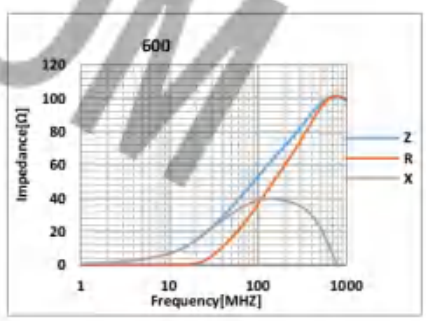


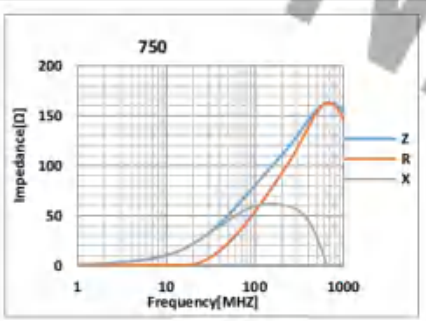


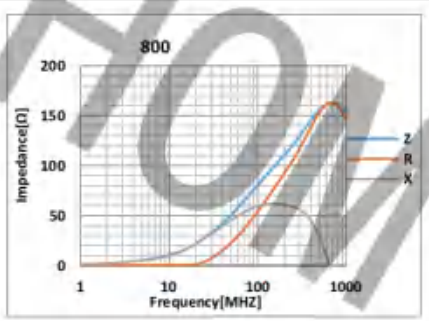


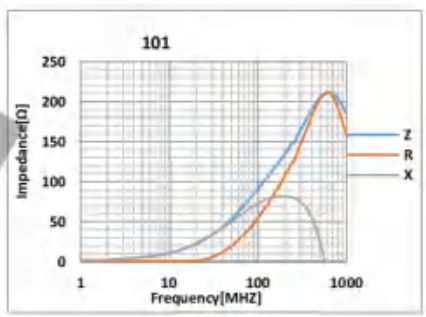




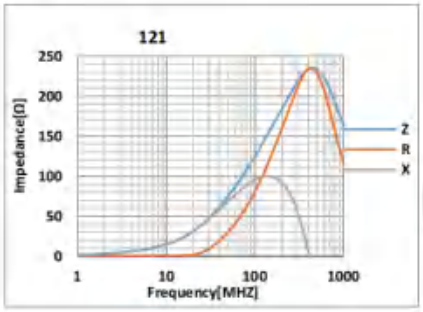


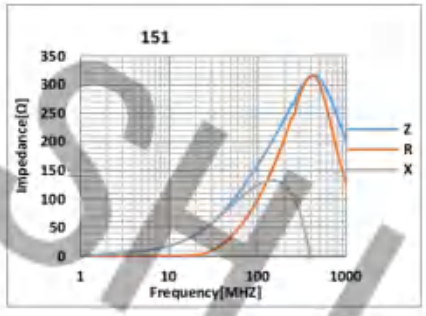


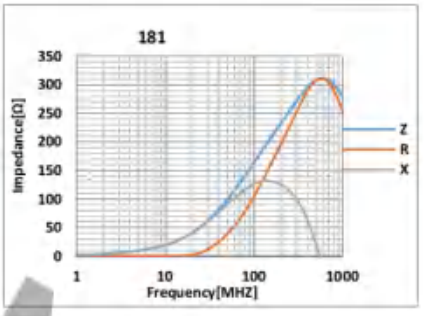


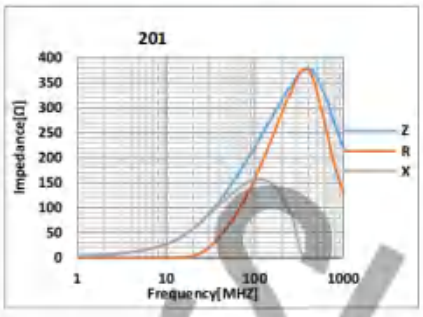


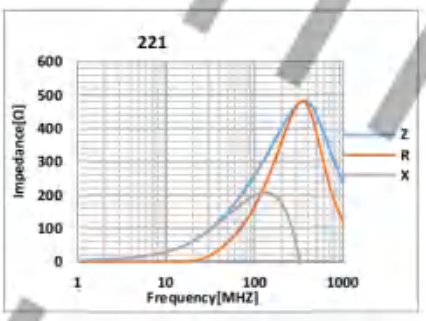
SBL1005 Type

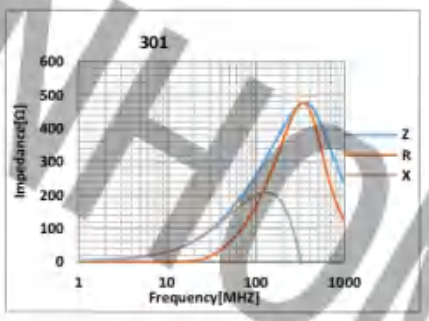


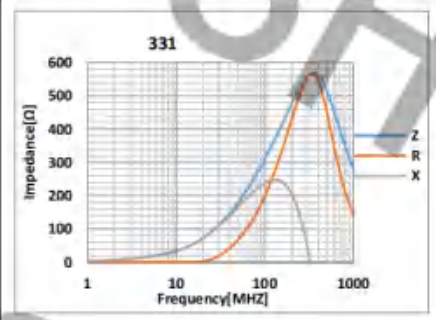


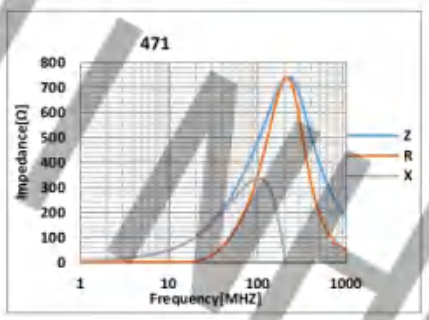


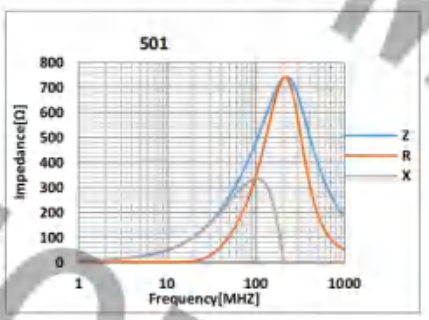


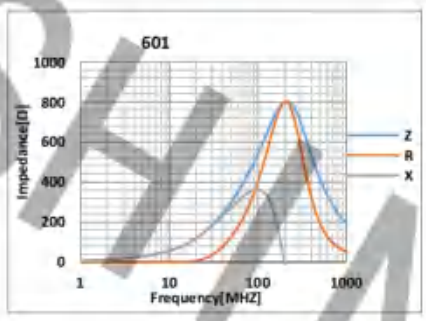


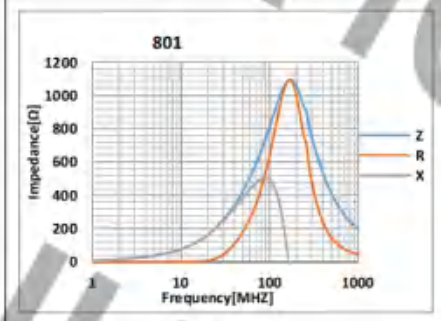


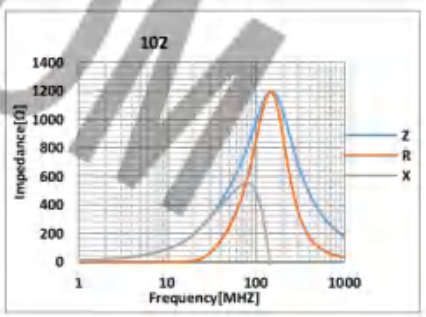




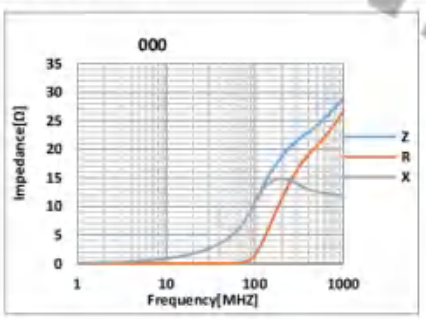


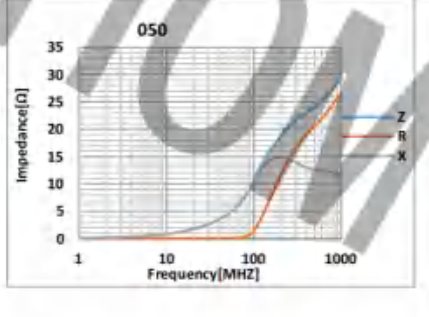


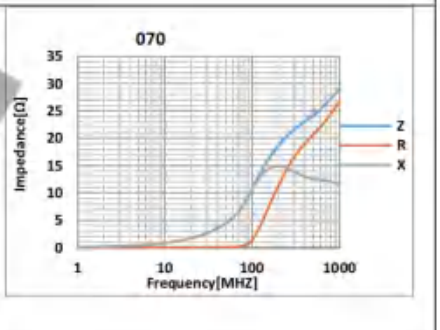


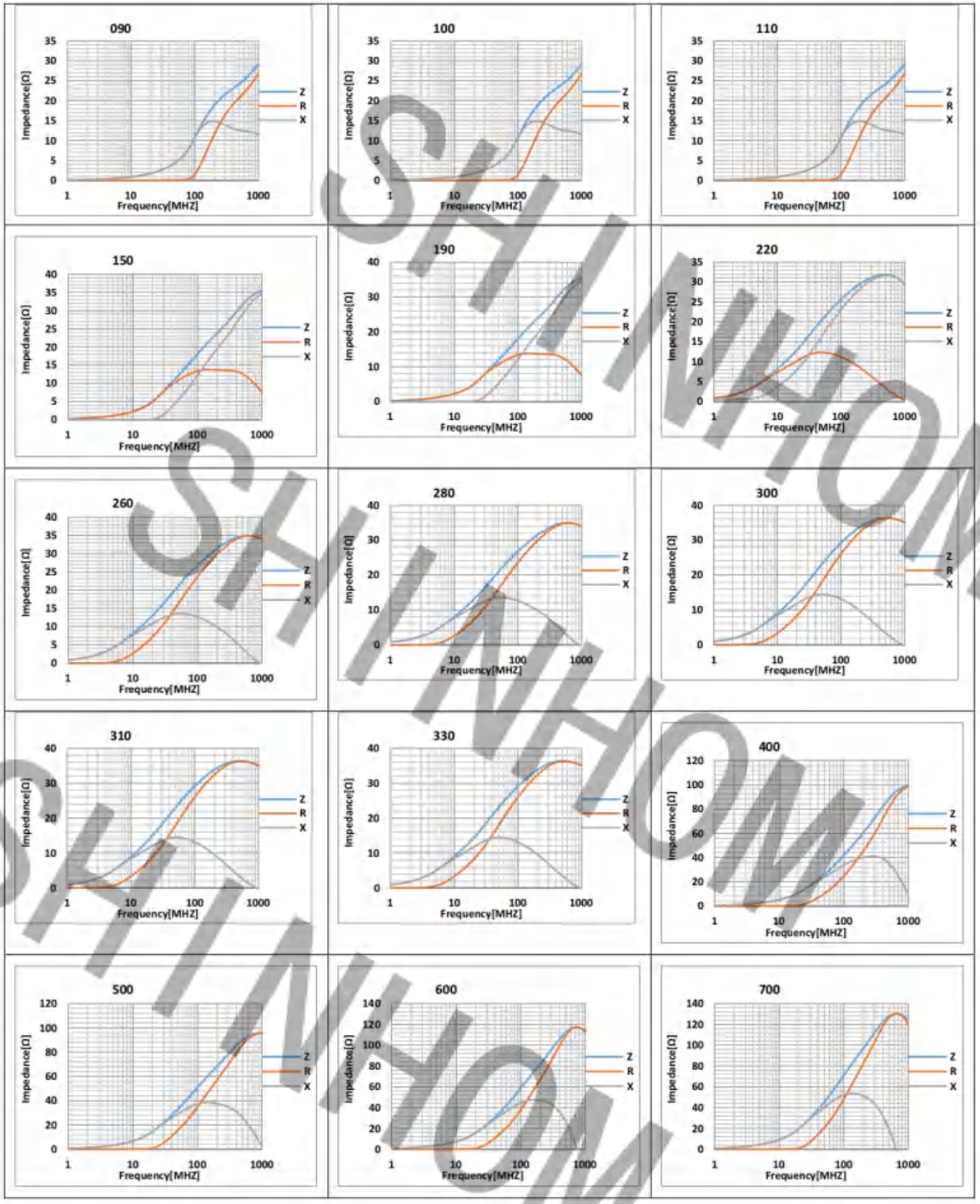


SBL1608 Type





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190
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300
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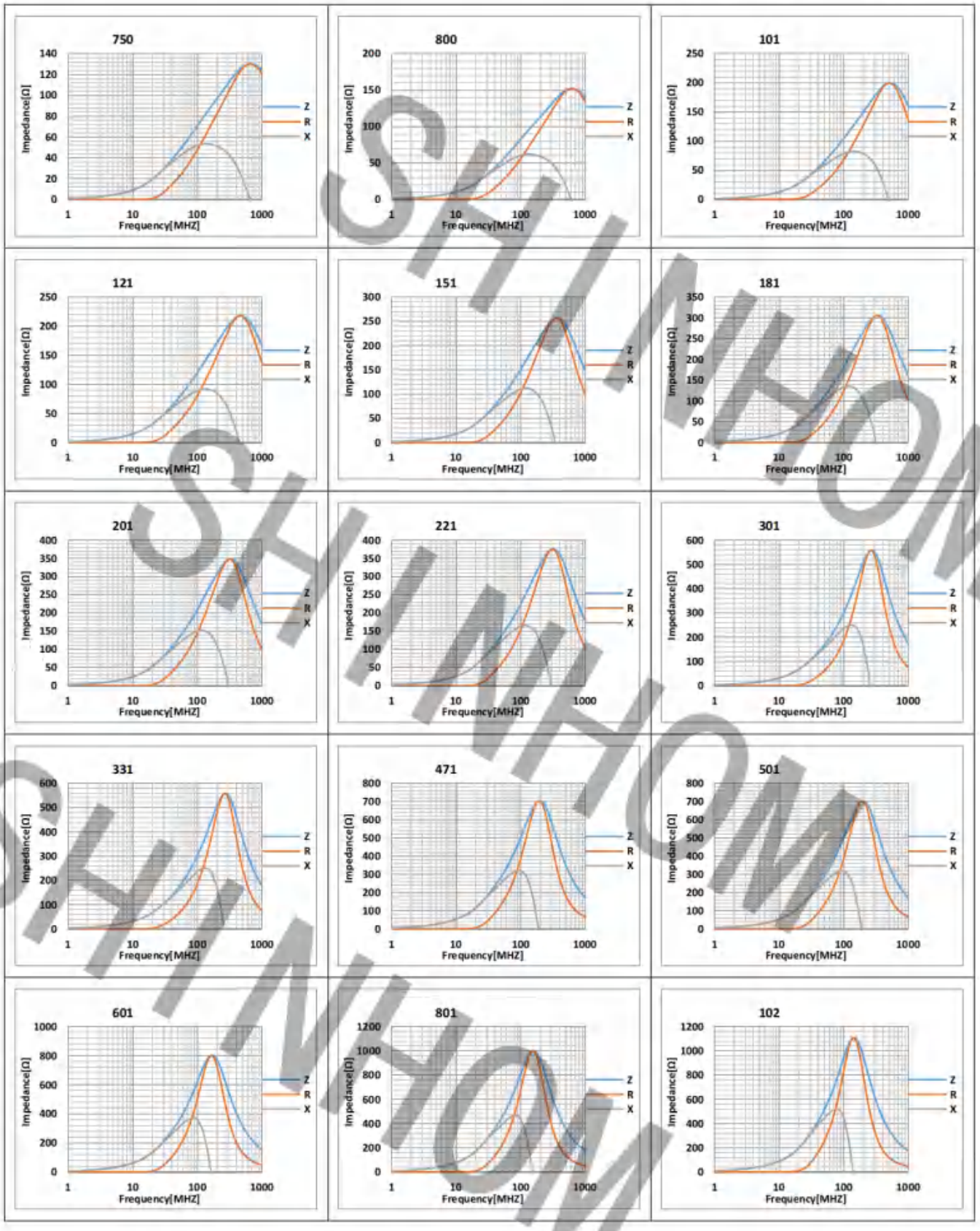
500
600
700
Impedance[Ω]
Frequency[MHZ]
Z
R
X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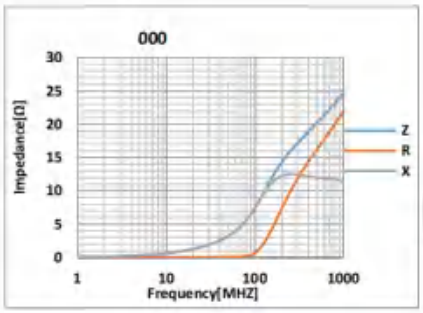
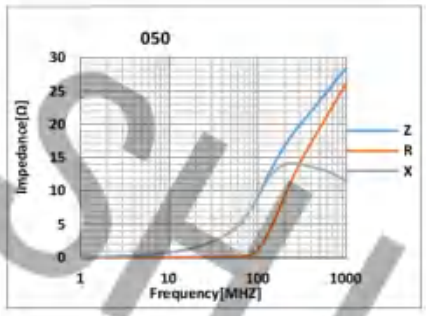
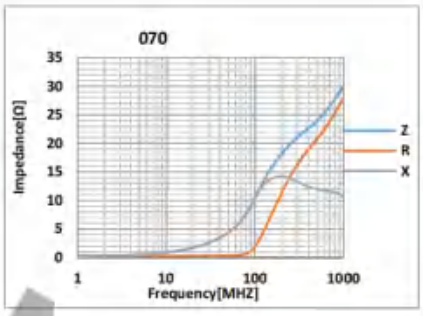
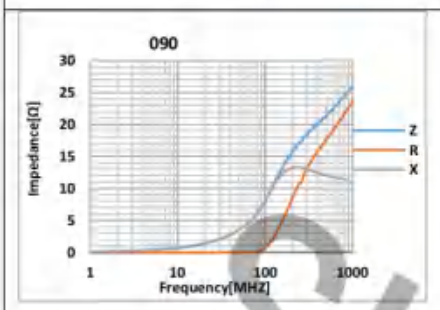
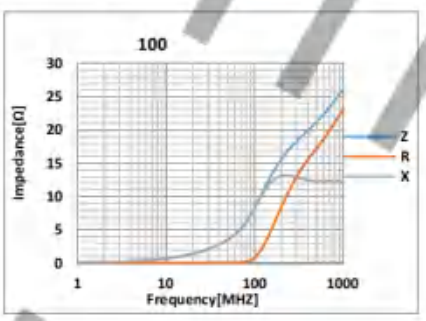
SBL2012 Type

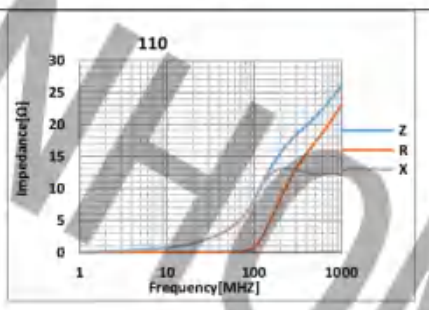


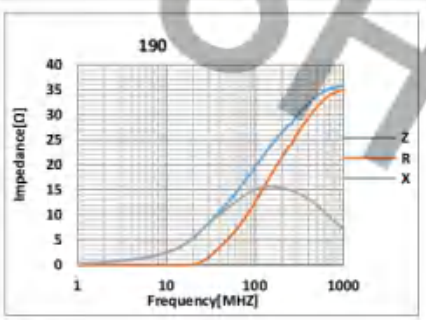


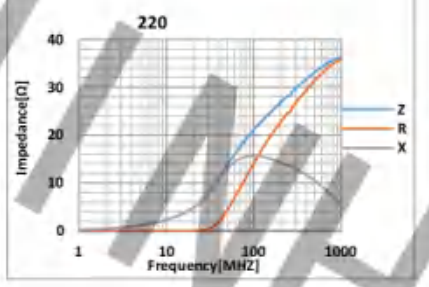


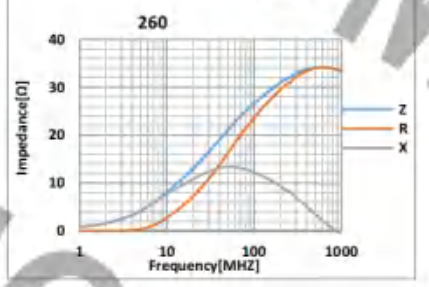


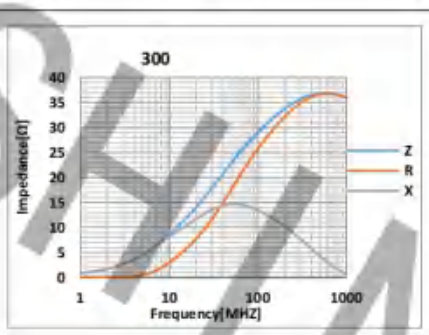


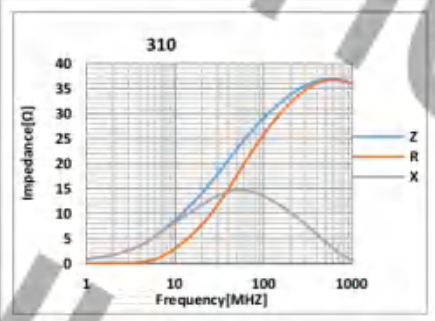


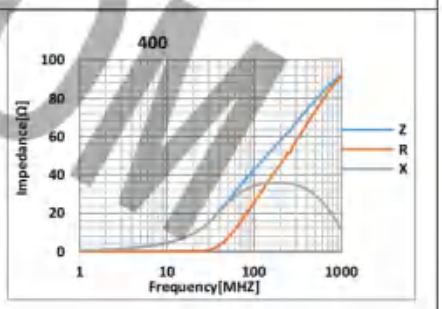


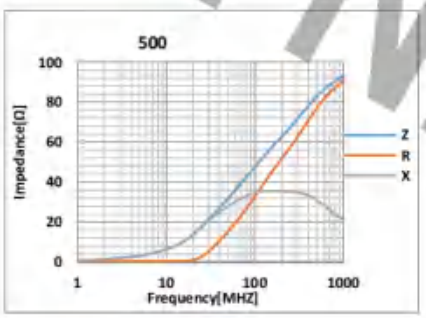


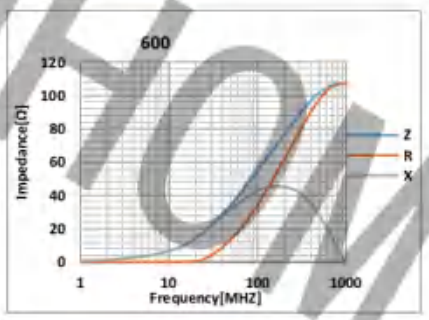


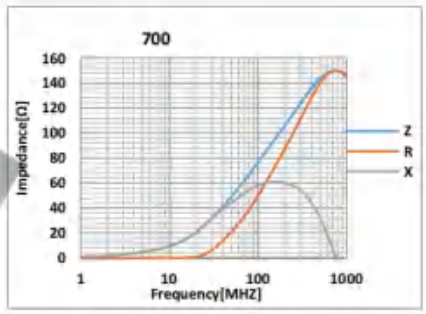


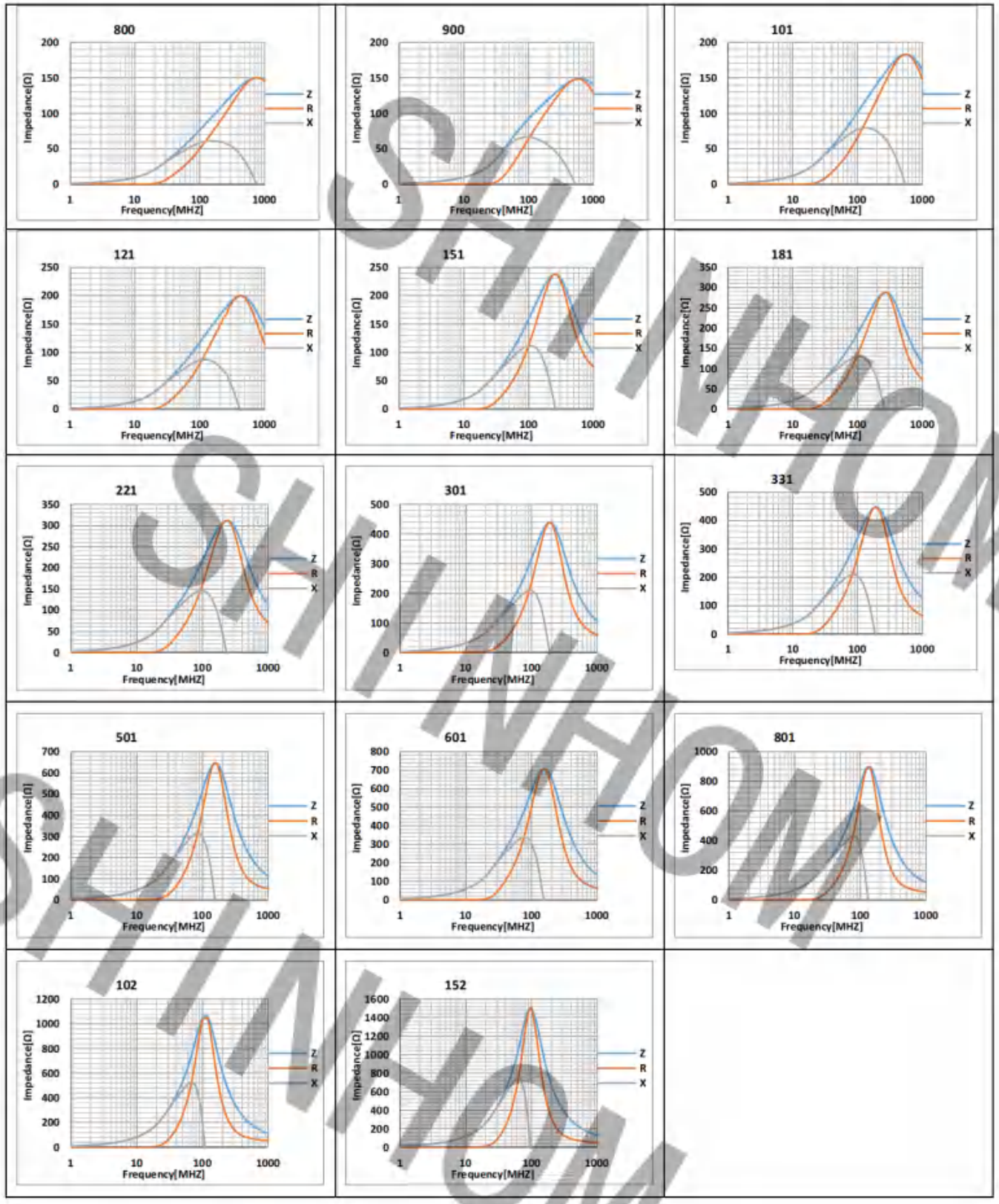








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Impedance[Ω]
Frequency[MHZ]
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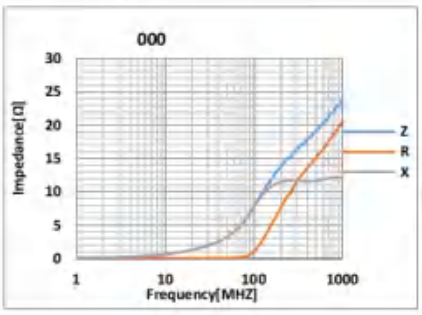
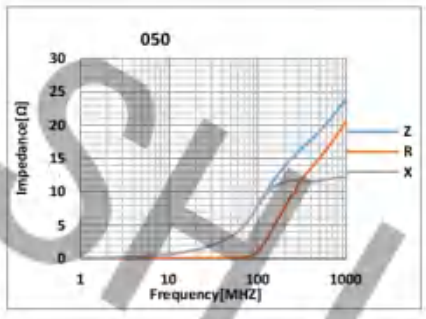
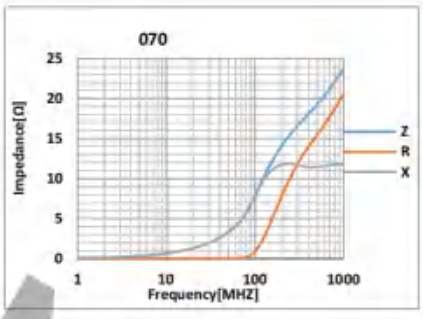
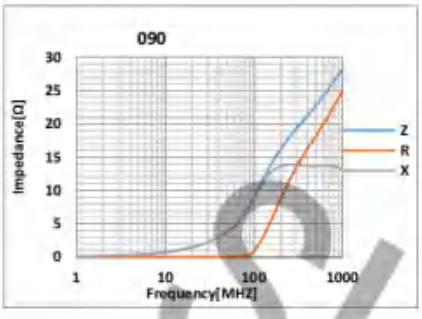
R
X

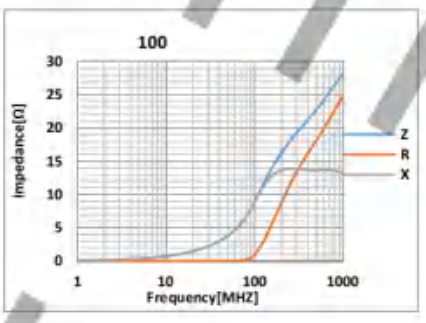
SBL3216 Type

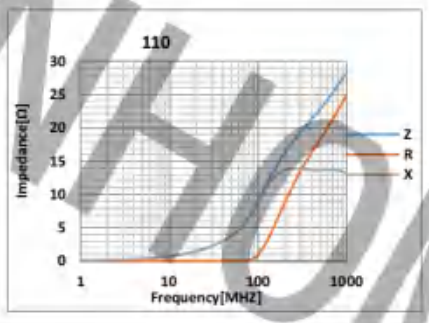


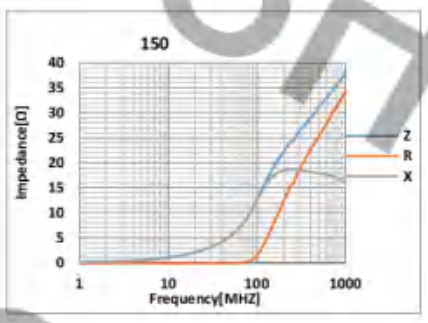


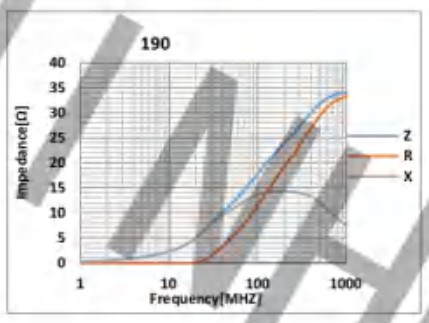


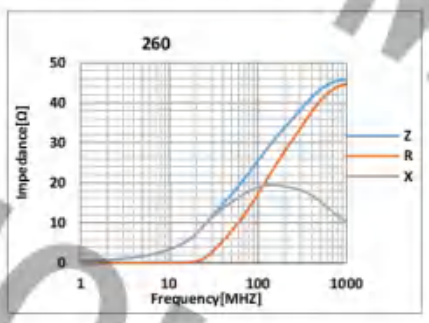


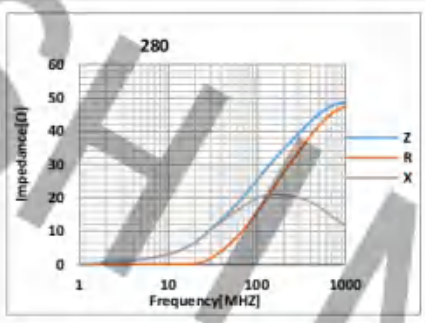


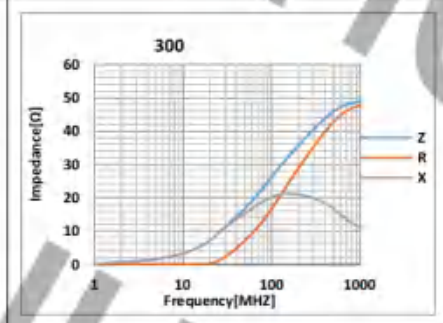


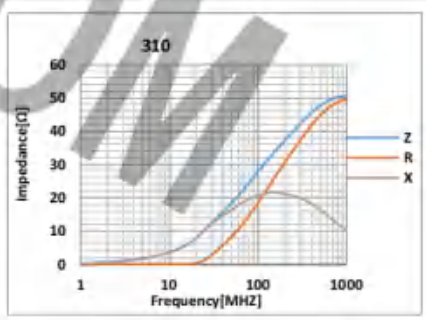


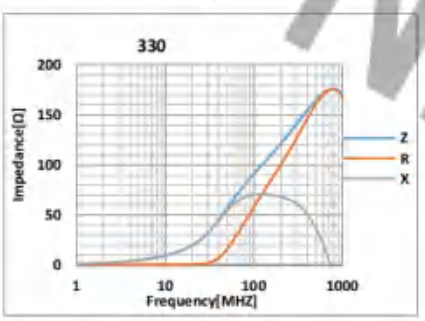


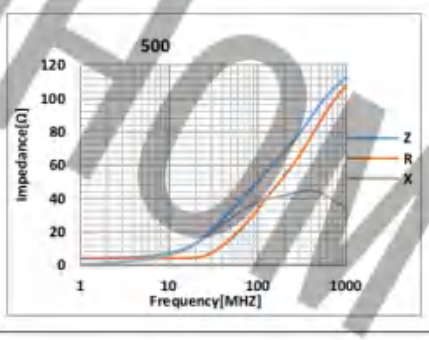


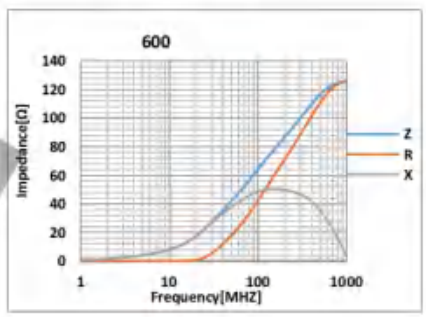


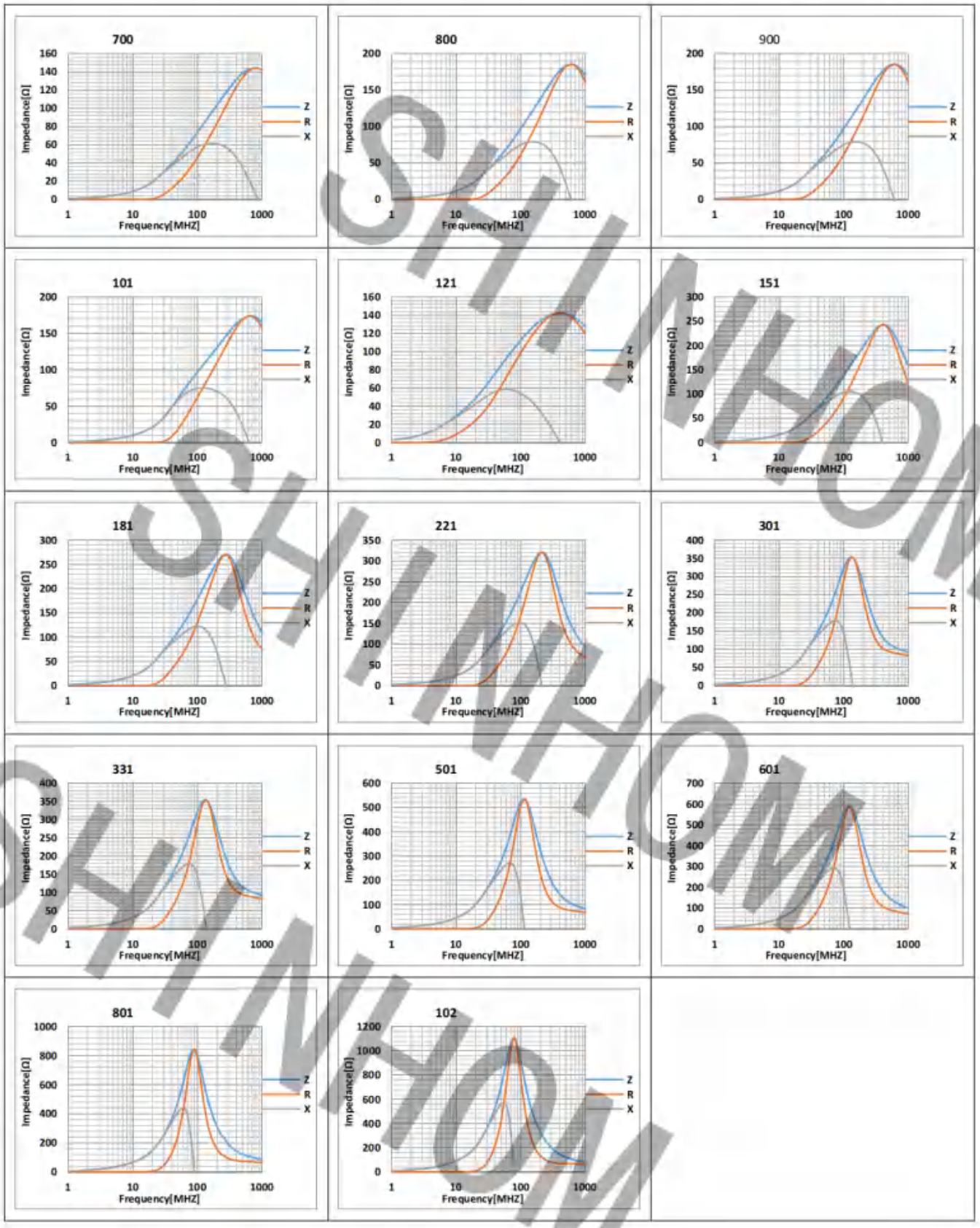








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Impedance[Ω]
Frequency[MHZ]
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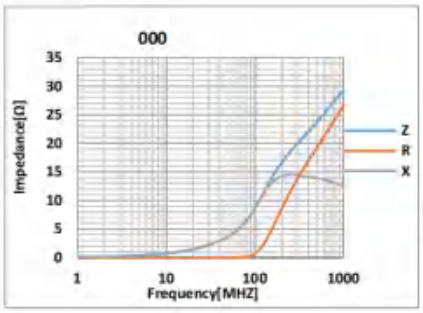
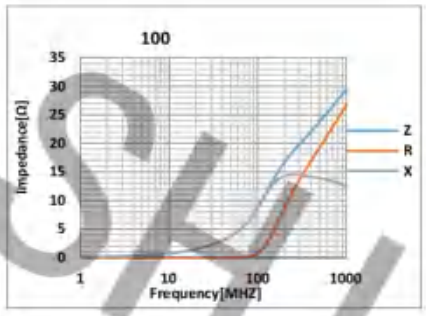
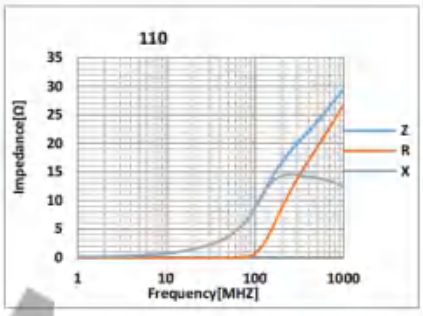
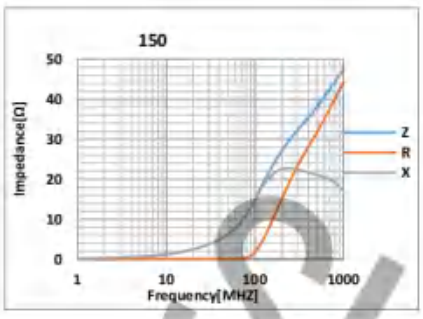
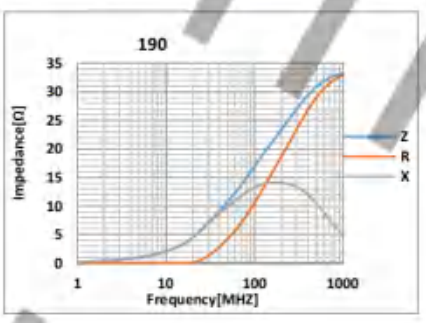
SBL3225 Type

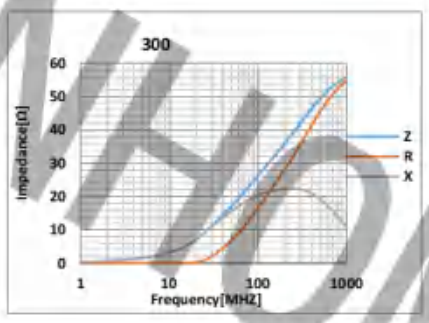


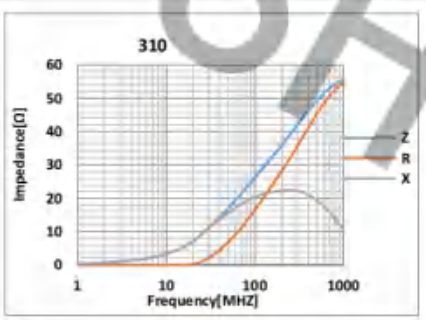


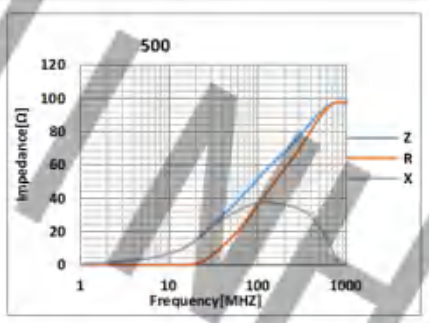


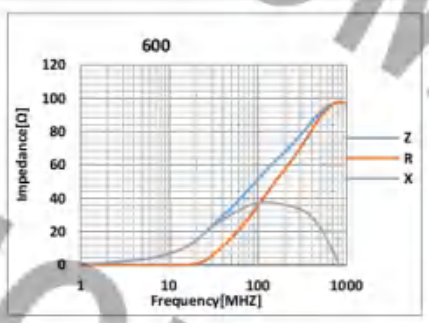


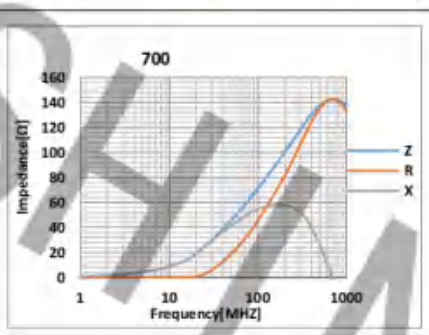


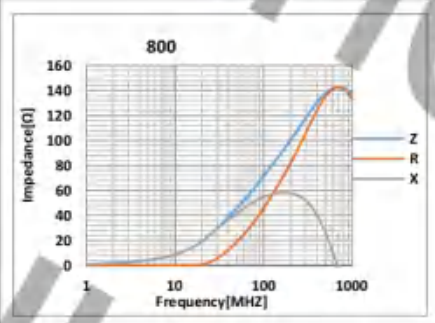


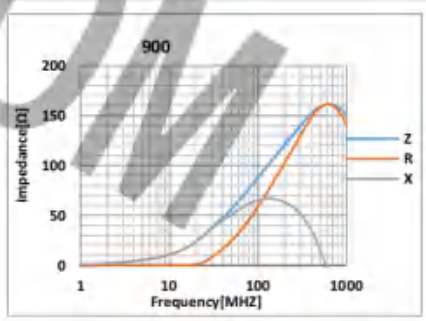


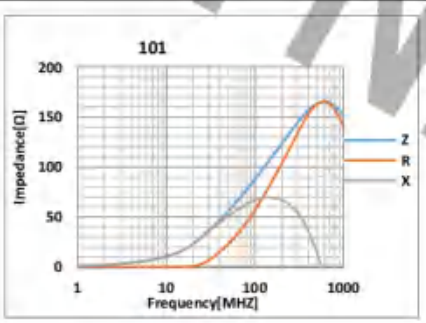


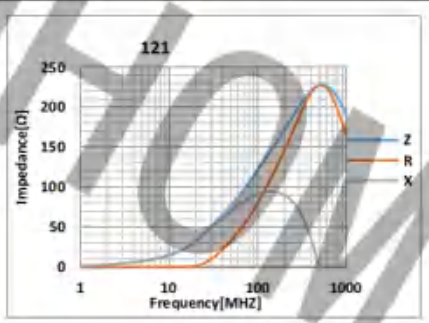


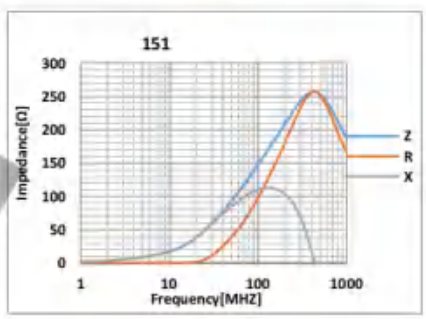


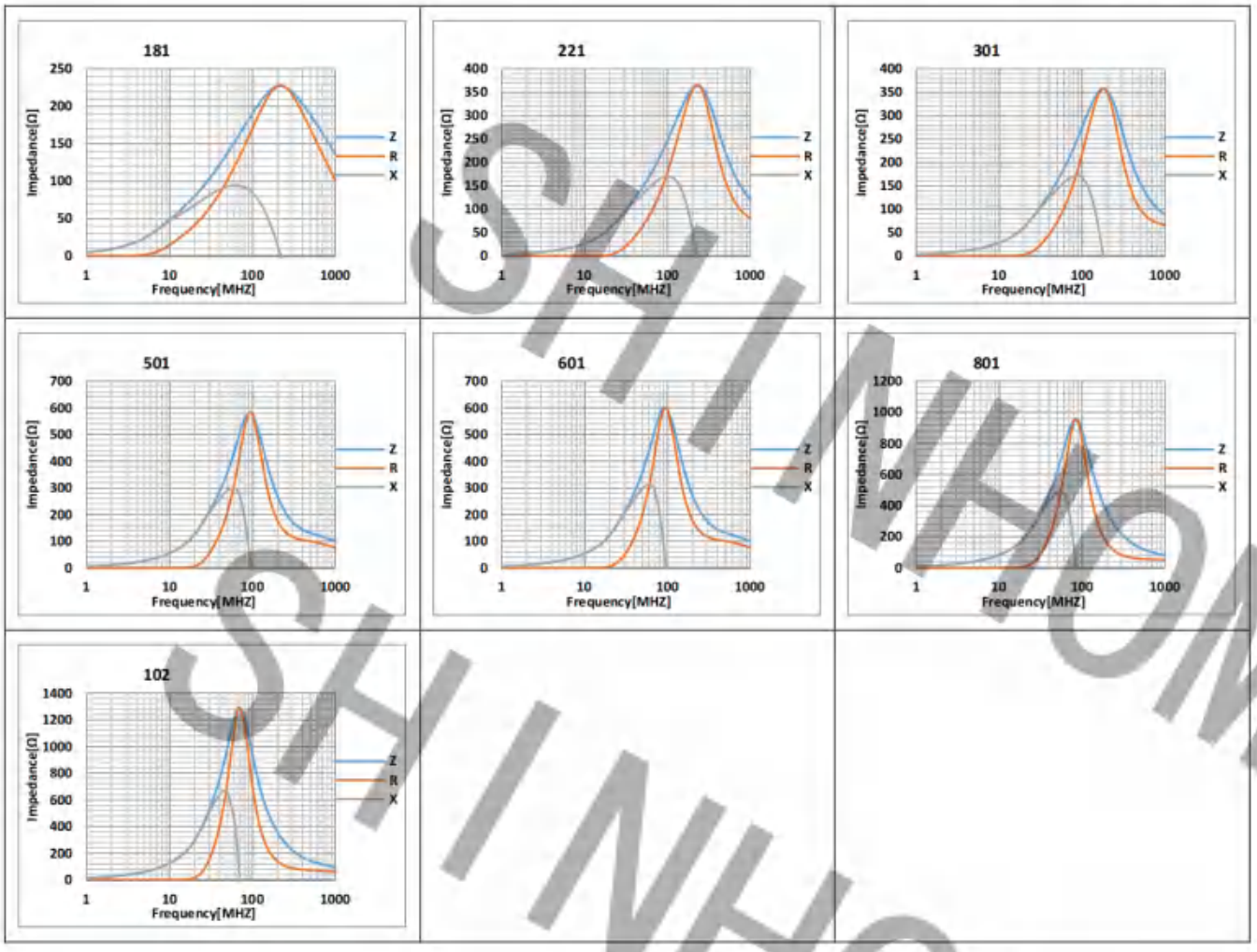




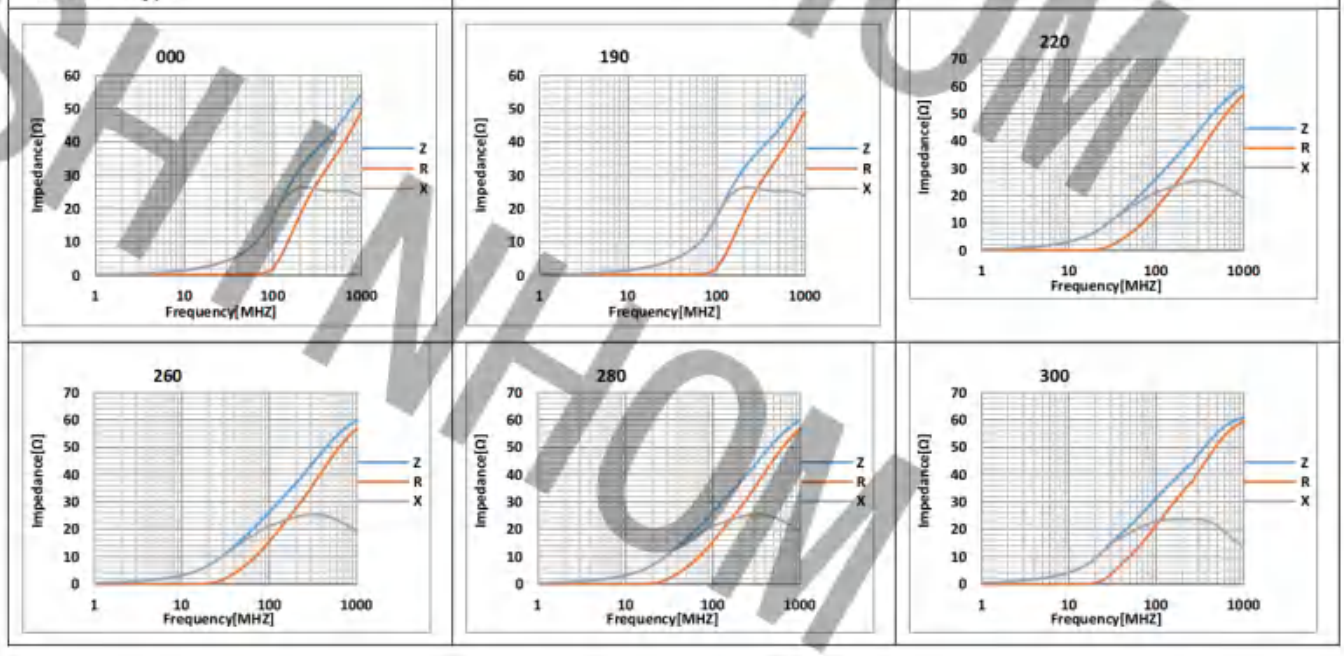


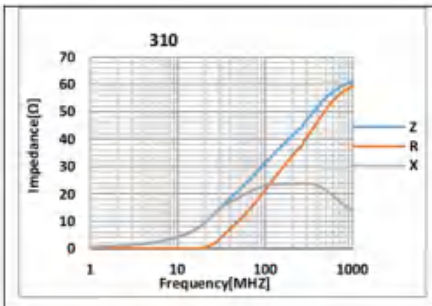


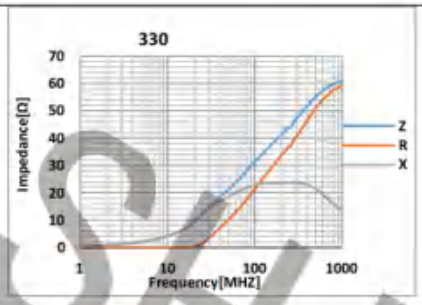


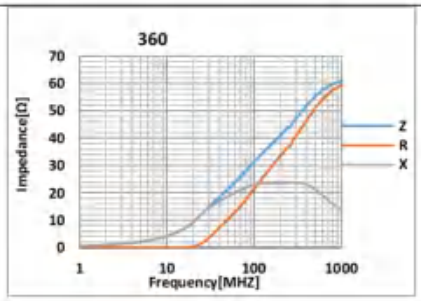


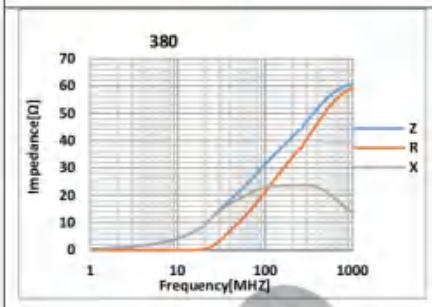
SBL4516 Type

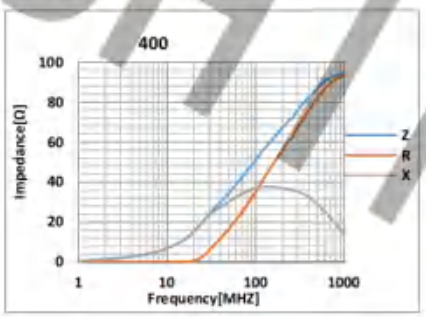


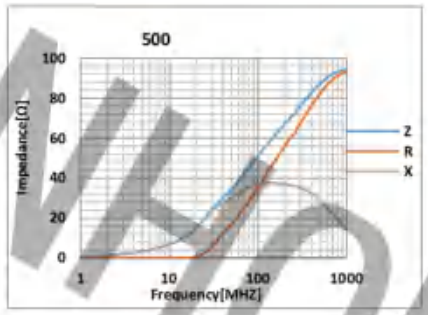


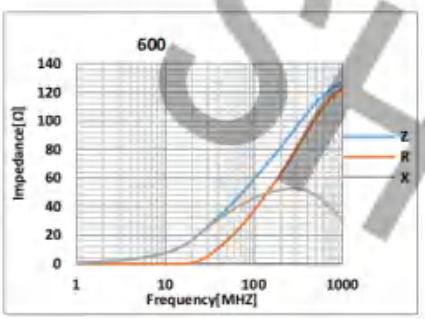


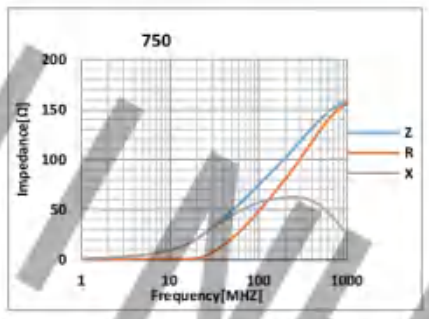


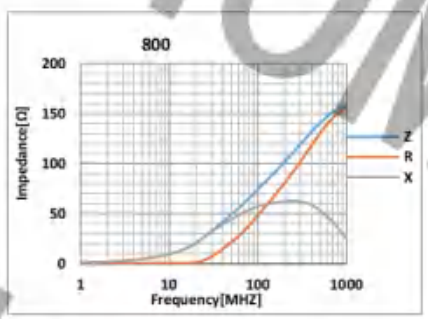




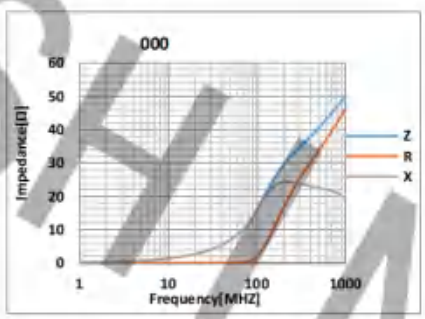


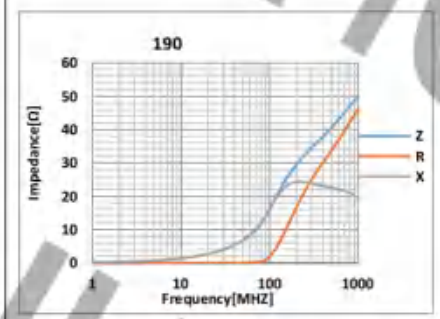


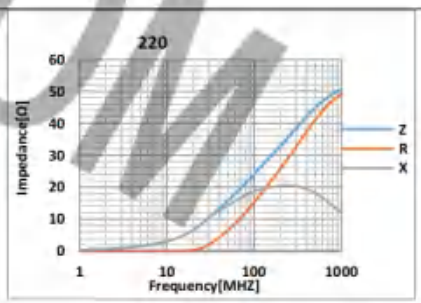


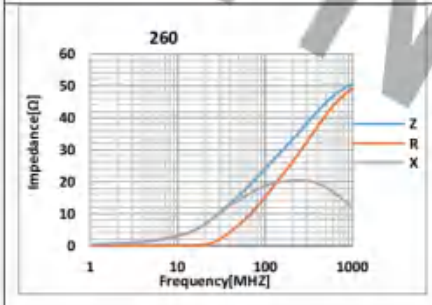


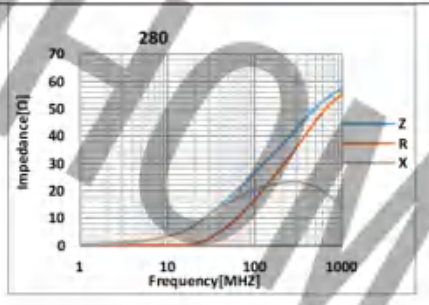
SBL4532 Type

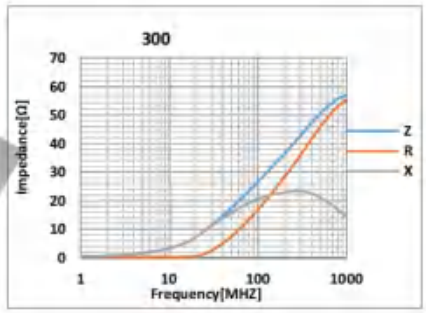


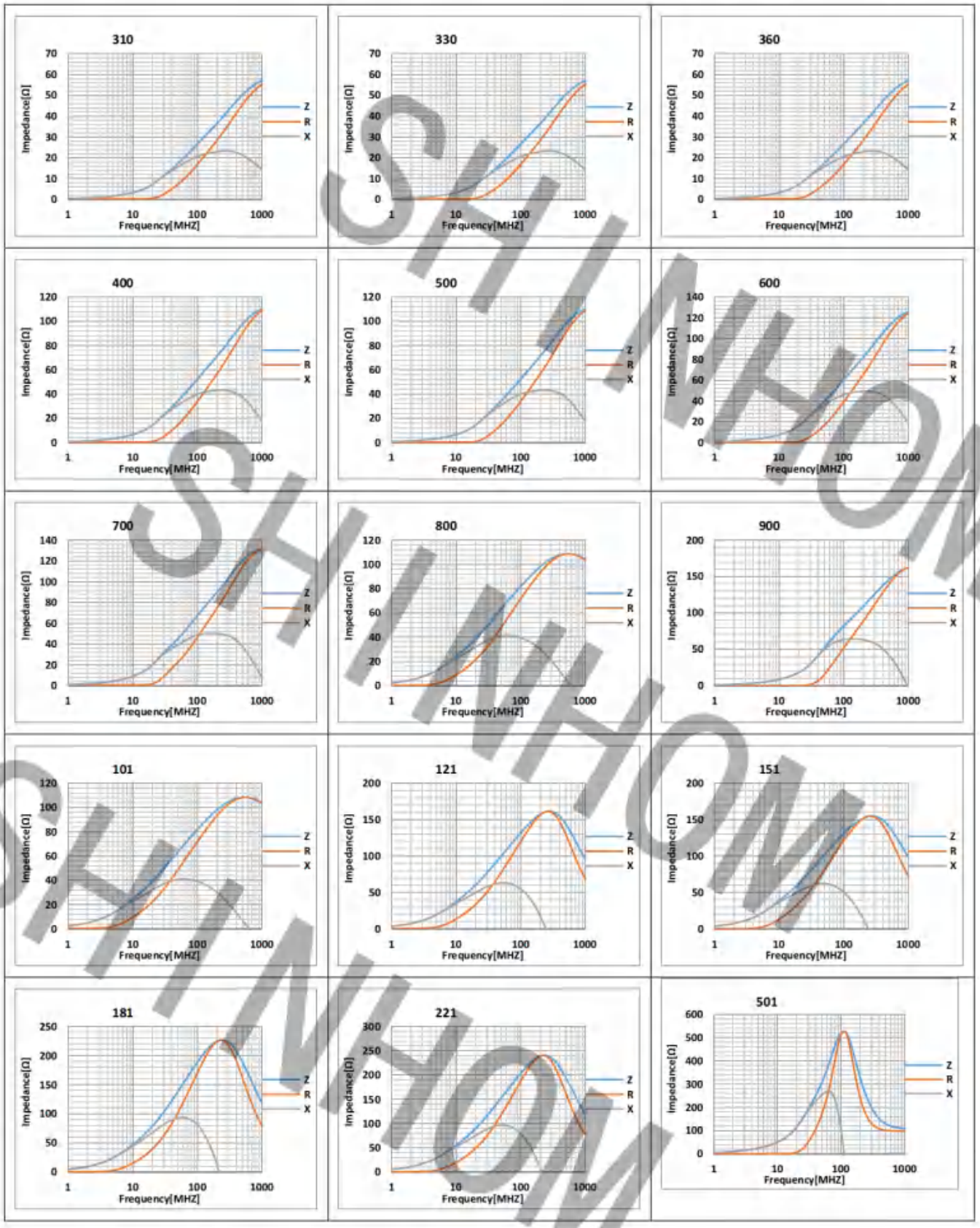








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Impedance[Ω]
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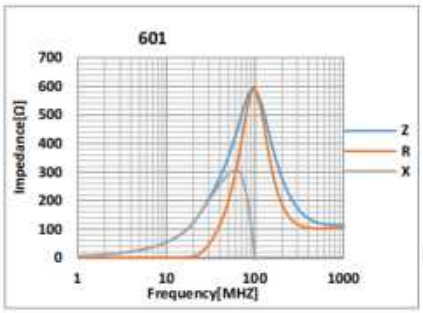
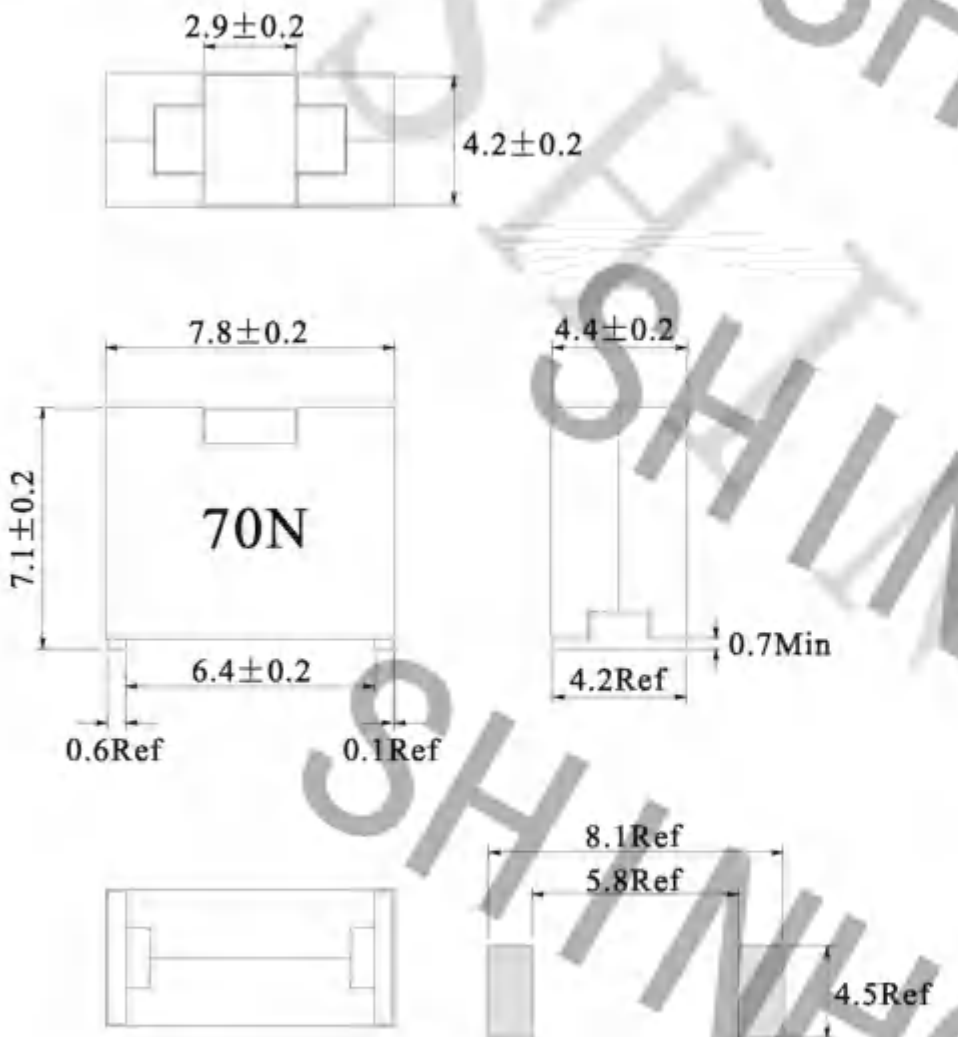


Rev.	Description	Date
A0	New release	2022.10.18

1.PHYSICAL CHARACTERISTICS(mm)



2. ELECTRICAL CHARACTERISTICS@25℃

Inductance: 70nH±15%@100KHz,1V

Irms: 50.0A Max(Temp. rise 40℃ Max.)

Isat: 100A Max(Inductance drop 20% Max)

DCR: 0.17mΩ ±10%

Operating temperature: -40℃ to +125℃

(Include temp. rise 40℃ Max)

Storage temperature: -40℃ to +125℃

Note:

1.Solderability:leads shall meet MIL-STD-202, Method 208D for solderability.

2.Flammability: UL94V-0

3.ASTM oxygen index: >28%

NAME:	Ferrite bead inductor		
CUSTOMER P/N:		DATE:	2022-10-18
SHINHOM P/N:	SMB0804-70NY	REV: A0	PAGE
DRAWN BY	CHECKED BY	APPROVE BY	

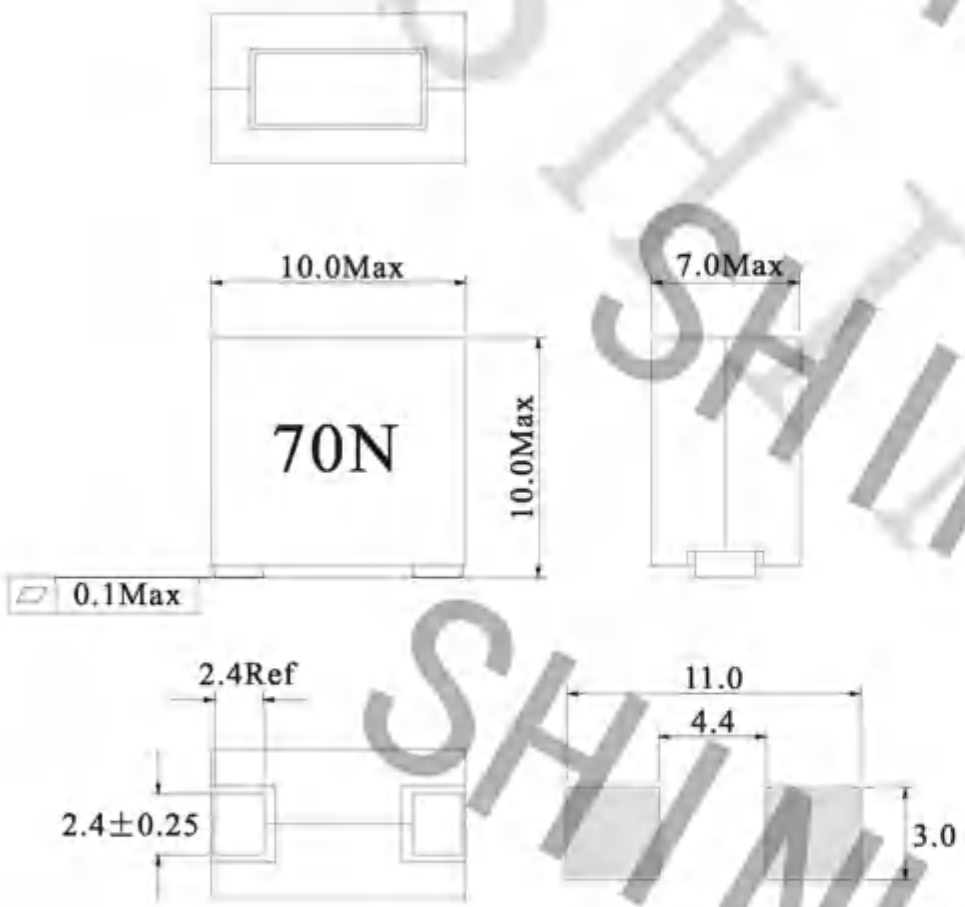
SHINHOM

SHINHOM

SHAANXISHINHOM ENTERPRISE CO LTD

Rev.	Description	Date
A0	New release	2022.10.18

1.PHYSICAL CHARACTERISTICS(mm)



2. ELECTRICAL CHARACTERISTICS@25℃

Inductance: 70nH±15%@100KHz,1V

Irms: 70.0A Max(Temp. rise 40℃ Max.)

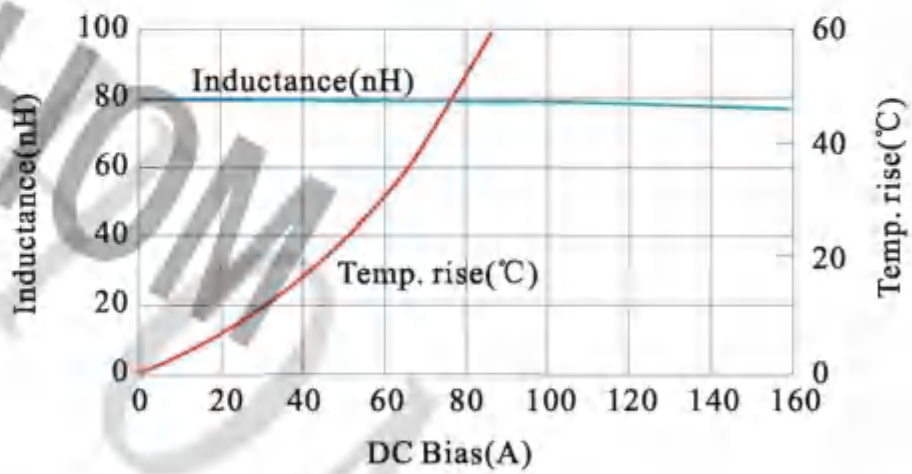
Isat: 145A Max(Inductance drop 20% Max)

DCR: 0.17mΩ ±10%

Operating temperature: -40℃ to +125℃

(Include temp. rise 40℃ Max)

Storage temperature: -40℃ to +125℃

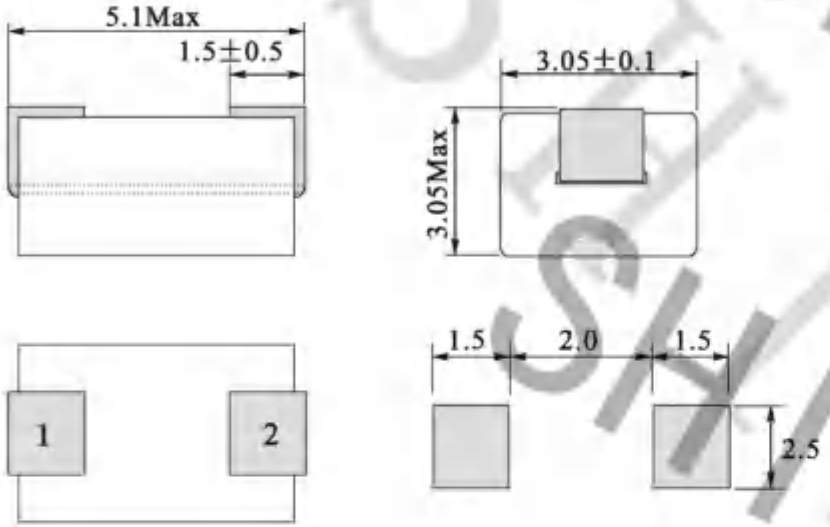


NAME:	Ferrite bead inductor		
CUSTOMER P/N:		DATE:	2022-10-18
SHINHOM P/N:	SMB1007-70NY	REV: A0	PAGE
DRAWN BY	CHECKED BY	APPROVE BY	

SHINHOM
SHAANXISHINHOM ENTERPRISE CO LTD

Rev.	Description	Date
A0	New release	2019.12.13

1.PHYSICAL CHARACTERISTICS(mm)



2.ELECTRONICAL SCHEMATIC

3.ELECTRONICAL SPECIFICATIONS

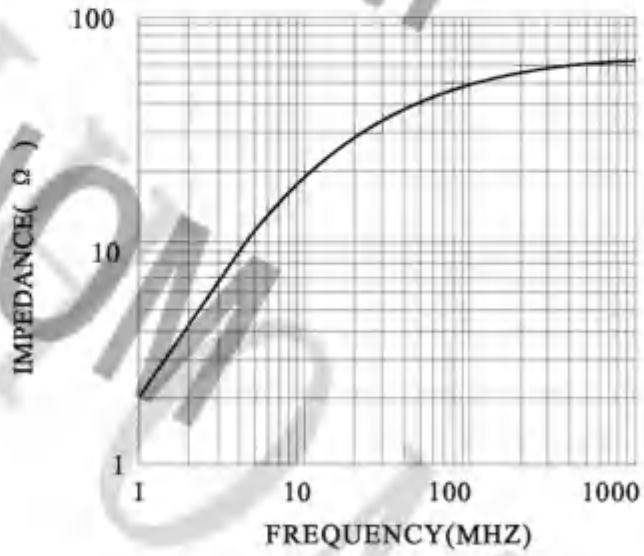
Impedance: 25Ω Min@25MHz

47Ω ±20%@100MHz

DCR: 0.6mΩ Max

Rated current: 15A

Operating temperature: -25℃ to +85℃

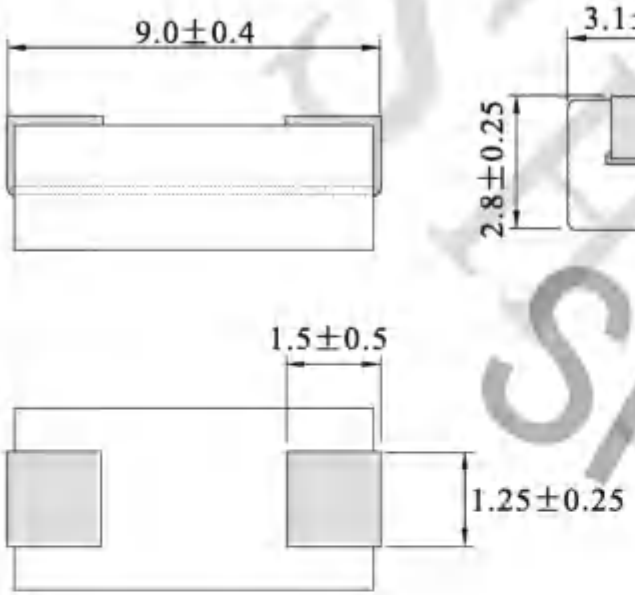


NAME:	Surface mount ferrite bead		
CUSTOMER P/N:		DATE:	2019-12-13
SHINHOM P/N:	SMB403025-2	REV: A0	PAGE
DRAWN BY	CHECKED BY	APPROVE BY	

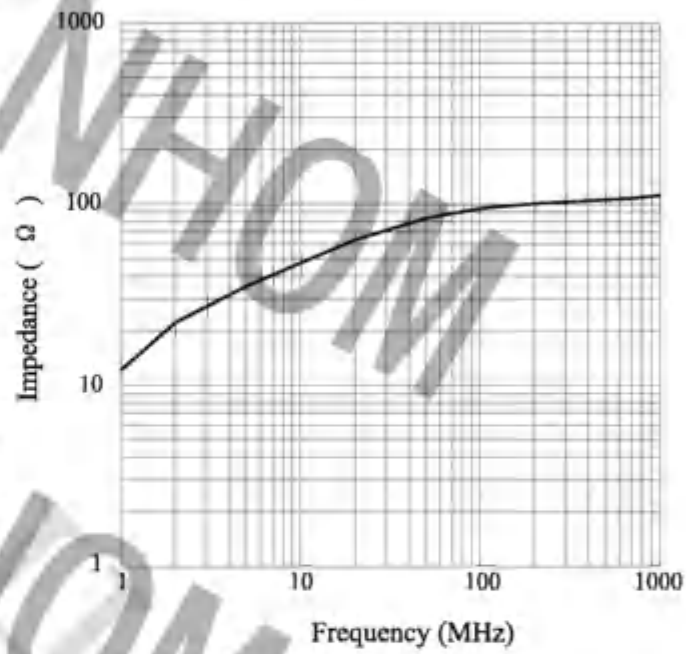
SHINHOM
SHAANXISHINHOM ENTERPRISE CO LTD

Rev.	Description	Date
A0	New release	2019.12.17

1.PHYSICAL CHARACTERISTICS(mm)



3.IMPEDANCE VS FREQUENCY



2. ELECTRICAL CHARACTERISTICS

Impedance: 45Ω Min@25MHz

75Ω Min@100MHz

Rated current: 13.0A Max(Temp. rise 40℃ typ.)

DCR: 1.0mΩ Max

Operating temperature: -40℃ to +125℃(Include temp. rise)

Storage temperature: -40℃ to +125℃

Note:

1.Solderability:leads shall meet MIL-STD-202, Method 208D for solderability.

2.Flammability: UL94V-0

3.ASTM oxygen index: >28%

NAME:	Power inductor		
CUSTOMER P/N:	74279225101	DATE:	2019-12-17
SHINHOM P/N:	SMB853025M-1	REV: A0	PAGE
DRAWN BY	CHECKED BY	APPROVE BY	

SHINHOM

SHINHOM

SHAANXISHINHOM ENTERPRISE CO LTD

SMD MULTI-LAYER COMMON MODE FILTER

FEATURES

- Effective for suppressing common mode noise and almost no effect for high speed differential data line
- Ultra low profile (0.87 x 0.67 x 0.50mm)
- Ceramic multilayer type SMD component
- Non-polarized product
- It is a product conforming to RoHS directive
- Operating Temperature Range -40℃ to +85℃

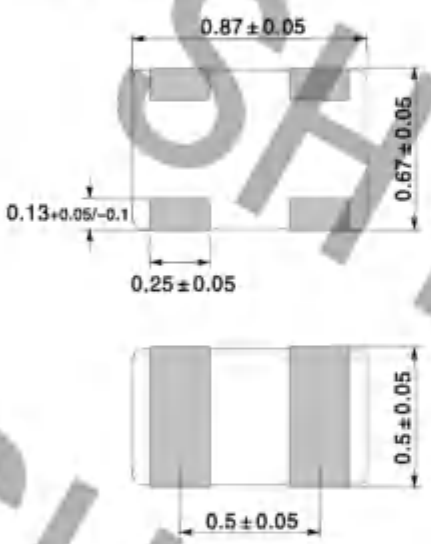
APPLICATIONS

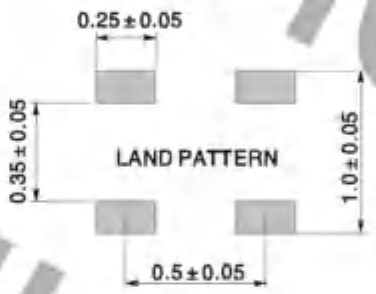
- LVDS lines in notebook computers
- USB2.0, IEEE1394, DVI, HDMI lines in PDP, LCD TV, DVD Player, PC, Audio player, DSC
- MDDI, MIPI in mobile phone

SPECIFICATION OF ELECTRICAL CHARACTERISTICS

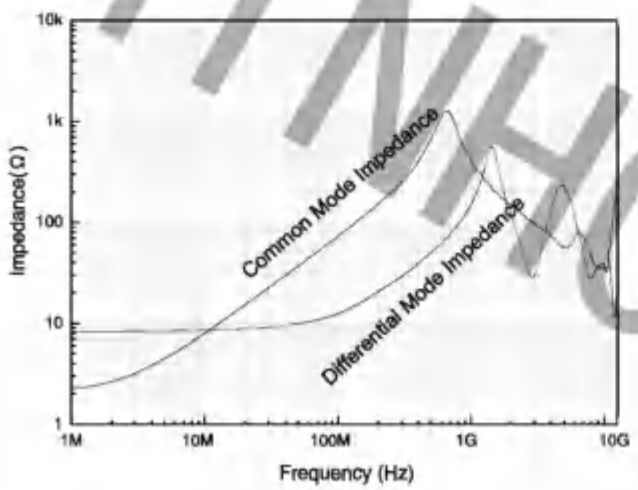
Part Number	Common mode Impedance (Ω)@100MHz	DCR (Ω)Max	Insulation Resistance (MΩ)Min	Rated current (mA)Max	Rated voltage (V)Max	Cutoff frequency (GHz)Typ
SBA0302-2-900	90±25%	6.0	10	100	5.0	4.0

APPEARANCE AND DIMENSION

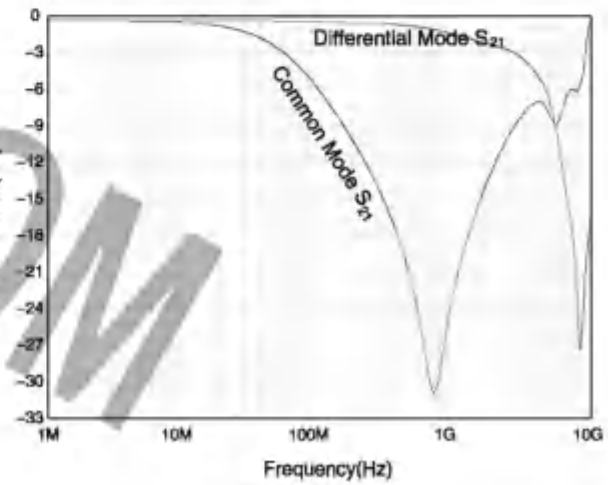




IMPEDANCE CURVES



TRANSMISSION CHARACTERISTICS (S-PARAMETER)



SMD MULTI-LAYER COMMON MODE FILTER

FEATURES

- Effective for suppressing common mode noise and almost no effect for high speed differential data line
- Ultra low profile (2.0x1.2x0.8mm)
- Ceramic multilayer type SMD component
- Non-polarized product
- It is a product conforming to RoHS directive
- Operating Temperature Range -40℃ to +85℃

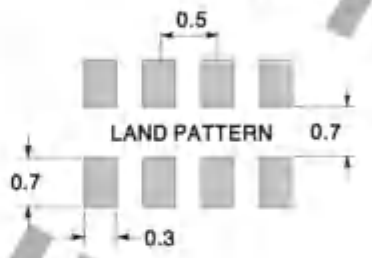
APPLICATIONS

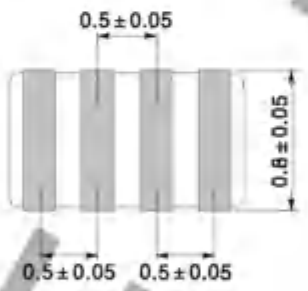
- LVDS lines in notebook computers
- USB2.0, IEEE1394, DVI, HDMI lines in PDP, LCD TV, DVD Player, PC, Audio player, DSC
- MDDI, MIPI in mobile phone

SPECIFICATION OF ELECTRICAL CHARACTERISTICS

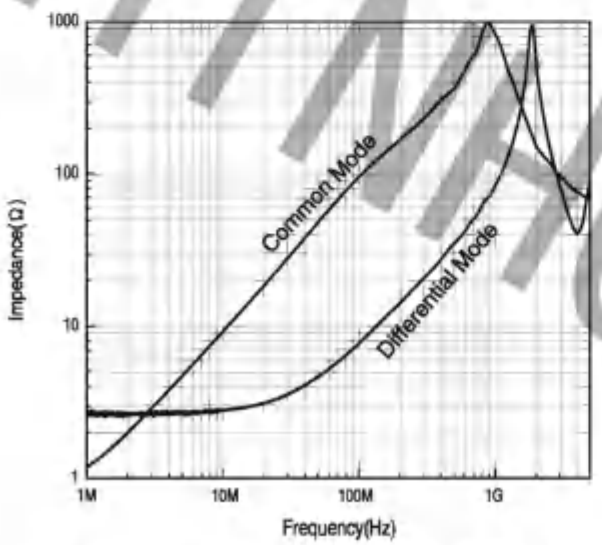
Part Number	Common mode Impedance (Ω)@100MHz	DCR (Ω)Max	Insulation Resistance (MΩ)Min	Rated current (mA)Max	Rated voltage (V)Max	Cutoff frequency (GHz)Typ
SBA0805-4-101	100±25%	4.0	10	100	5.0	3.0

APPEARANCE AND DIMENSION

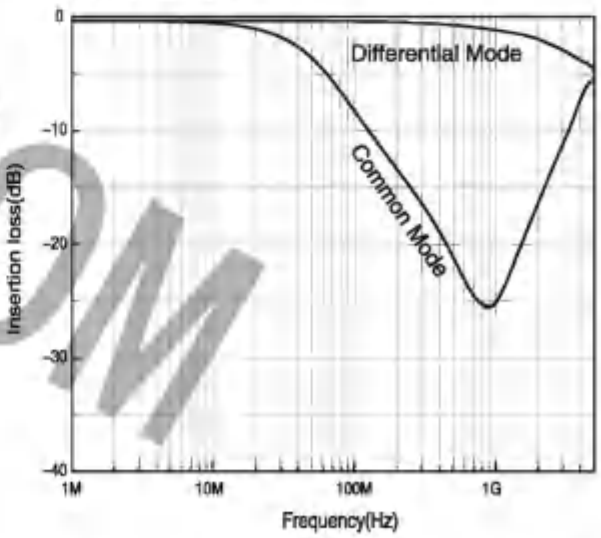




IMPEDANCE CURVES



TRANSMISSION CHARACTERISTICS (S-PARAMETER)



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

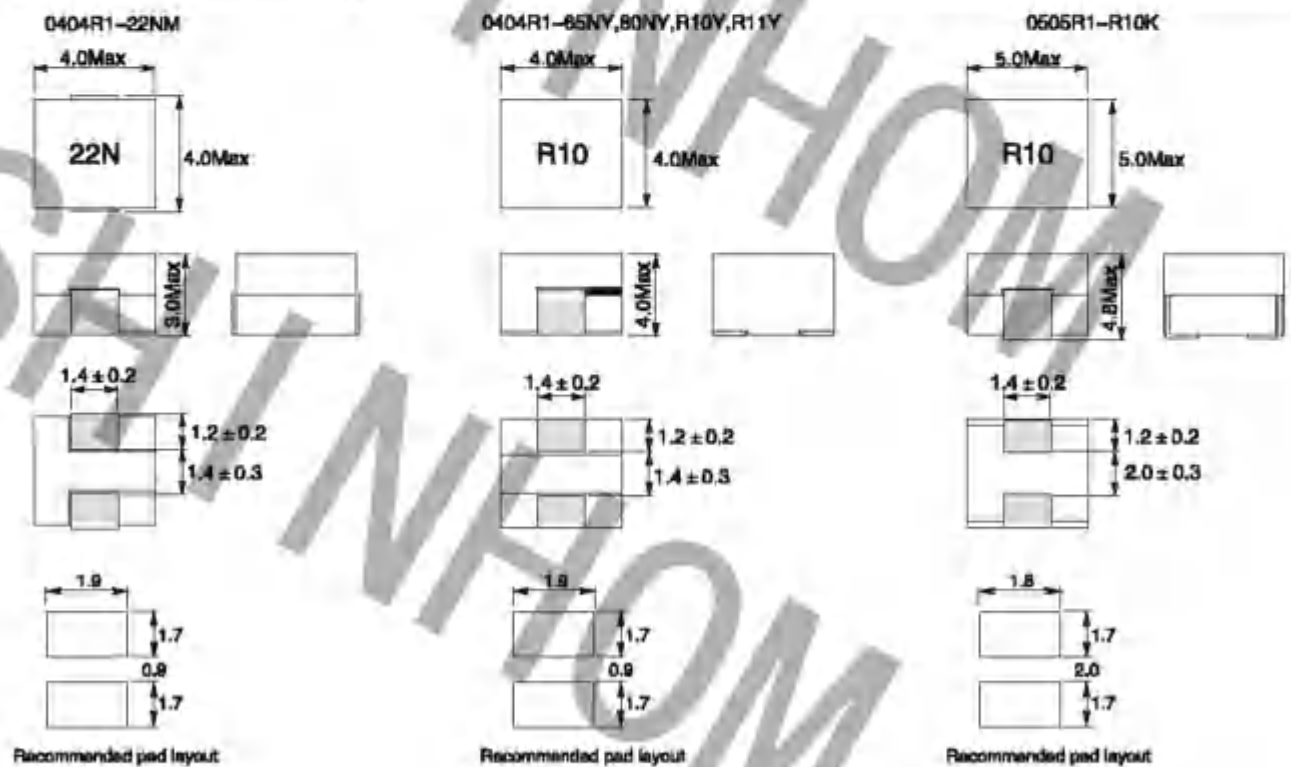
APPLICATIONS:

- 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) ± 15% @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 ℃ (mΩ) ± 25%
HCB0404R1-22NM	22 ± 20%	15	19	40	32	0.32 ± 15%
HCB0404R1-65NY	65	44	18	24	20	0.32
HCB0404R1-80NY	80	54	18	20	16	0.32
HCB0404R1-R10Y	100	68	18	16	13	0.32
HCB0404R1-R11Y	110	74	18	14	12	0.32
HCB0505R1-R10K	100	68	30	34	24	0.38

DIMENSIONS:(mm)



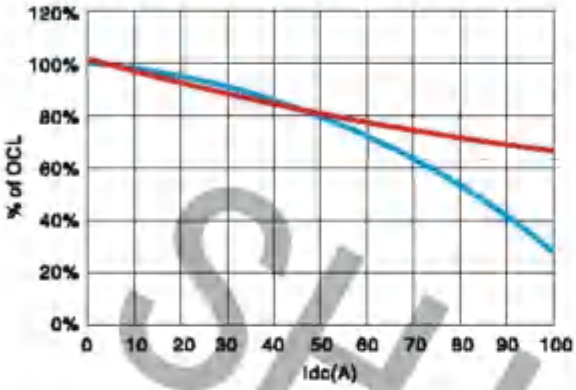
NOTES:

- Test Frequency : 100KHz / 0.1V@25℃ (1MHz/0.1V for 22NM)
- Irms: DC current for an approximate temperature rise of 40℃ without core loss
- Isat1: Peak current for approximately 20% rolloff at +25℃
- Isat2: Peak current for approximately 20% rolloff at +125℃
- Operating temperature: -40℃ to +125℃(ambient plus self-temperature rise)
- Storage temperature: -40℃ to +125℃

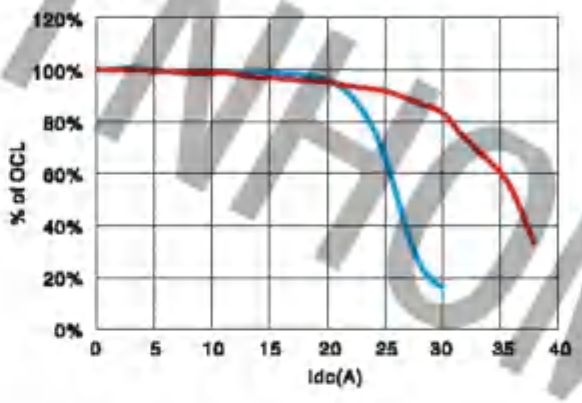
HIGH CURRENT POWER INDUCTORS
HCB0404 0505 SERIES

INDUCTANCE CHARACTERISICS:

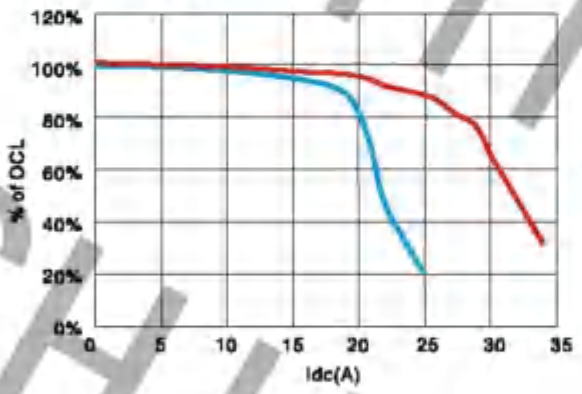
HCB0404R1-22NM



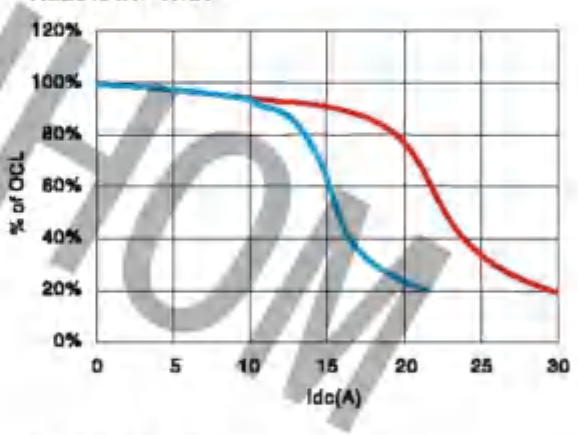
HCB0404R1-85NY



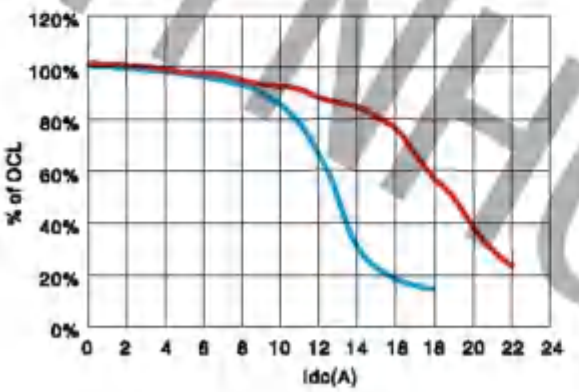
HCB0404R1-80NY



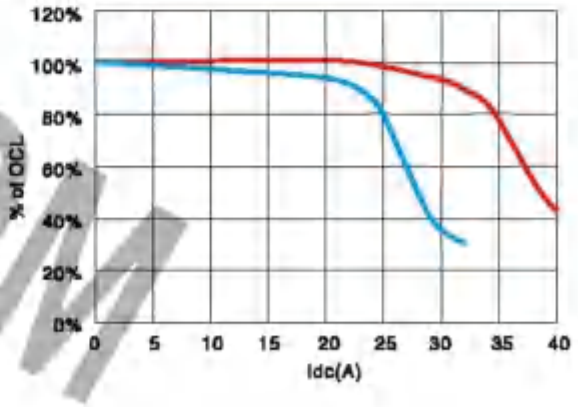
HCB0404R1-R10Y



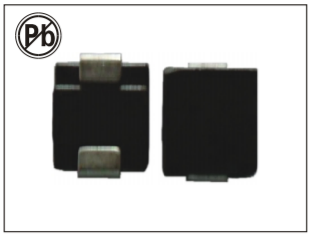
HCB0404R1-R11Y



HCB0505R1-R10K



+25℃
+125℃



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

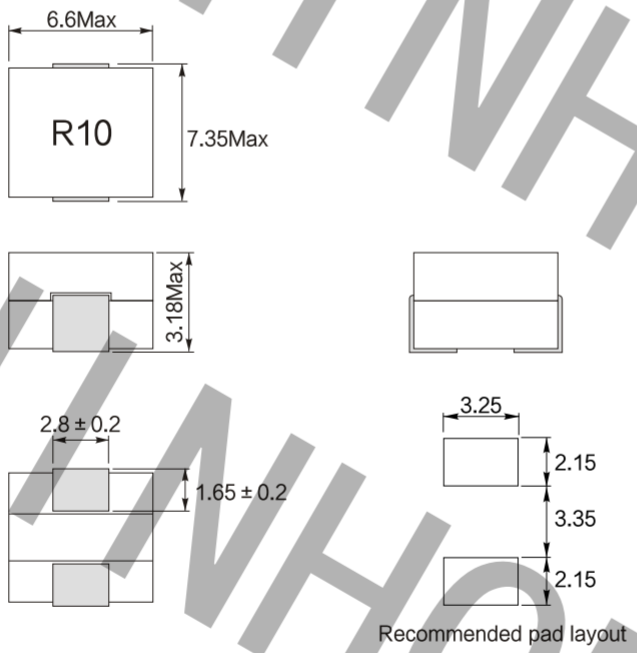
APPLICATIONS:

- 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)

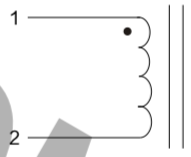
ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) ± 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 ℃ (mΩ) ± 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) :



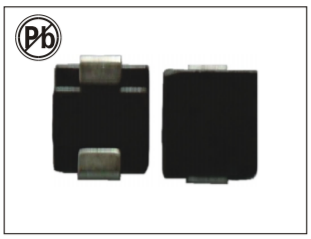
SCHEMATIC :



NOTES:

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

Note:All specifications subject to change without notice.

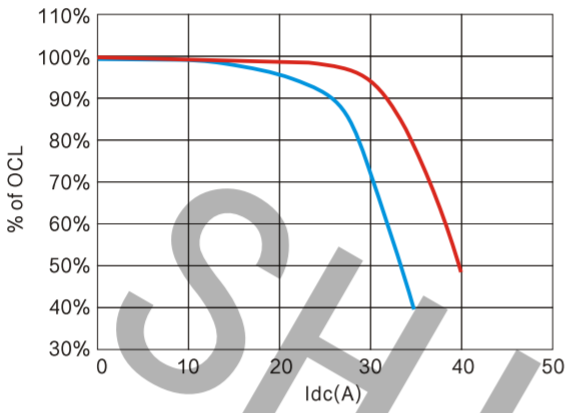


HIGH CURRENT POWER INDUCTORS

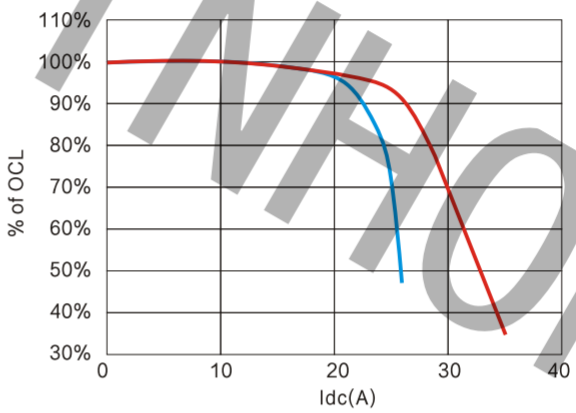
HCB0703 SERIES

INDUCTANCE CHARACTERISICS:

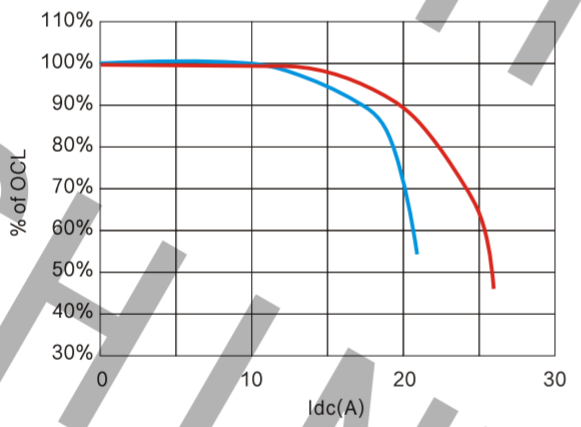
HCB0703R1-80NK



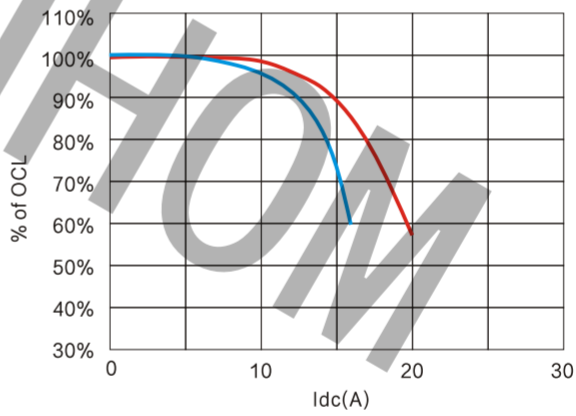
HCB0703R1-R10K



HCB0703R1-R12K



HCB0703R1-R15K



+25℃

+125℃

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

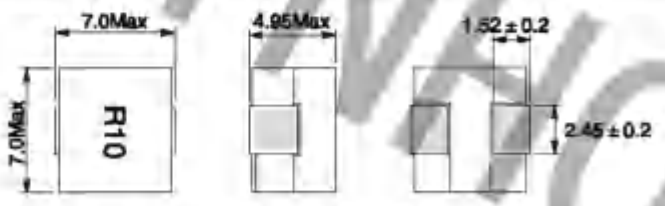
APPLICATIONS:

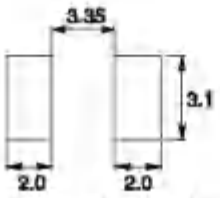
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module(VRM)

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance (nH) ± 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 ℃ (mΩ)
HCB0705R1-72NK	72	51	43	65	50	0.25 ± 8%
HCB0705R1-R10K	105	78	43	44	34	0.25 ± 8%
HCB0705R1-R12K	120	86	43	37	30	0.25 ± 8%
HCB0705R1-R15K	150	108	43	30	24	0.25 ± 8%
HCB0705R1-R18K	180	130	43	25	20	0.25 ± 8%
HCB0705R1-R22K	226	159	43	20	16	0.25 ± 8%
HCB0705R2-72NK	72	51	38	65	50	0.32 ± 7%
HCB0705R2-R10K	105	78	38	44	34	0.32 ± 7%
HCB0705R2-R12K	120	86	38	37	30	0.32 ± 7%
HCB0705R2-R15K	150	108	38	30	24	0.32 ± 7%
HCB0705R2-R18K	180	130	38	25	20	0.32 ± 7%
HCB0705R2-R22K	226	159	38	20	16	0.32 ± 7%
HCB0705R3-72NK	72	51	32	65	50	0.46 ± 6%
HCB0705R3-R10K	105	78	32	44	34	0.46 ± 6%
HCB0705R3-R12K	120	86	32	37	30	0.46 ± 6%
HCB0705R3-R15K	150	108	32	30	24	0.46 ± 6%
HCB0705R3-R18K	180	130	32	25	20	0.46 ± 6%
HCB0705R3-R22K	226	159	32	20	16	0.46 ± 6%

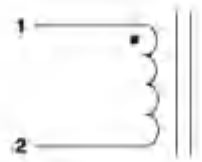
DIMENSIONS(mm) :





Recommended pad layout

SCHEMATIC :



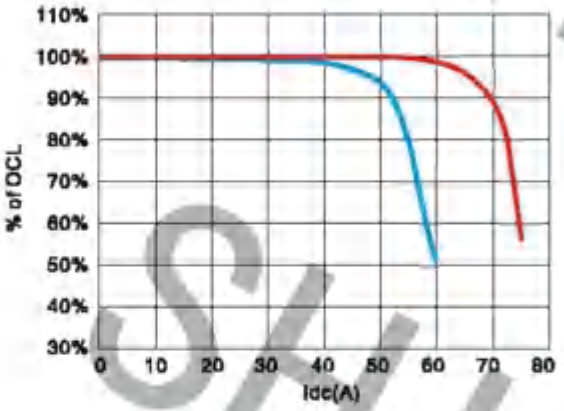
NOTES:

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

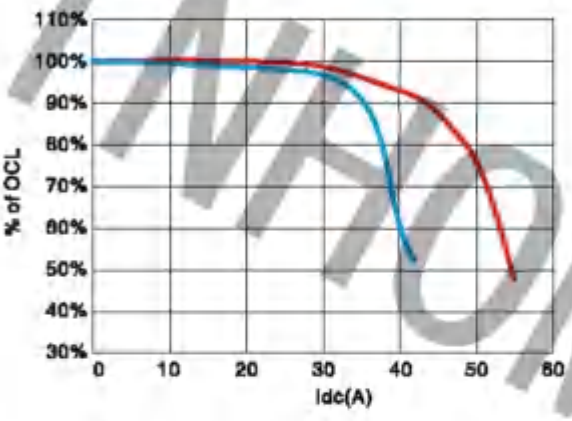
HIGH CURRENT POWER INDUCTORS
HCB0705 SERIES

INDUCTANCE CHARACTERISICS:

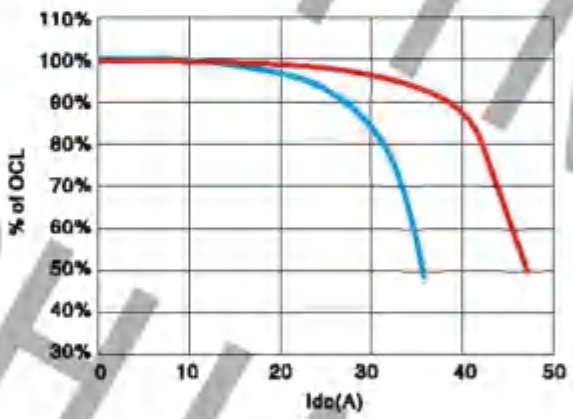
HCB0705RX-72NK



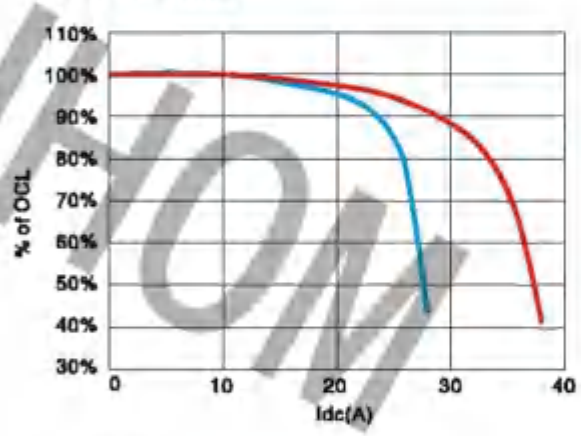
HCB0705RX-R10K



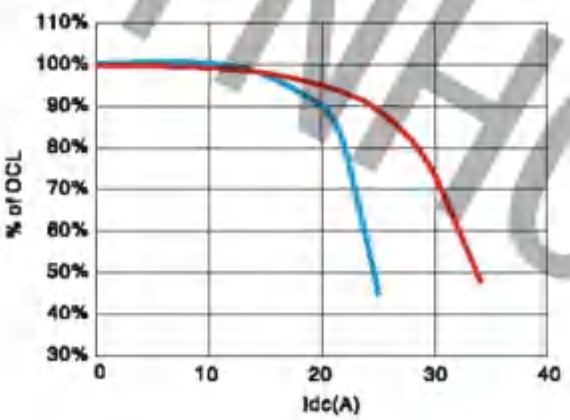
HCB0705RX-R12K



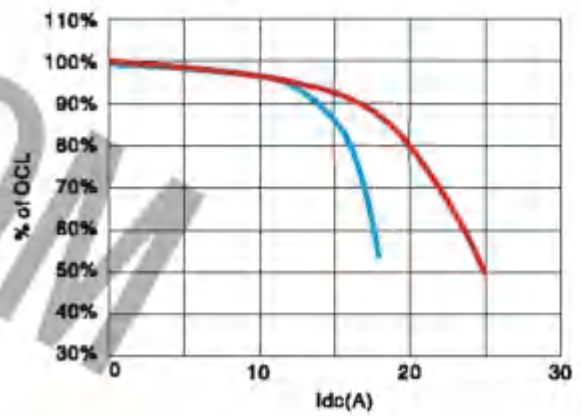
HCB0705RX-R15K



HCB0705RX-R18K



HCB0705RX-R22K



+25℃ +125℃

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

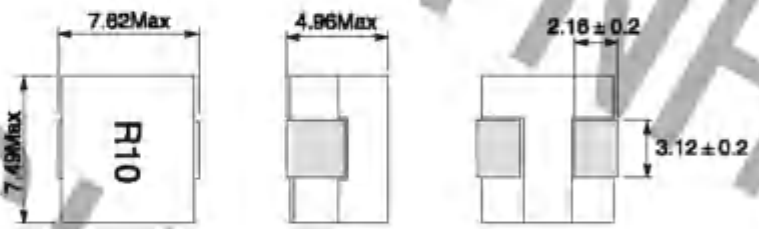
APPLICATIONS:

- 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)

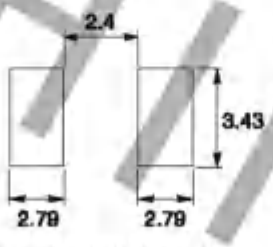
ELECTRICAL CHARACTERISTICS:

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

DIMENSIONS(mm) :



SCHEMATIC :



Recommended pad layout

NOTES:

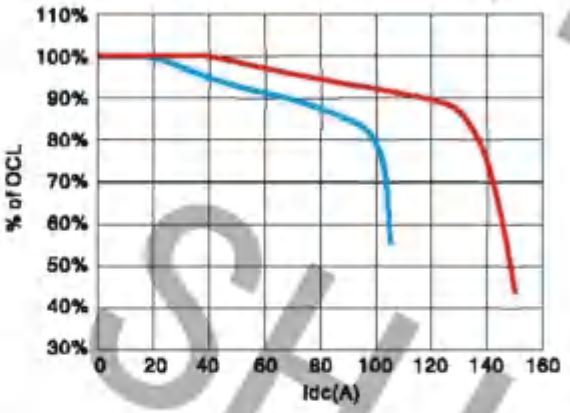
- Test Frequency : 100KHz / 0.1V@25℃
- Irms: DC current for an approximate temperature rise of 40℃ without core loss
- Isat1: Peak current for approximately 20% rolloff at +25℃
- Isat2: Peak current for approximately 20% rolloff at +125℃
- Operating temperature: -40℃ to +125℃(ambient plus self-temperature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

HIGH CURRENT POWER INDUCTORS

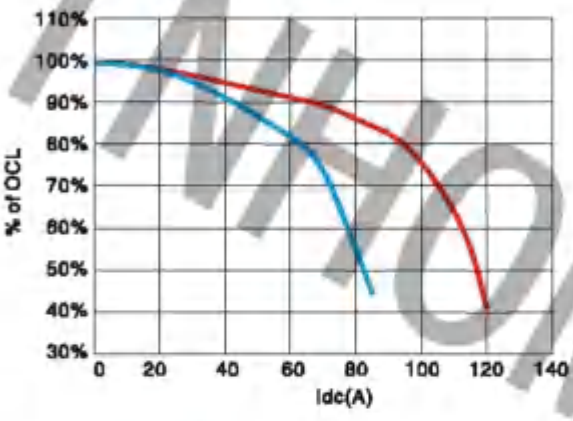
HCB0805 SERIES

INDUCTANCE CHARACTERISICS:

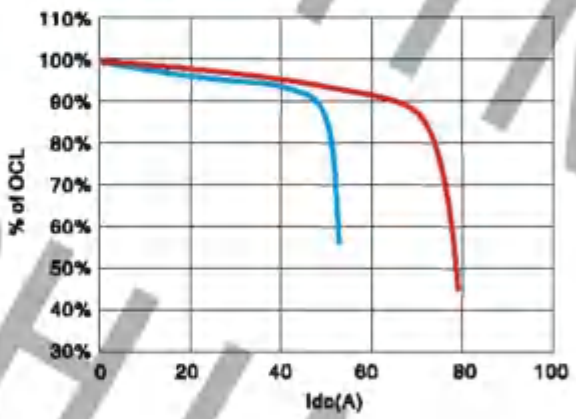
HCB0805R1-32NK



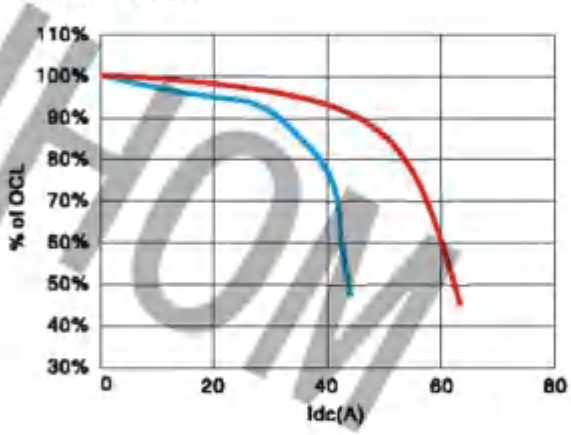
HCB0805R1-58NK



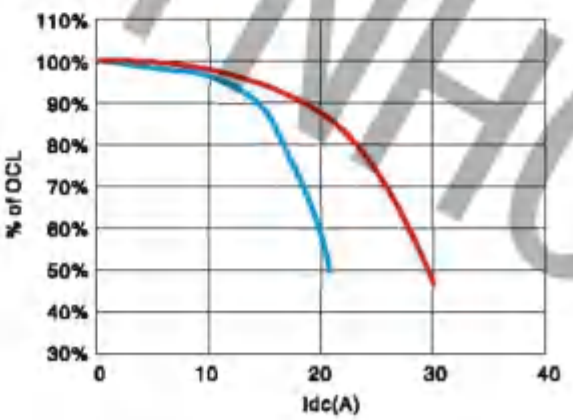
HCB0805R1-72NK



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

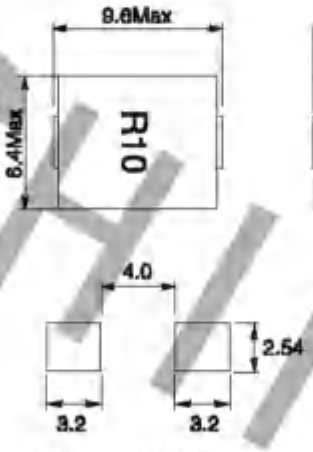
APPLICATIONS:

- 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) ± 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℃ (mΩ)
HCB0906R1-R10K	100	72	51	94	81	0.29±5%
HCB0906R1-R12K	120	86	51	79	68	0.29±5%
HCB0906R1-R15K	150	108	51	65	54.5	0.29±5%
HCB0906R1-R22K	220	155	51	44	37.5	0.29±5%
HCB0906R1-R28K	280	200	51	34	29	0.29±5%
HCB0906R1-R30K	300	216	51	32.5	27.5	0.29±5%

DIMENSIONS(mm) :



Recommended pad layout

SCHEMATIC :

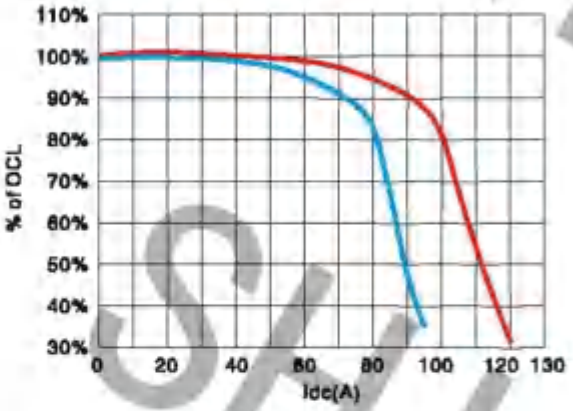
NOTES:

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

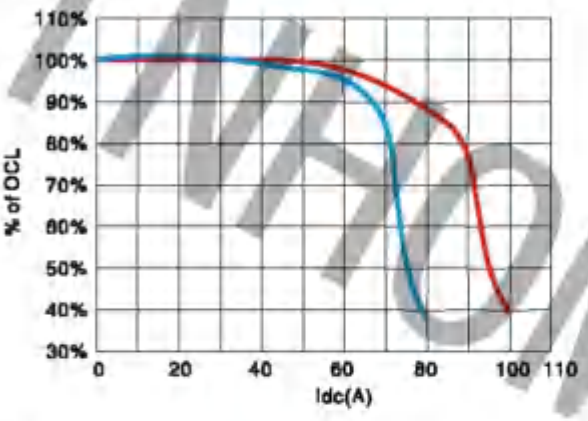
HIGH CURRENT POWER INDUCTORS
HCB0906 SERIES

INDUCTANCE CHARACTERISICS:

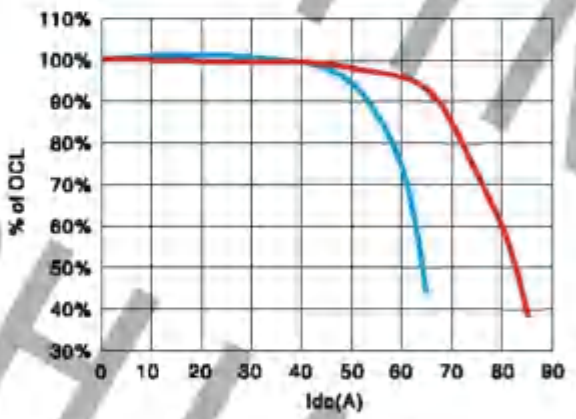
HCB0906R1-R10K



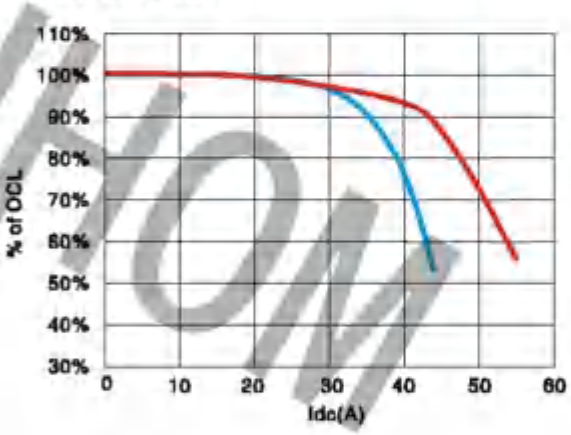
HCB0906R1-R12K



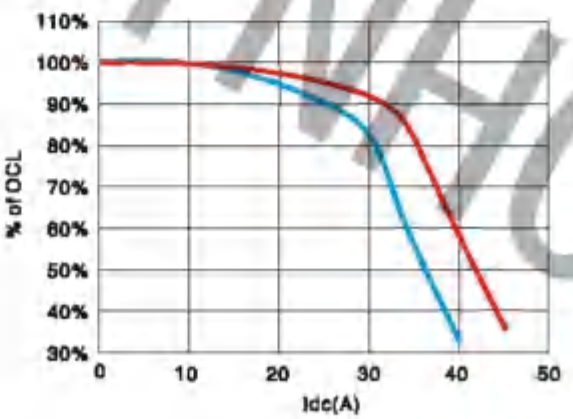
HCB0906R1-R15K



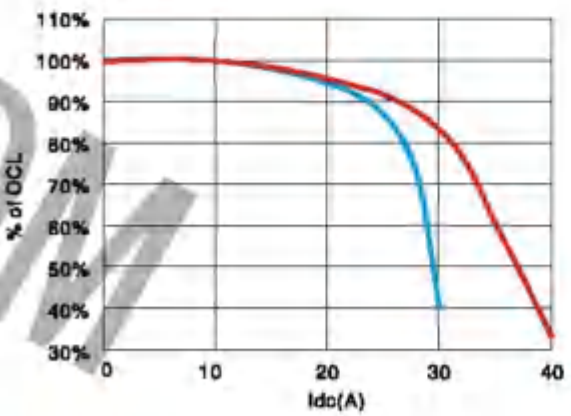
HCB0906R1-R22K



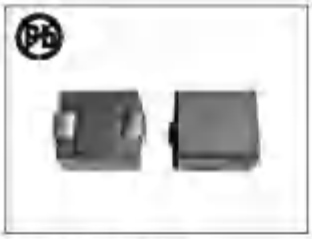
HCB0906R1-R28K



HCB0906R1-R30K



+25℃ +125℃



HIGH CURRENT POWER INDUCTORS

HCB1005 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 80nH to 220nH
- Current range from 53A to 90A
- Ferrite core material

OPTIONS:

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

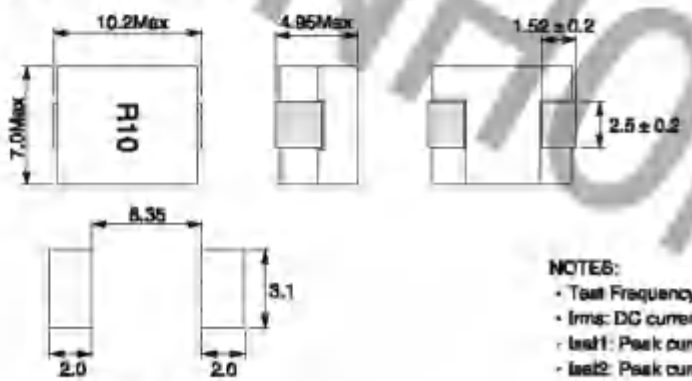
APPLICATIONS:

- 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:

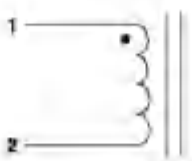
Part Number	Inductance (nH) ± 10% @0Adc	Inductance (nH)Min @Isat1	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat1(A)	Saturation current DC Amps Isat2(A)	DCR@25℃ (mΩ)
HCB1005R1-80NK	80	60	53	90	64	0.39±7.5%
HCB1005R1-R10K	100	72	53	79	57	0.39±7.5%
HCB1005R1-R12K	120	86	53	60	48	0.39±7.5%
HCB1005R1-R15K	150	108	53	47	37	0.39±7.5%
HCB1005R1-R22K	220	158	53	33	26	0.39±7.5%
HCB1005R2-80NK	80	60	50	90	64	0.47±6.5%
HCB1005R2-R10K	100	72	50	79	57	0.47±6.5%
HCB1005R2-R12K	120	86	50	60	48	0.47±6.5%
HCB1005R2-R15K	150	108	50	47	37	0.47±6.5%
HCB1005R2-R22K	220	158	50	33	26	0.47±6.5%
HCB1005R3-80NK	80	60	50	90	64	0.55±5.4%
HCB1005R3-R10K	100	72	50	79	57	0.55±5.4%
HCB1005R3-R12K	120	86	50	60	48	0.55±5.4%
HCB1005R3-R15K	150	108	50	47	37	0.55±5.4%
HCB1005R3-R22K	220	158	50	33	26	0.55±5.4%
HCB1005R4-80NK	80	60	53	90	64	0.31±7.0%
HCB1005R4-R10K	100	72	53	79	57	0.31±7.0%
HCB1005R4-R12K	120	86	53	60	48	0.31±7.0%
HCB1005R4-R15K	150	108	53	47	37	0.31±7.0%
HCB1005R4-R22K	220	158	53	33	26	0.31±7.0%

DIMENSIONS(mm) :



Recommended pad layout

SCHEMATIC :



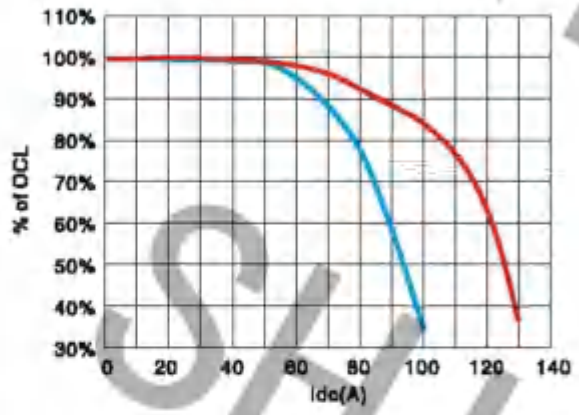
NOTES:

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

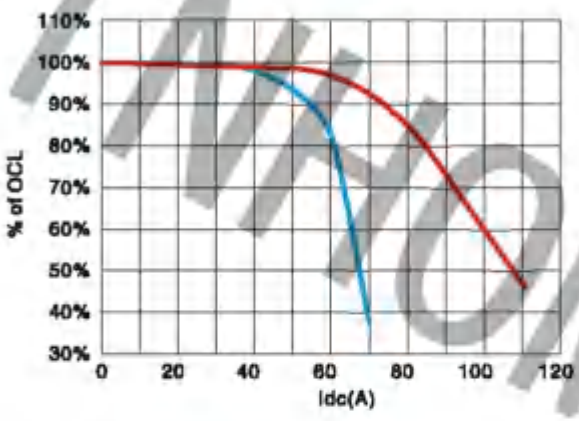
HIGH CURRENT POWER INDUCTORS
HCB1005 SERIES

INDUCTANCE CHARACTERISICS:

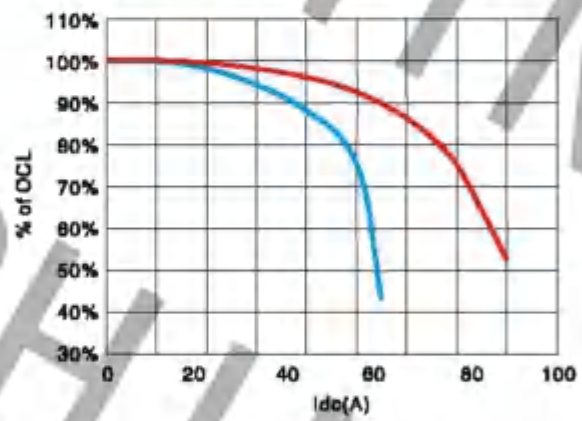
HCB1005RX-80NK



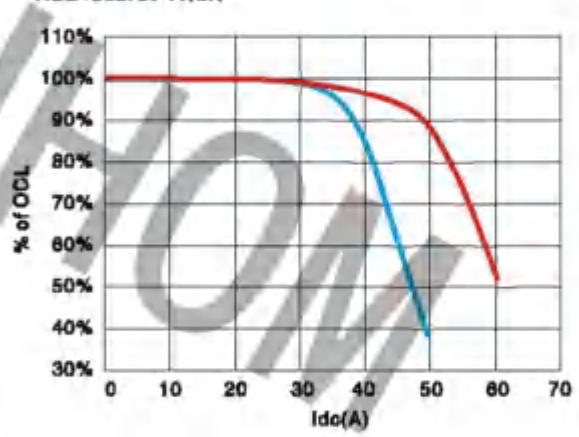
HCB1005RX-R10K



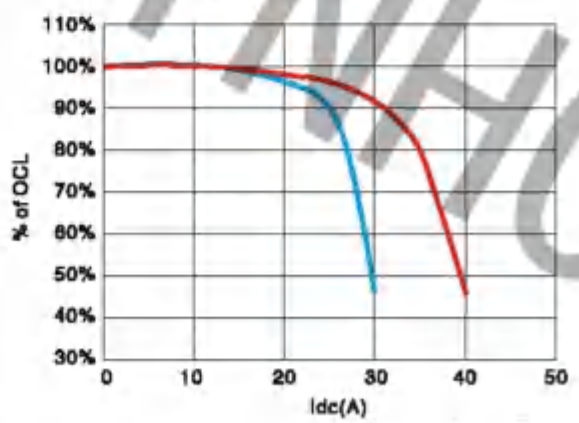
HCB1005RX-R12K



HCB1005RX-R15K



HCB1005RX-R22K



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

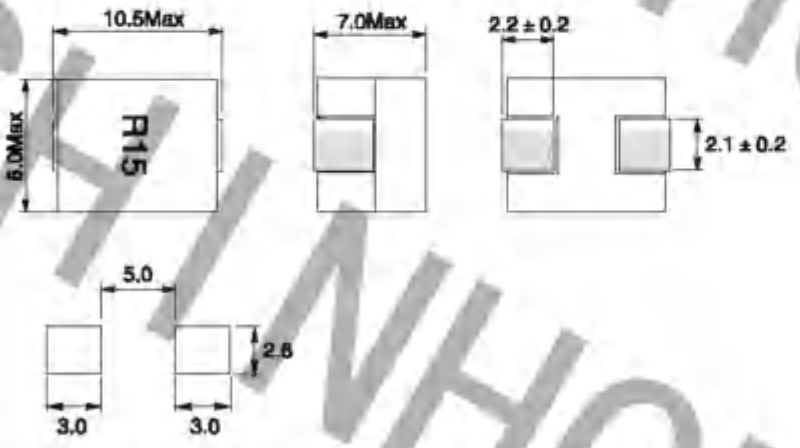
APPLICATIONS:

- 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) ± 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℃ (mΩ)
HCB1007R1-R11K	115	83	61	94	66	0.29±5%
HCB1007R1-R15K	150	108	61	75	60	0.29±5%
HCB1007R1-R18K	180	129	61	60	50	0.29±5%
HCB1007R1-R22K	220	158	61	50	40	0.29±5%
HCB1007R1-R27K	270	194	61	41	33	0.29±5%
HCB1007R1-R30K	300	216	61	35	30	0.29±5%
HCB1007R1-R33K	330	237	61	33	26.5	0.29±5%
HCB1007R1-R39K	390	280	61	28	22.5	0.29±5%
HCB1007R1-R47K	470	338	61	23.5	19	0.29±5%

DIMENSIONS(mm) :



Recommended pad layout

SCHEMATIC :

NOTES:

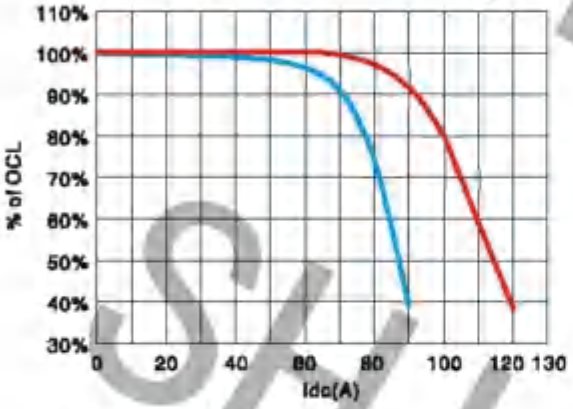
- Test Frequency : 100KHz / 0.1V@25℃
- Irms: DC current for an approximate temperature rise of 40℃ without core lose
- Isat1: Peak current for approximately 20% rolloff at +25℃
- Isat2: Peak current for approximately 20% rolloff at +125℃
- Operating temperature: -40℃ to +125℃(ambient plus self-temperature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

HIGH CURRENT POWER INDUCTORS

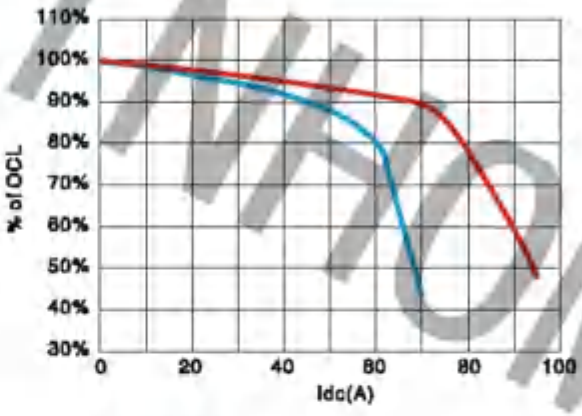
HCB1007 SERIES

INDUCTANCE CHARACTERISICS:

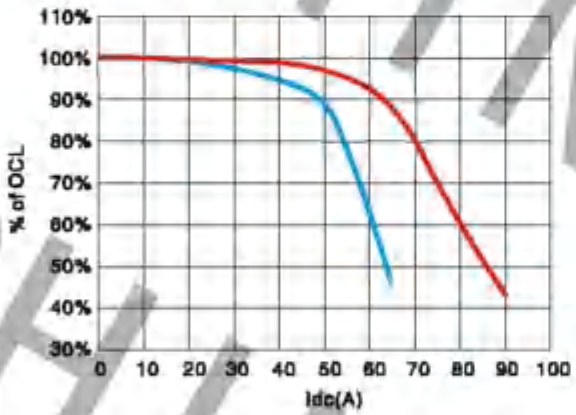
HCB1007R1-R11K



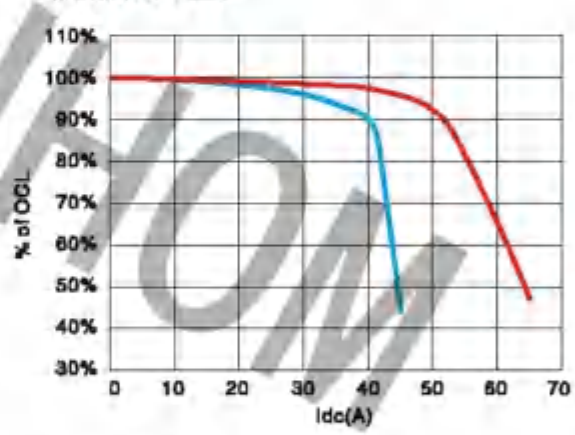
HCB1007R1-R15K



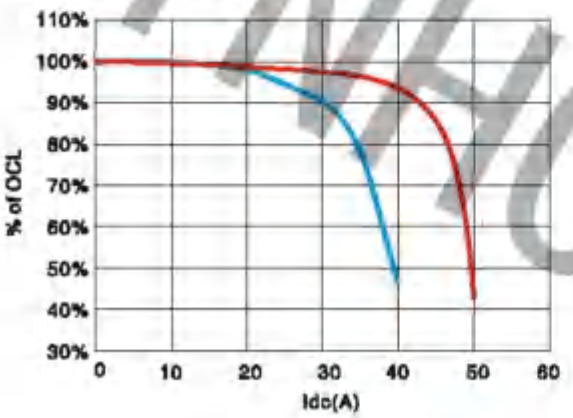
HCB1007R1-R18K



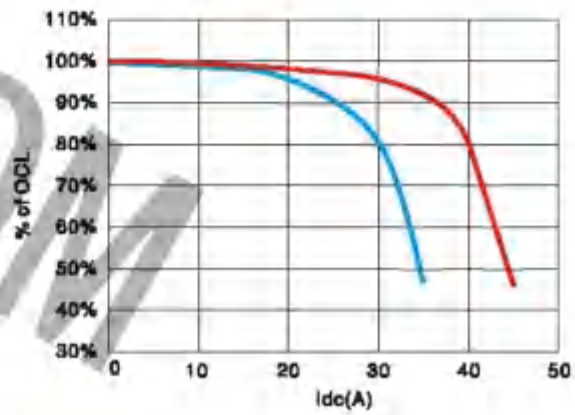
HCB1007R1-R22K



HCB1007R1-R27K



HCB1007R1-R30K



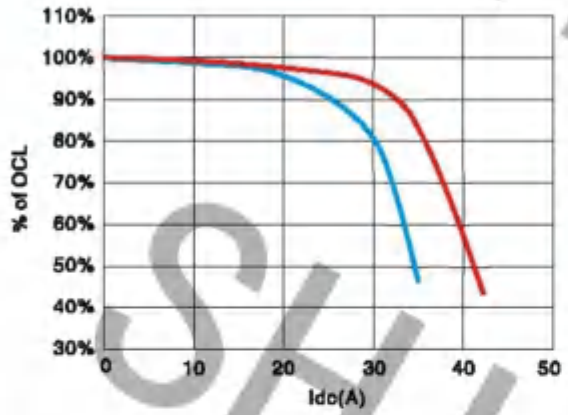
+25℃ +125℃

HIGH CURRENT POWER INDUCTORS

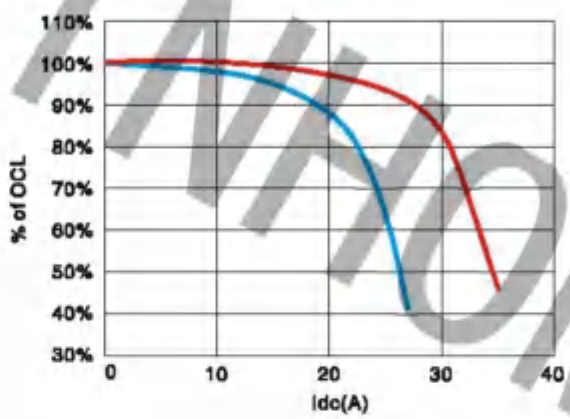
HCB1007 SERIES

INDUCTANCE CHARACTERISICS:

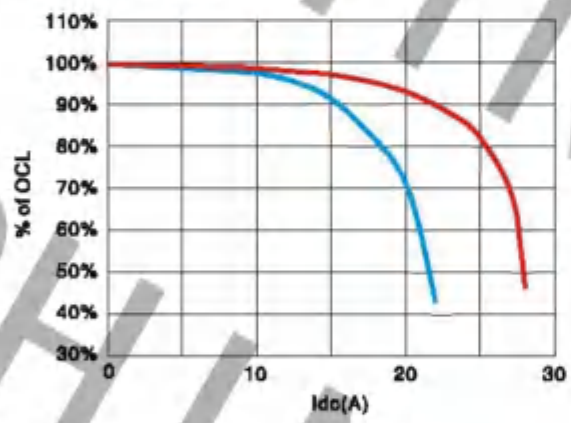
HCB1007R1-R33K



HCB1007R1-R39K



HCB1007R1-R47K



+25℃ +125℃

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

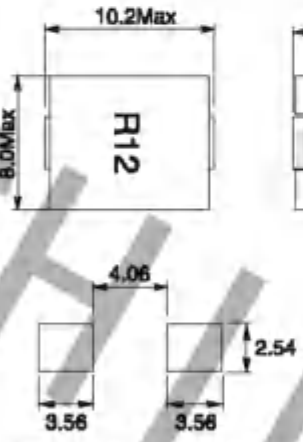
APPLICATIONS:

- 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) ± 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℃ (mΩ)
HCB1006R1-R12K	120	86.4	68	95	77	0.18±5%
HCB1006R1-R15K	150	108	68	79	66	0.18±5%
HCB1006R1-R18K	180	129.6	68	62	52	0.18±5%
HCB1006R1-R22K	220	158.4	68	58	47	0.18±5%

DIMENSIONS(mm) :



Recommended pad layout

SCHEMATIC :

NOTES:

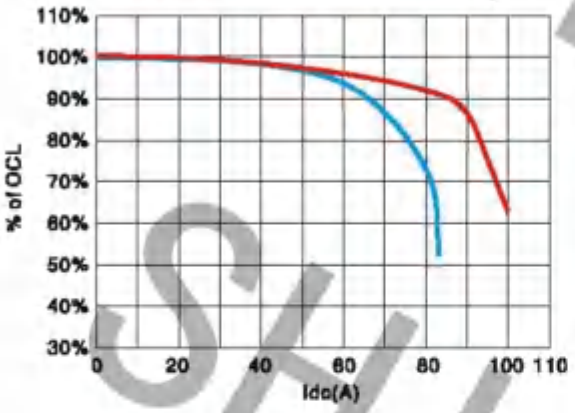
- Test Frequency : 100KHz / 0.1V@25℃
- Irms: DC current for an approximate temperature rise of 40℃ without core loss
- Isat1: Peak current for approximately 20% rolloff at +25℃
- Isat2: Peak current for approximately 20% rolloff at +125℃
- Operating temperature: -40℃ to +125℃(ambient plus self-temperature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

HIGH CURRENT POWER INDUCTORS

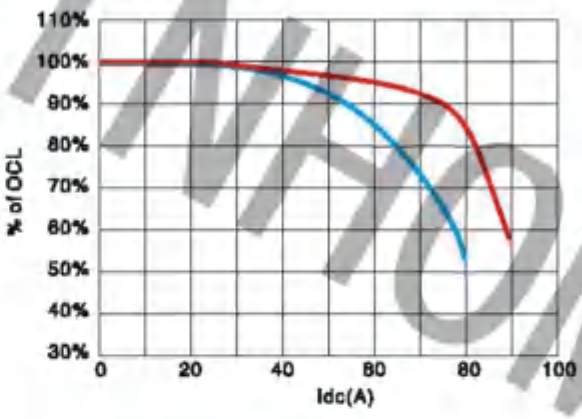
HCB1008 SERIES

INDUCTANCE CHARACTERISICS:

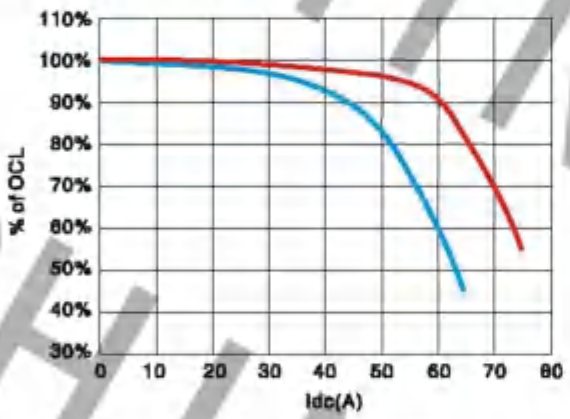
HCB1008R1-R12K



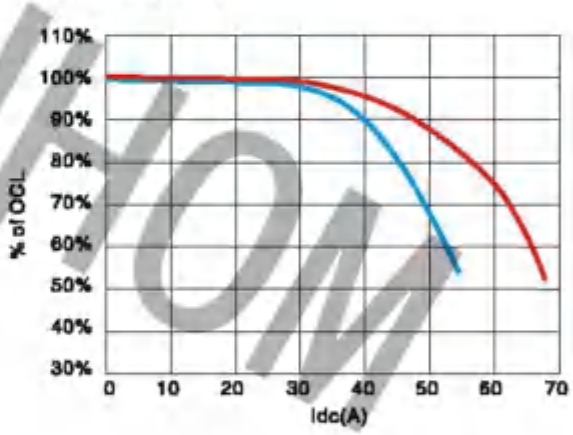
HCB1008R1-R15K



HCB1008R1-R18K



HCB1008R1-R22K



+25℃ +125℃

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

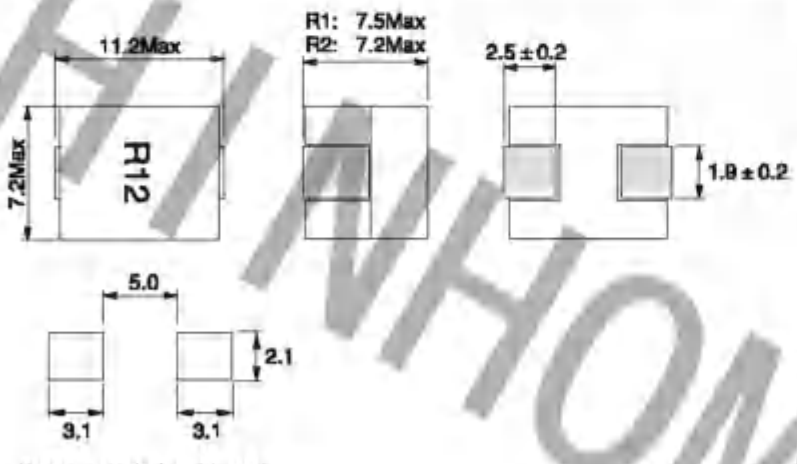
APPLICATIONS:

- 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) ± 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℃ (mΩ)
HCB1107R1-R12K	120	86	55	90	72	0.29±5%
HCB1107R1-R15K	150	108	55	70	56	0.29±5%
HCB1107R1-R23K	230	166	55	45	36	0.29±5%
HCB1107R1-R30K	300	217	55	35	28	0.29±5%
HCB1107R1-R40K	400	288	55	25	20	0.29±5%
HCB1107R1-R51K	510	364	55	18	14.5	0.29±5%
HCB1107R2-R12K	120	86	42	90	72	0.47±6%
HCB1107R2-R15K	150	108	42	70	56	0.47±6%
HCB1107R2-R23K	230	166	42	45	36	0.47±6%
HCB1107R2-R30K	300	217	42	35	28	0.47±6%
HCB1107R2-R40K	400	288	42	25	20	0.47±6%
HCB1107R2-R51K	510	364	42	18	14.5	0.47±6%

DIMENSIONS(mm) :



Recommended pad layout

SCHEMATIC :

NOTES:

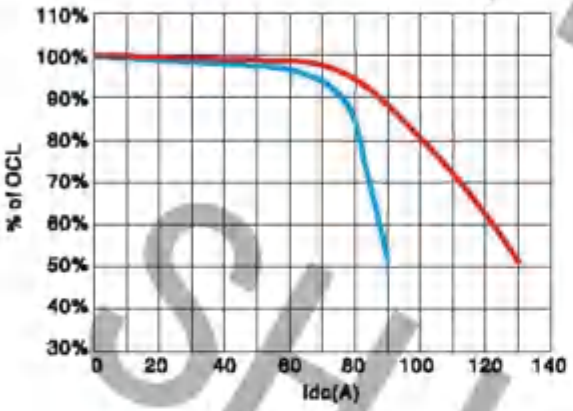
- Test Frequency : 100KHz / 0.1V@25℃
- Irms: DC current for an approximate temperature rise of 40℃ without core loss
- Isat1: Peak current for approximately 20% rolloff at +25℃
- Isat2: Peak current for approximately 20% rolloff at +125℃
- Operating temperature: -40℃ to +125℃(ambient plus self-temperature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

HIGH CURRENT POWER INDUCTORS

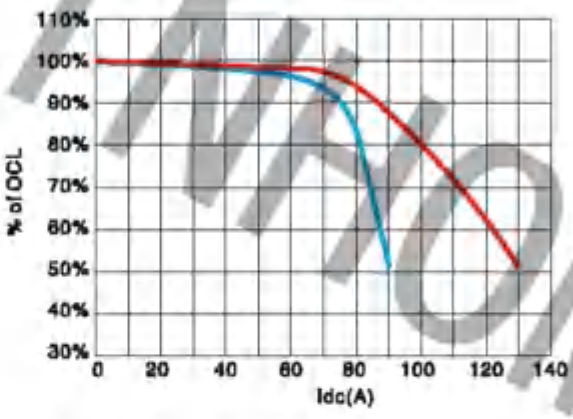
HCB1107 SERIES

INDUCTANCE CHARACTERISICS:

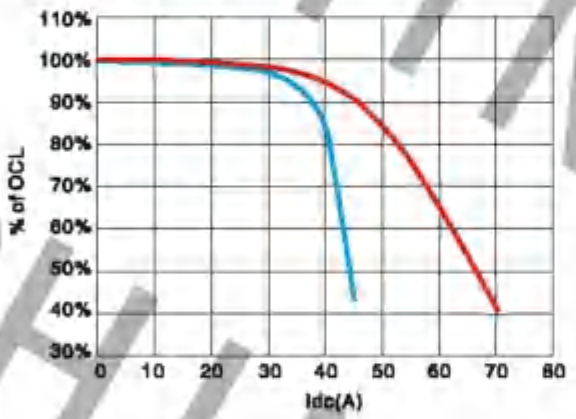
HCB1107RX-R12K



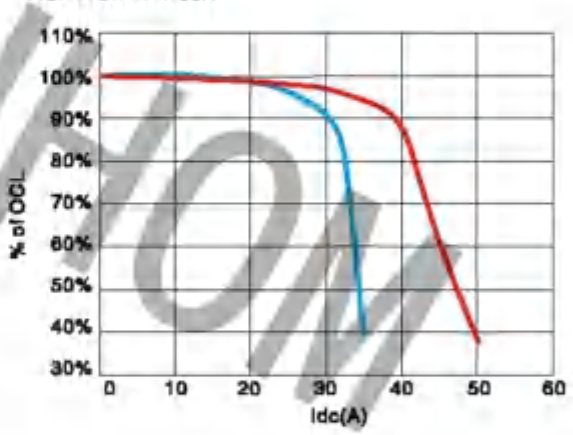
HCB1107RX-R15K



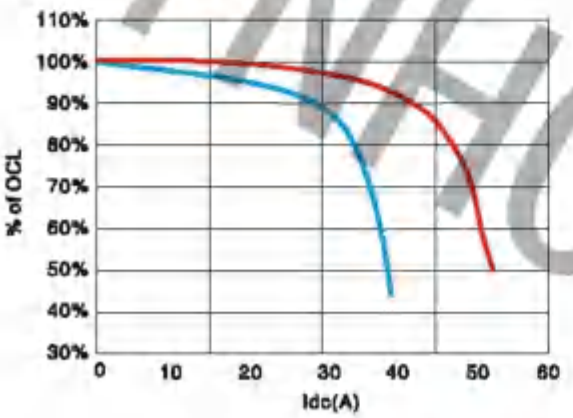
HCB1107RX-R23K



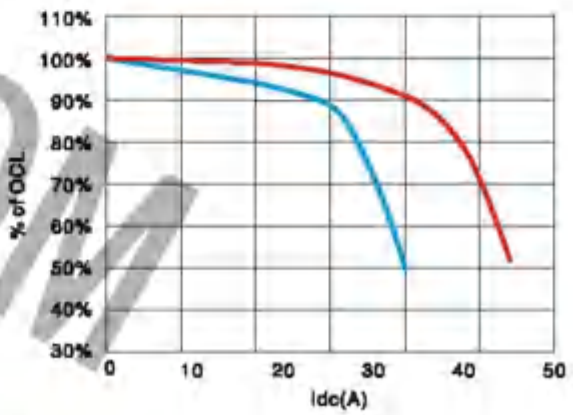
HCB1107RX-R30K



HCB1107RX-R40K



HCB1107RX-R51K



+25℃ +125℃

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

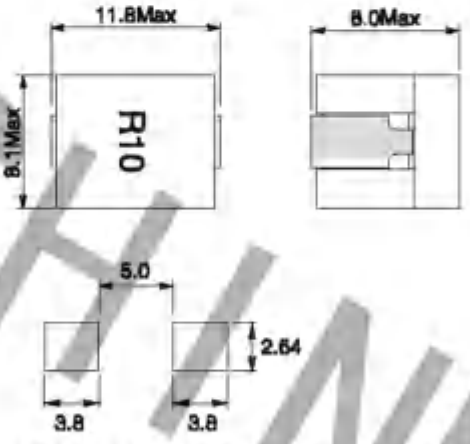
APPLICATIONS:

- 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) ± 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℃ (mΩ)
HCB1206R1-R15K	150	114	50	85	72	0.29±5%
HCB1206R1-R18K	180	137	50	72	63	0.29±5%
HCB1206R1-R21K	210	160	50	65	55	0.29±5%
HCB1206R1-R23K	230	176	50	61	50	0.29±5%
HCB1206R1-R25K	250	191	50	55	44	0.29±5%

DIMENSIONS(mm) :



Recommended pad layout

SCHEMATIC :

NOTES:

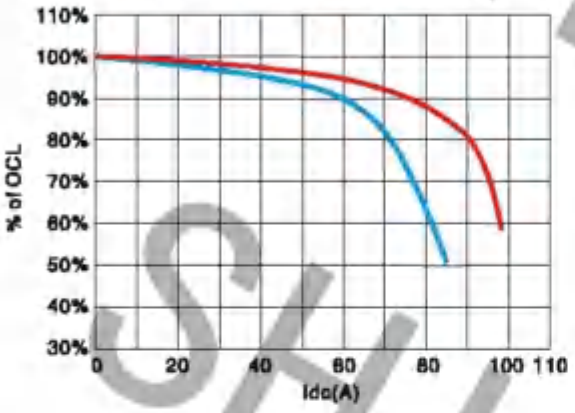
- Test Frequency : 100KHz / 0.1V@25℃
- Irms: DC current for an approximate temperature rise of 40℃ without core loss
- Isat1: Peak current for approximately 20% rolloff at +25℃
- Isat2: Peak current for approximately 20% rolloff at +125℃
- Operating temperature: -40℃ to +125℃(ambient plus self-temperature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

HIGH CURRENT POWER INDUCTORS

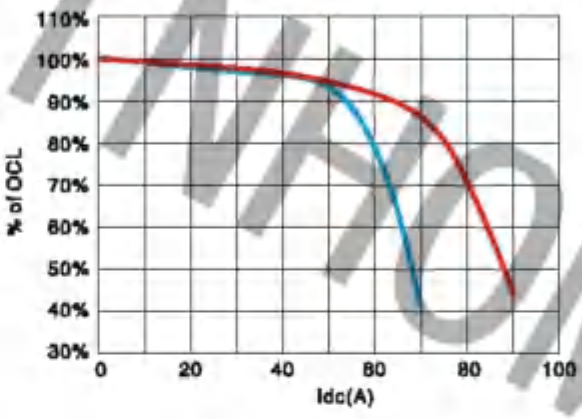
HCB1208 SERIES

INDUCTANCE CHARACTERISICS:

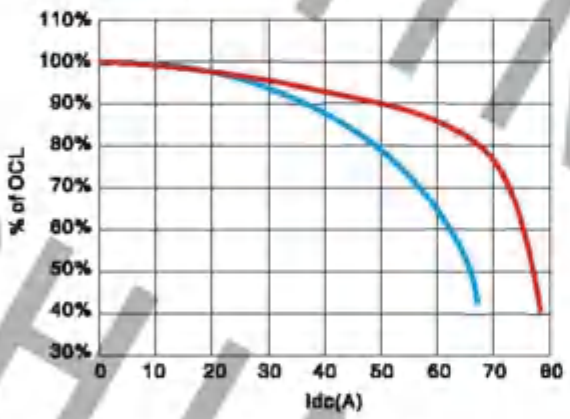
HCB1208R1-R15K



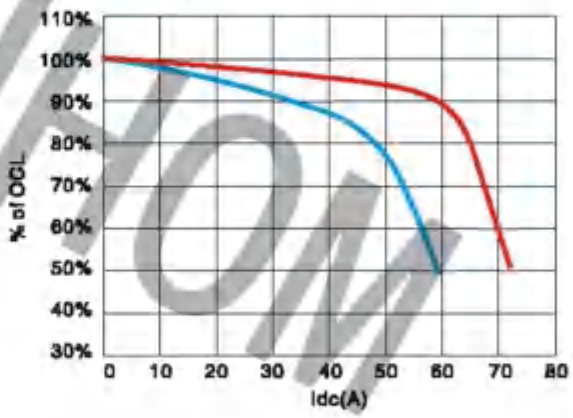
HCB1208R1-R18K



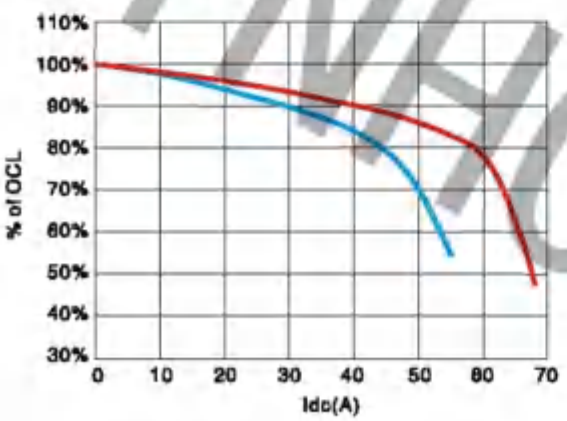
HCB1208R1-R21K



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

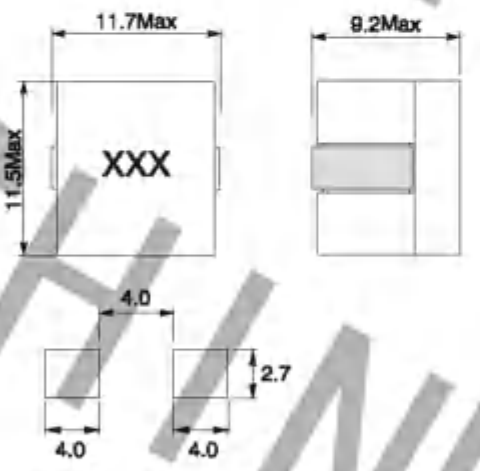
APPLICATIONS:

- 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) ± 15% @0Adc	Inductance (nH)Min @Isat1	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat(A)	DCR@25℃ (mΩ)
HCB1211R1-R23K	230	184	40	60	0.3±7%
HCB1211R1-R32K	320	256	40	45	0.3±7%
HCB1211R1-R38K	380	304	40	40	0.3±7%
HCB1211R1-R46K	460	368	40	32	0.3±7%
HCB1211R1-R54K	540	432	40	26	0.3±7%

DIMENSIONS(mm) :



Recommended pad layout

SCHEMATIC :

NOTES:

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

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

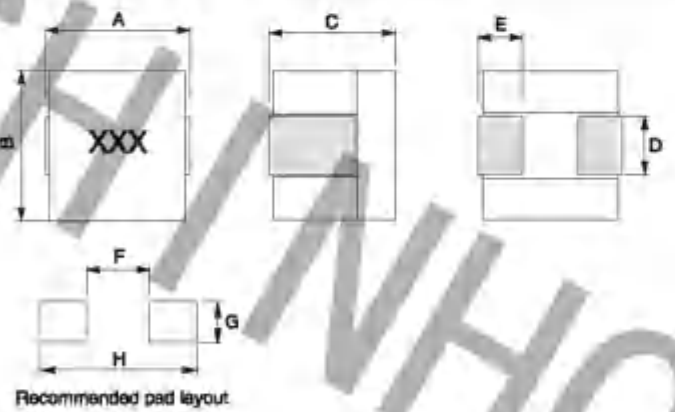
APPLICATIONS:

- 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) ± 15% @0Adc	Inductance (nH)Min @Isat1	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat(A)	DCR@25℃ (mΩ)
HCB1313R1-R22K	220	176	50	40	0.155±10%
HCB1313R1-R28K	280	224	50	30	0.155±10%
HCB1313R1-R31K	310	248	50	24	0.155±10%
HCB1313R1-R40K	400	320	50	18	0.155±10%
HCB1313R1-R52K	520	416	50	13	0.155±10%
HCB1313R2-R21K	210	168	45	71	0.32±9.4%
HCB1313R2-R26K	260	208	45	60	0.32±9.4%
HCB1313R2-R32K	320	256	45	50	0.32±9.4%
HCB1313R2-R44K	440	352	45	35	0.32±9.4%
HCB1313R2-R50K	500	400	45	28	0.32±9.4%

DIMENSIONS(mm) :



Recommended pad layout

SCHEMATIC :

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℃
- Irms: DC current for an approximate temperature rise of 40℃ without core loss
- Isat: Peak current for approximately 20% rolloff at +25℃
- Operating temperature: -40℃ to +125℃(ambient plus self-temperature rise)
- Storage temperature: -40℃ to +125℃

HIGH CURRENT POWER INDUCTORS

HCB1413 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 300nH to 660nH
- Current range from 24A to 60A
- Ferrite core material

OPTIONS:

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

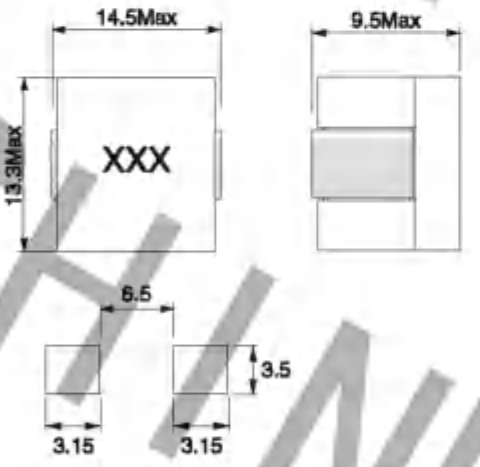
APPLICATIONS:

- 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:

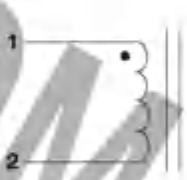
Part Number	Inductance (nH) ± 15% @0Adc	Inductance (nH)Min @Isat	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat(A)	DCR@25℃ (mΩ)
HCB1413R1-R30K	300	240	45	60	0.25±7%
HCB1413R1-R36K	360	288	45	52	0.25±7%
HCB1413R1-R45K	450	360	45	43	0.25±7%
HCB1413R1-R53K	530	424	45	34	0.25±7%
HCB1413R1-R68K	660	544	45	24	0.25±7%

DIMENSIONS(mm) :



Recommended pad layout

SCHEMATIC :



NOTES:

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

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

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

Applications

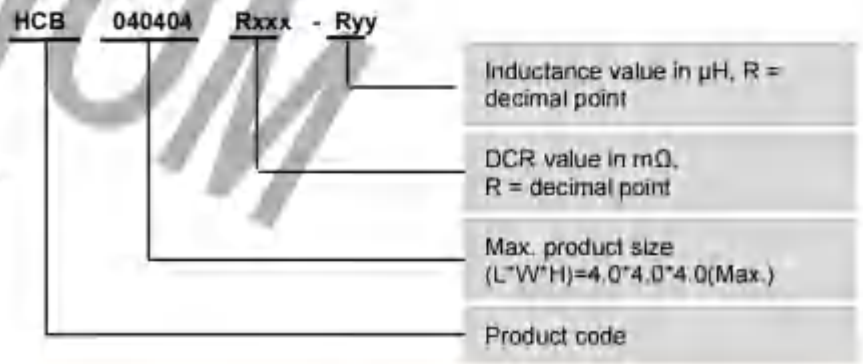
- Servers
- Multi-phase and Vcore regulators
- Voltage Regulator Modules (VRMs)
  - Server and desktop
  - Central processing unit (CPU)
  - Graphics processing unit (GPU)
  - Specific integrated circuit (ASIC)
  - High power density
- Notebook regulators
- Battery power systems
- Graphics cards

Product Specifications

Part Number[5]	OCL[1] (nH) ±15%	Irms[2] (Amps)	Isat[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

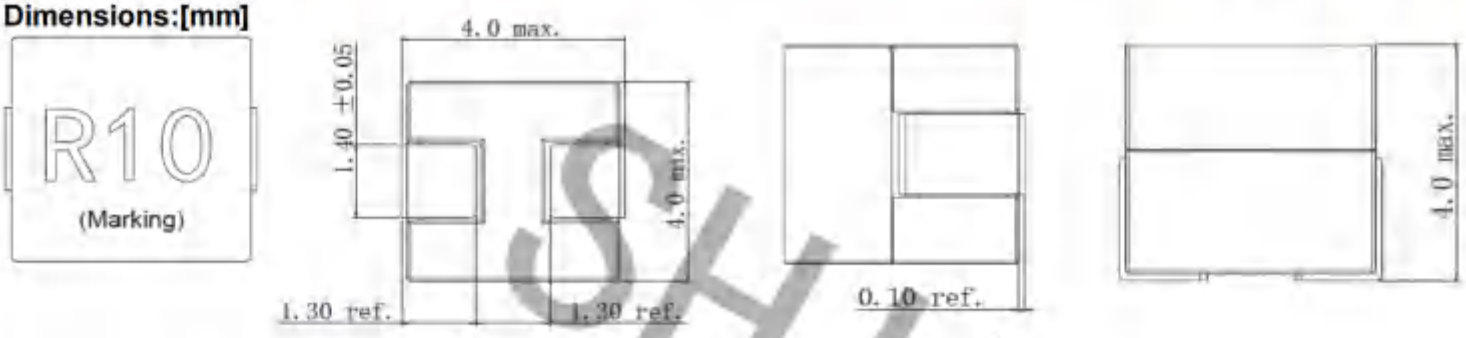
Notes:

1. Open Circuit Inductance (OCL) Test Parameters: 100 kHz, 1 Vrms,0.0 Adc, +25 °C
2. Irms: 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. Isat : Peak current for approximately 20% rolloff @+25 °C
4. Measurement Equipment: WK3260B+WK3265B
5. Part Number Definition:



Technical Data HCB040404R32 Series

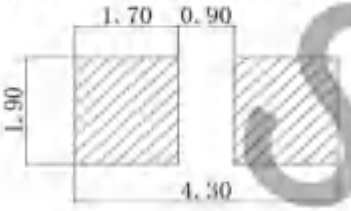
Dimensions:[mm]



Product Marking:

Part Code	Ryy
Date Code	YYWW

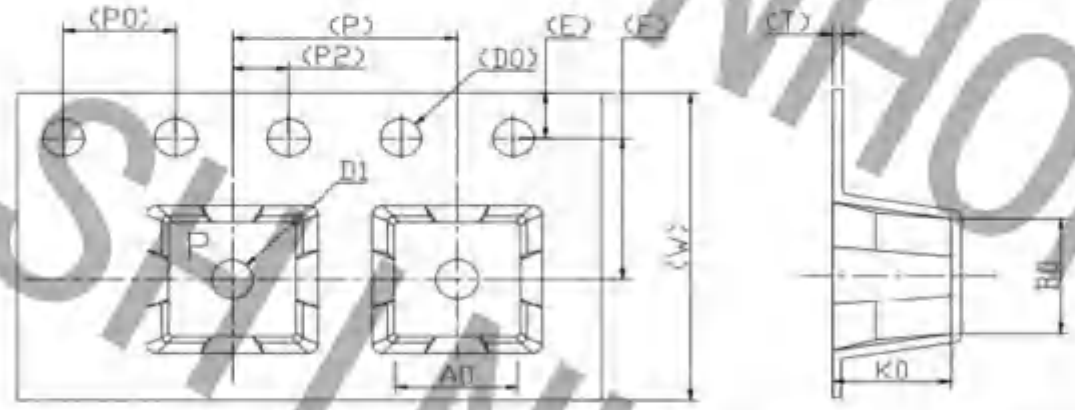
Recommended Pad Layout:[mm]



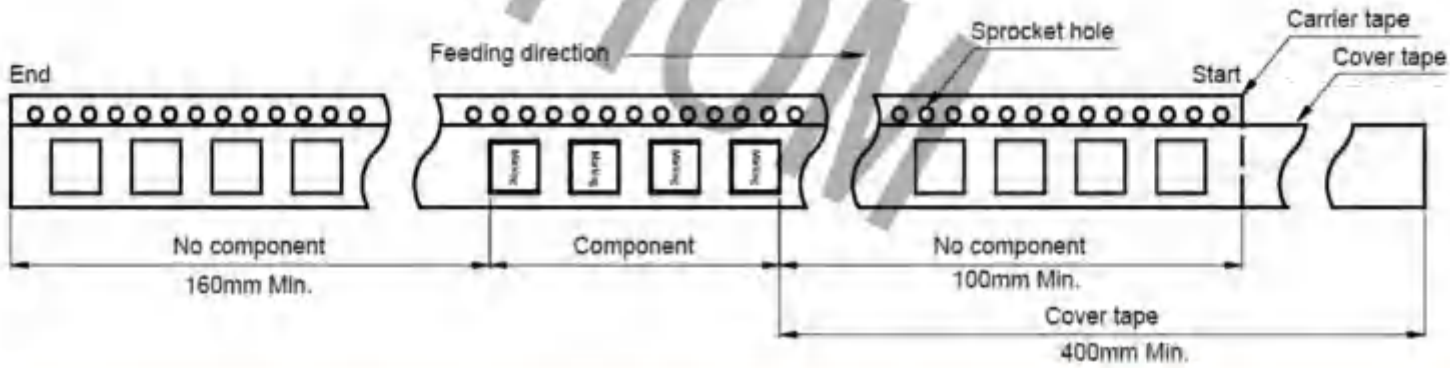
Schematic:

Packaging Information:[mm]

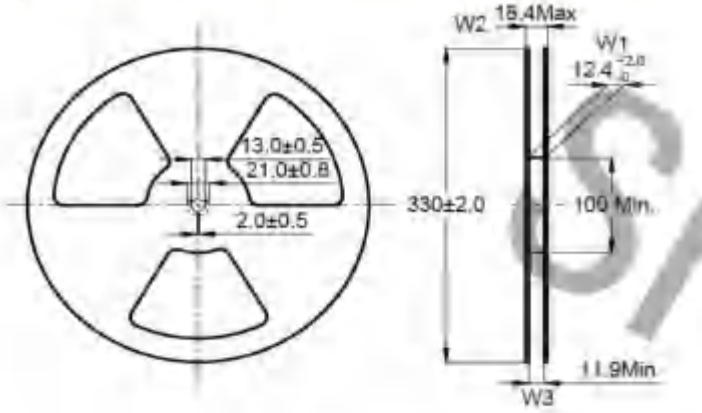
Tape Dimensions



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

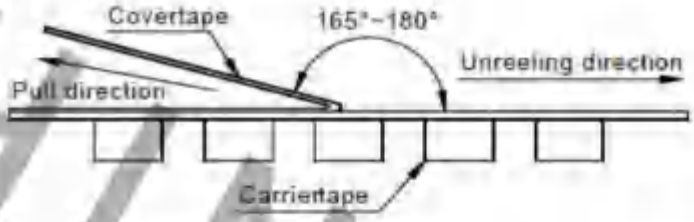


Reel Dimensions



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:

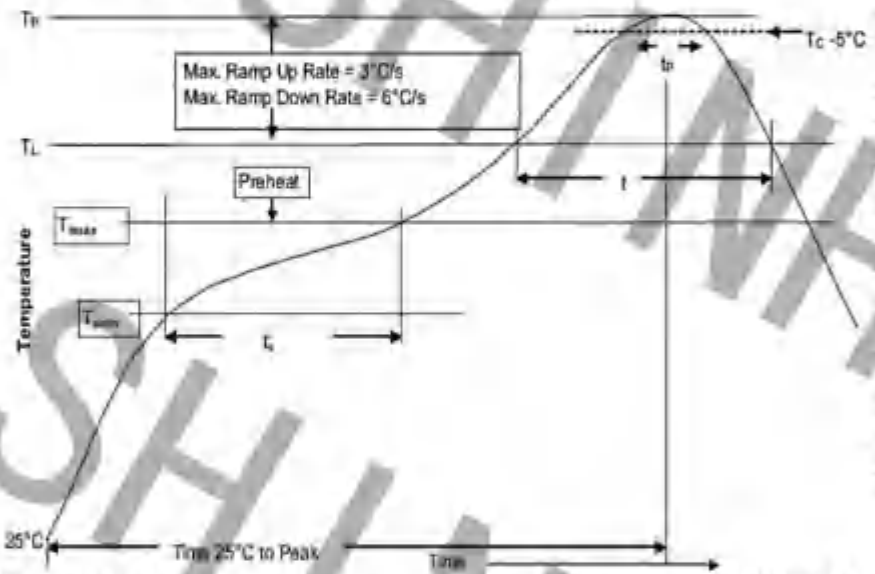


Table 1 - Standard SnPb Solder (T_C)

Package Thickness	Volume mm3 <350	Volume mm3 ≥350
<2.5mm	235°C	220°C
≥2.5mm	220°C	220°C

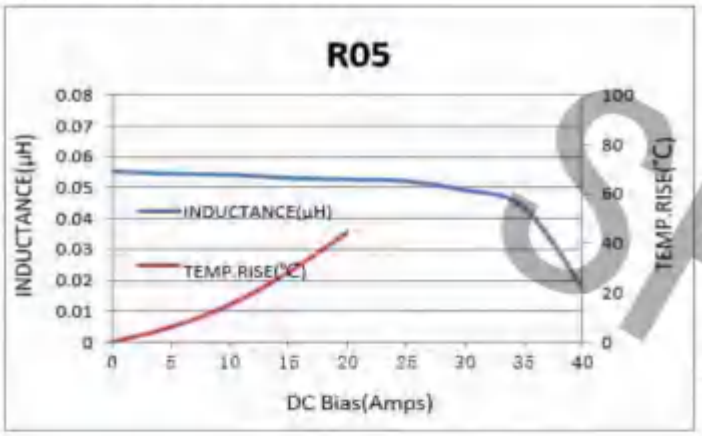
Table 2 - Lead (Pb) Free Solder (T_C)

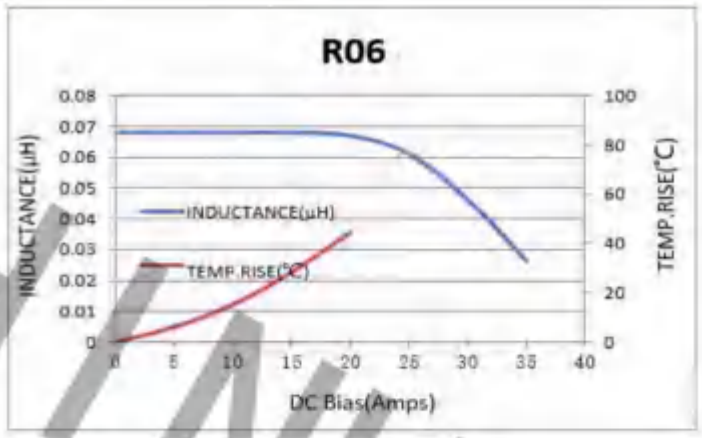
Package Thickness	Volume mm³ <350	Volume mm³ 350 - 2000	Volume mm³ >2000
<1.6mm	260°C	260°C	260°C
1.6 – 2.5mm	260°C	250°C	245°C
>2.5mm	250°C	245°C	245°C

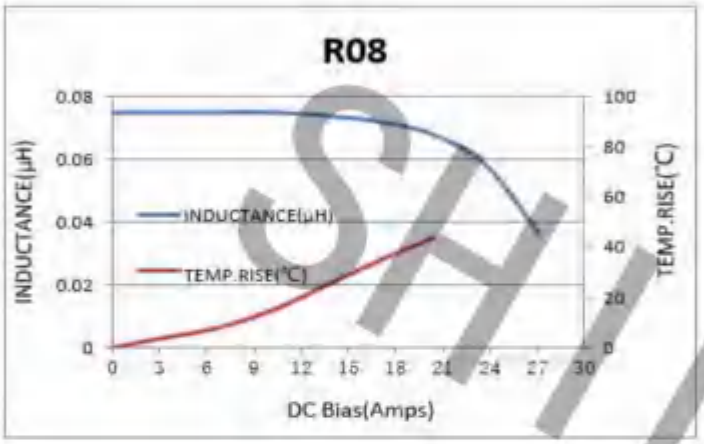
Profile Feature		Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak	• Temperature min. (T_{smin})	100°C	150°C
	• Temperature max. (T_{smax})	150°C	200°C
	• Time (T_{smin} to T_{smax}) (t_s)	60-120 Seconds	60-120 Seconds
Average ramp up rate T_{smax} to T_p		3°C/ Second Max.	3°C/ Second Max.
Liquidous temperature (T_L) Time at liquidous (t_L)		183°C 60-150 Seconds	217°C 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.

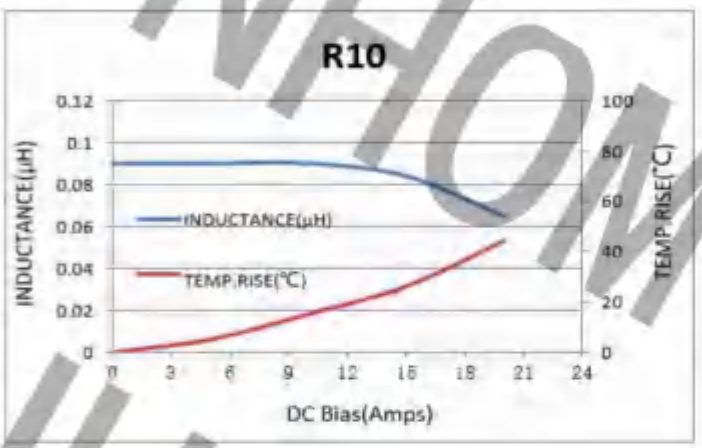
* Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.
** Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

Inductance Characteristics:









Low Profile, High Current Power Inductors

Features

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

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

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%	Irms[2] (Amps)	Isat[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 Adc, +25 °C
2. Irms: 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. Isat: Peak current for approximately 20% rolloff @+25 °C
4. Measurement Equipment: WK3260B+WK3265B

5. Part Number Definition:

HCB 070705 Rxxx - Ryy

- HCB: Product code
- 070705: Max. product size (L*W*H)=7.0*6.8*5.0(Max.)
- Rxxx: DCR value in mΩ, R = decimal point
- Ryy: Inductance value in µH, R = decimal point

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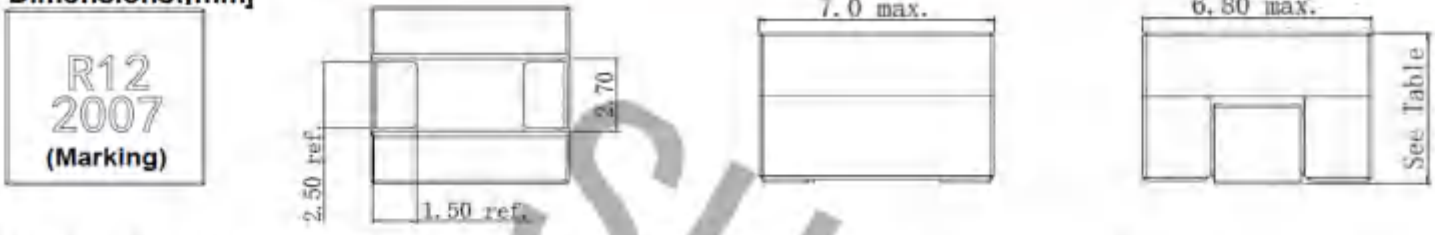
Dimensions:[mm]



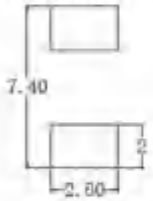
Product Marking:

Part Code	Ryy
Date Code	YYWW

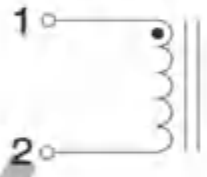
Table

Part Number	Max. Height
HCB070705R32 Type	5.0

Recommended Pad Layout:[mm]

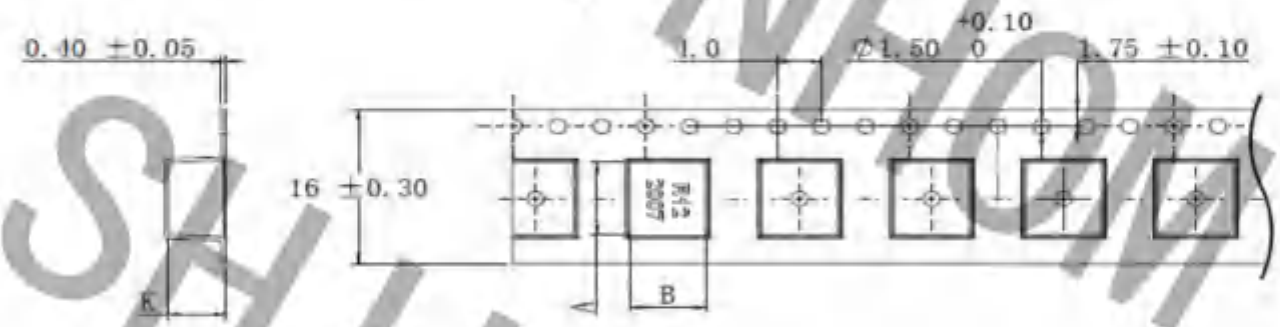


Schematic:

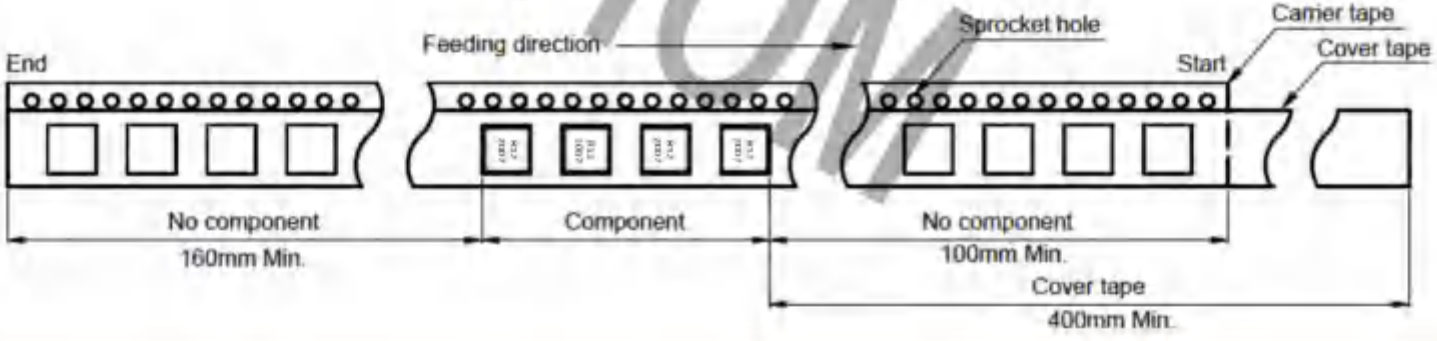


Packaging Information:[mm]

Tape Dimensions

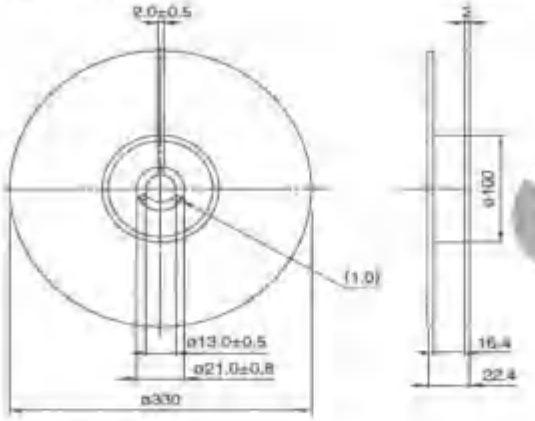


Part Number	A	B	K
HCB070705R32 Type	7.5±0.1	6.9±0.1	5.2±0.1



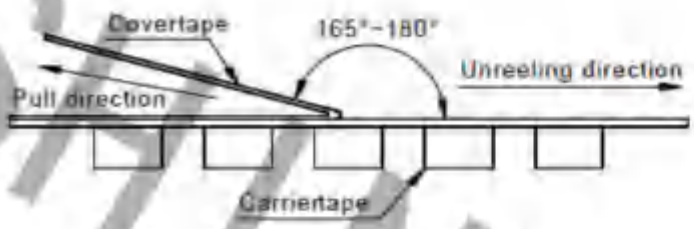
Technical Data — HCB070705R32 Series

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:

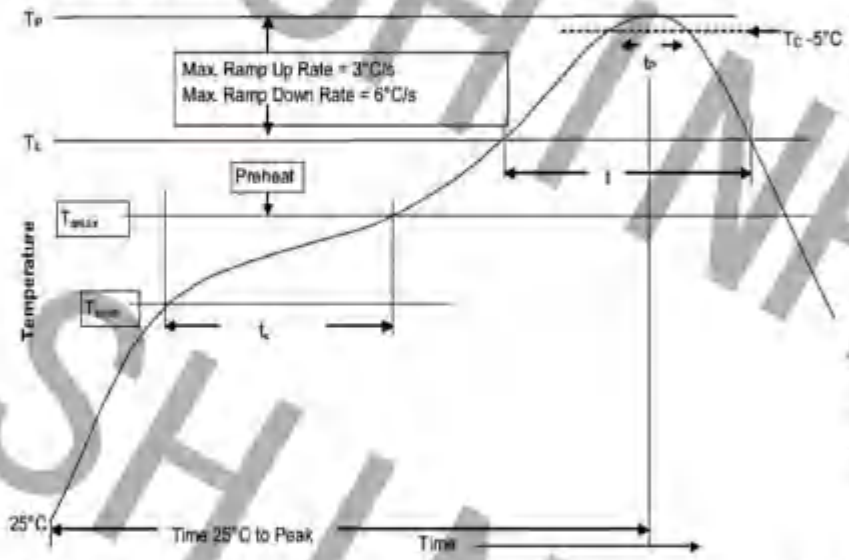


Table 1 - Standard SnPb Solder (T_C)

Package Thickness	Volume mm3 <350	Volume mm2 ≥350
<2.5mm	235°C	220°C
≥2.5mm	220°C	220°C

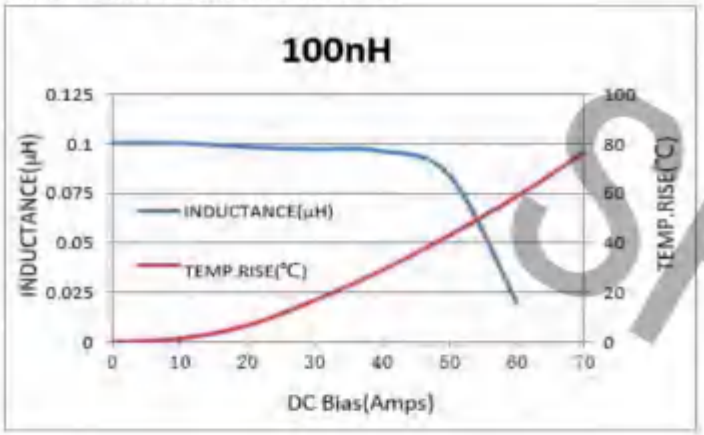
Table 2 - Lead (Pb) Free Solder (T_C)

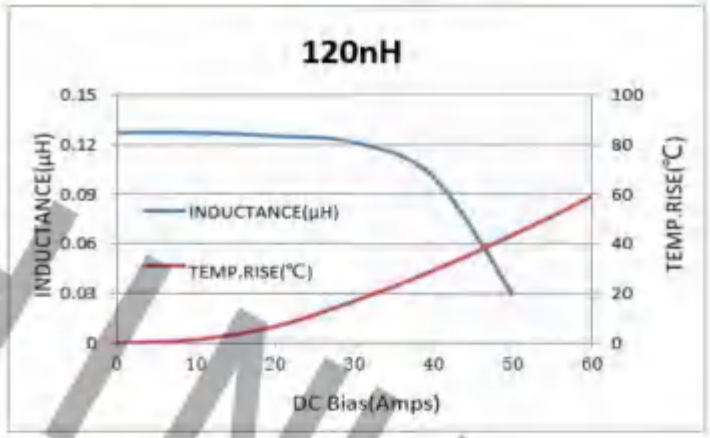
Package Thickness	Volume mm³ <350	Volume mm³ 350 - 2000	Volume mm³ >2000
<1.6mm	260°C	260°C	260°C
1.6 – 2.5mm	260°C	250°C	245°C
>2.5mm	250°C	245°C	245°C

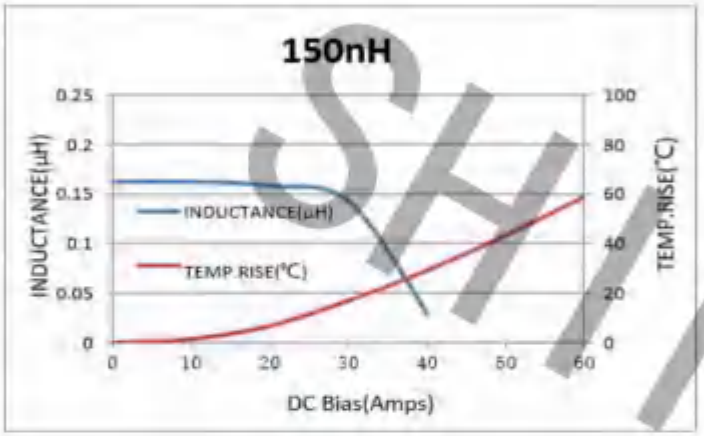
Profile Feature		Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak	• Temperature min. (T_{smin})	100°C	150°C
	• Temperature max. (T_{smax})	150°C	200°C
	• Time (T_{smin} to T_{smax}) (t_s)	60-120 Seconds	60-120 Seconds
Average ramp up rate T_{smax} to T_p		3°C/ Second Max.	3°C/ Second Max.
Liquidous temperature (T_L) Time at liquidous (t_L)		183°C 60-150 Seconds	217°C 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.

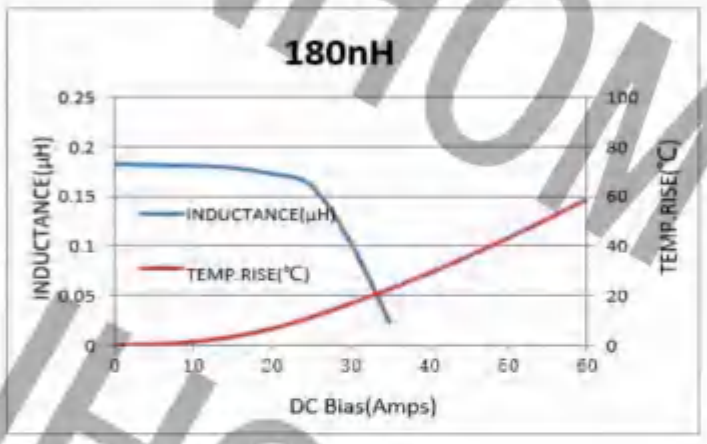
* Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.
** Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

Inductance Characteristics:









Low Profile, High Current Power Inductors

Features

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

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

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%	Irms[2] (Amps)	Isat[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 Adc, +25 °C
2. Irms: 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. Isat : Peak current for approximately 20% rolloff @+25 °C
4. Measurement Equipment: WK3260B+WK3265B

5. Part Number Definition:

HCB 100612 Rxxx - Ryy

- HCB — Product code
- 100612 — Max. product size (L*W*H)=10.0*6.0*12.0(Max.)
- Rxxx — DCR value in mΩ, R = decimal point
- Ryy — Inductance value in μH, R = decimal point

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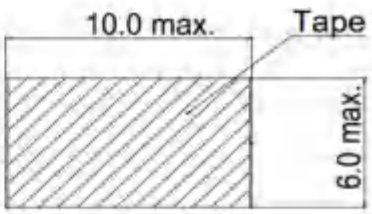
Technical Data — HCB100612R125 Series

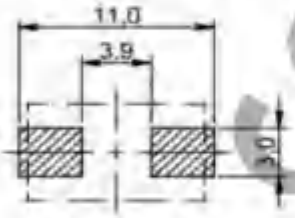
Dimensions:[mm]



Product Marking:

Part Code	Ryy
Date Code	YYWW

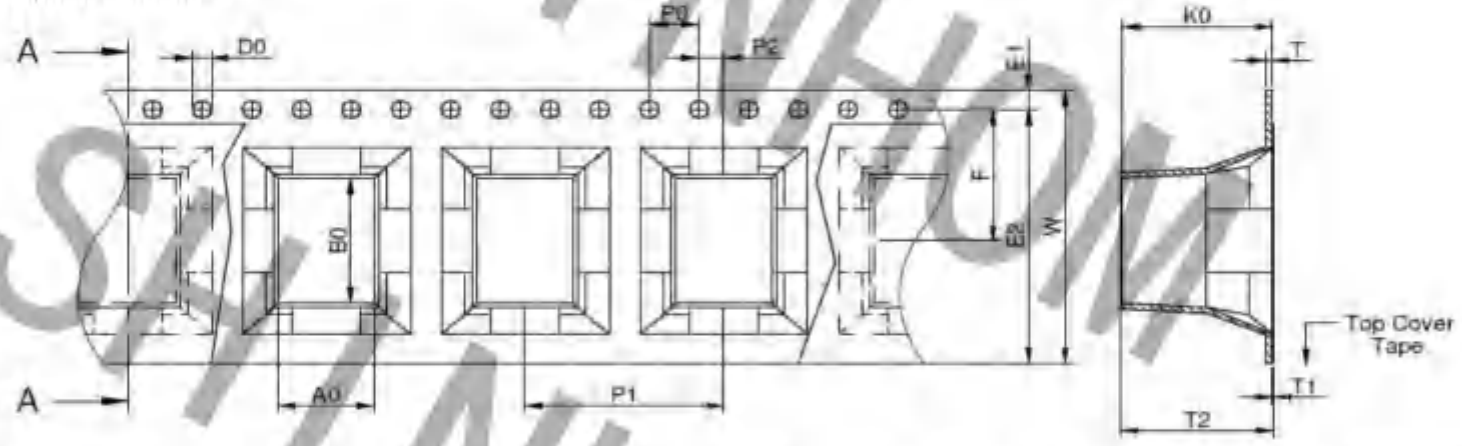
Recommended Pad Layout:[mm]



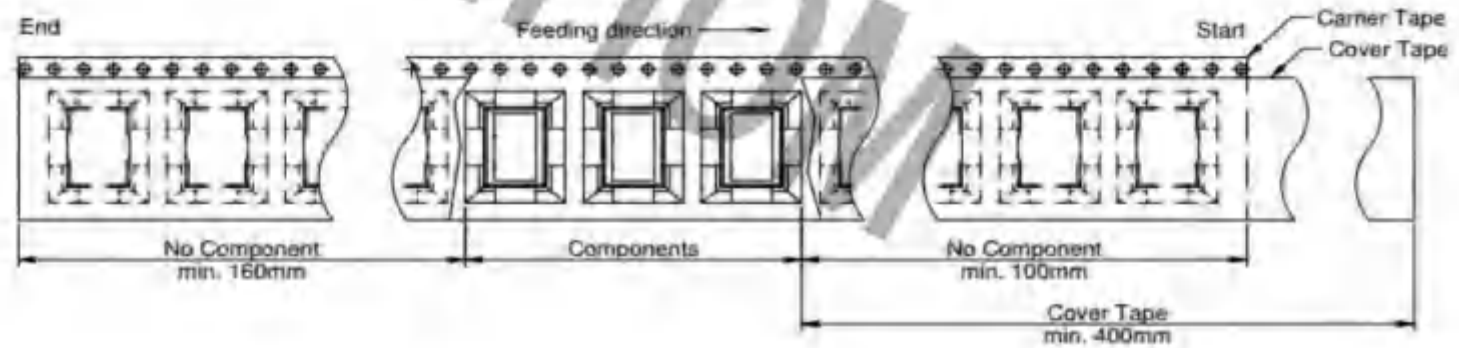
Schematic:

Packaging Information:[mm]

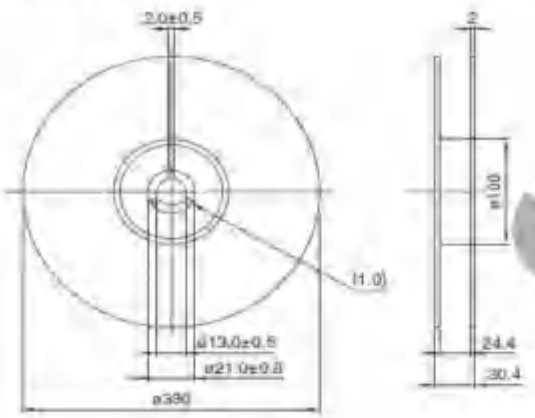
Tape Dimensions



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	24.00	0.50	0.10	12.50	4.00	16.00	2.00	1.50	1.75	22.25	11.50

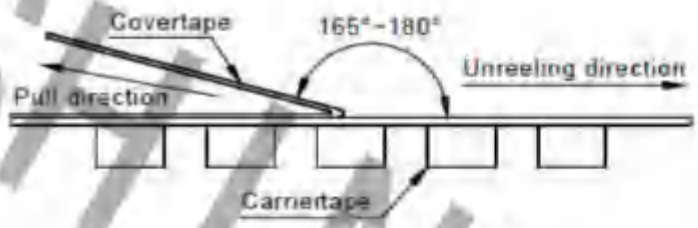


Reel Dimensions



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:

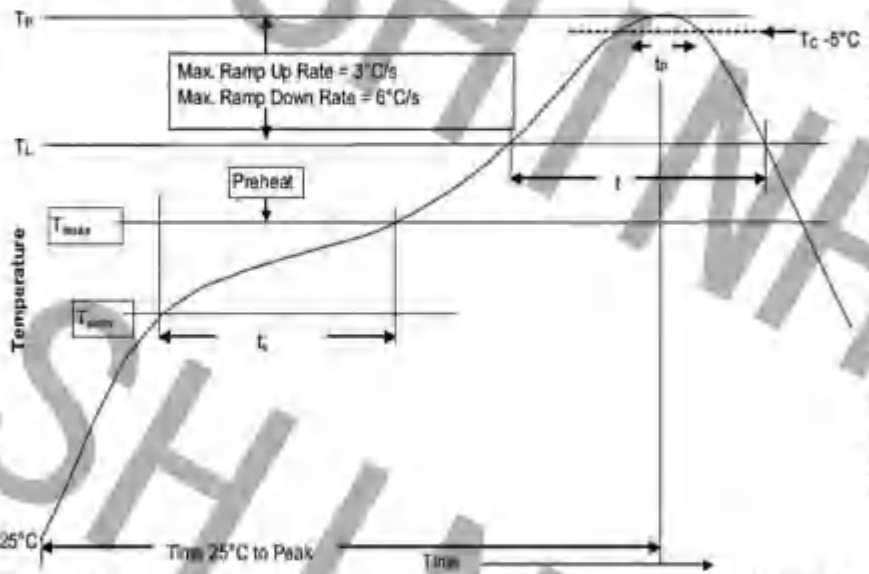


Table 1 - Standard SnPb Solder (T_C)

Package Thickness	Volume mm3 <350	Volume mm3 ≥350
<2.5mm	235°C	220°C
≥2.5mm	220°C	220°C

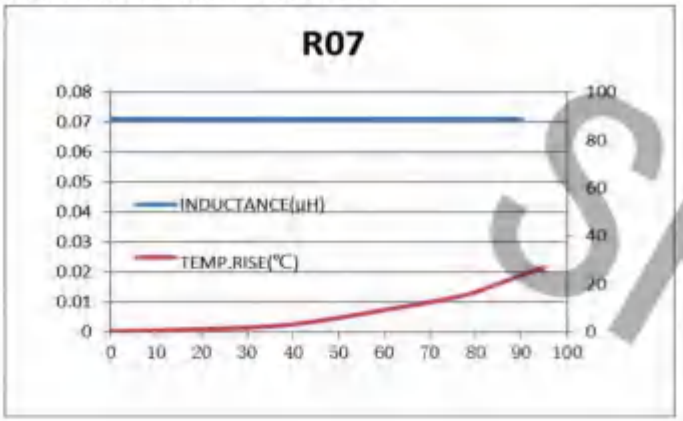
Table 2 - Lead (Pb) Free Solder (T_C)

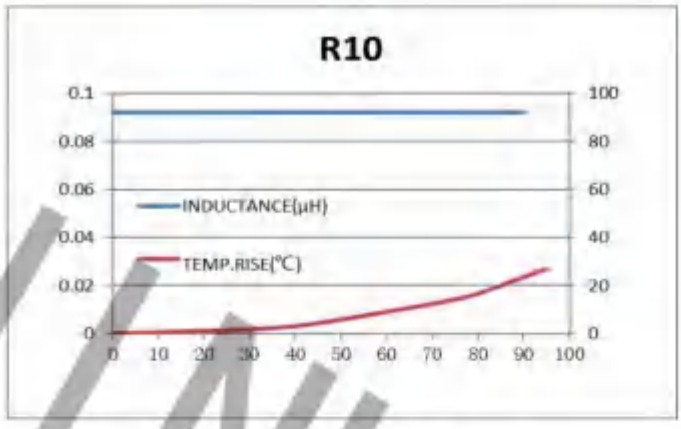
Package Thickness	Volume mm³ <350	Volume mm³ 350 - 2000	Volume mm³ >2000
<1.6mm	260°C	260°C	260°C
1.6 – 2.5mm	260°C	250°C	245°C
>2.5mm	250°C	245°C	245°C

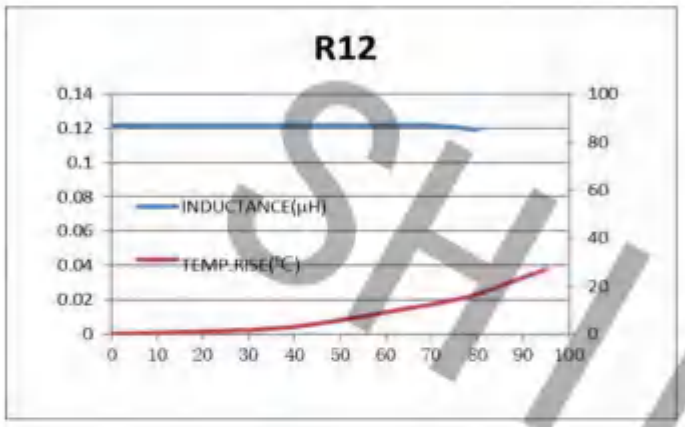
Profile Feature		Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak	• Temperature min. (T_{smin})	100°C	150°C
	• Temperature max. (T_{smax})	150°C	200°C
	• Time (T_{smin} to T_{smax}) (t_s)	60-120 Seconds	60-120 Seconds
Average ramp up rate T_{smax} to T_p		3°C/ Second Max.	3°C/ Second Max.
Liquidous temperature (T_L) Time at liquidous (t_L)		183°C 60-150 Seconds	217°C 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.

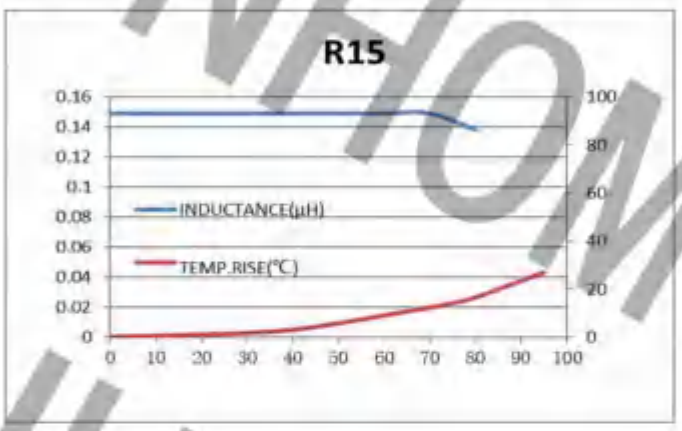
* Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.
** Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

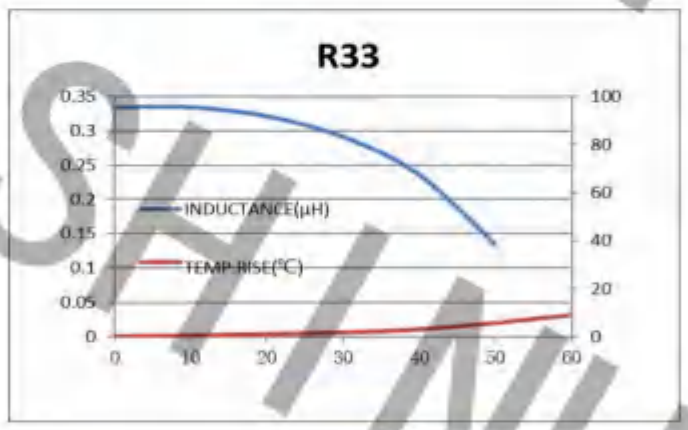
Inductance Characteristics:





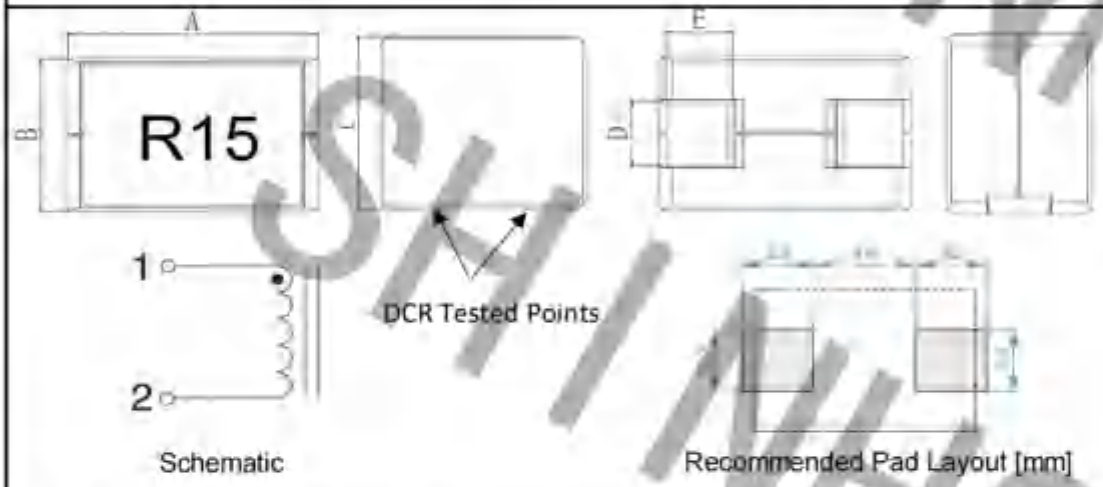






LOW PROFILE, HIGH CURRENT POWER BEAD INDUCTORS

1. SHAPE AND DIMENSIONS



Schematic

Recommended Pad Layout [mm]

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%	Irms[2] (Amps)	Isat[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. Irms: 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. Isat : 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

4. PRODUCT IDENTIFICATION

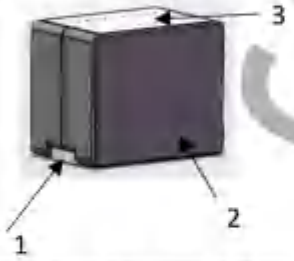
HCB	100709	RXX	-	RXX
1	2	3		4

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

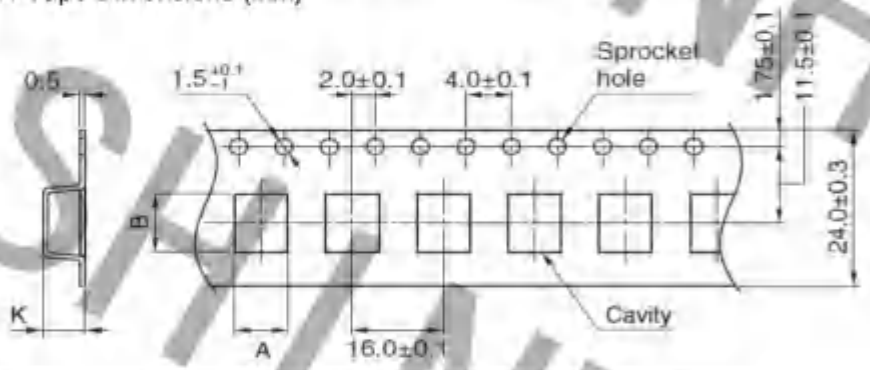
6. CONSTRUCTION AND MATERIAL LIST



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

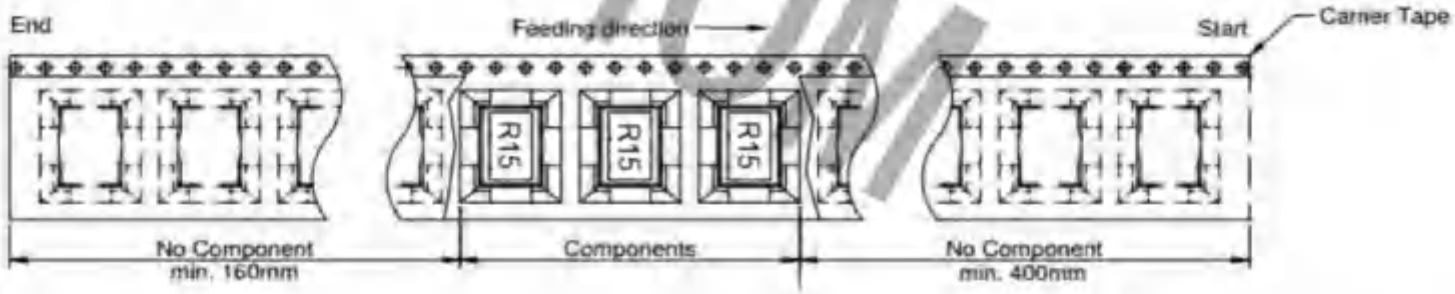
7.PACKAGING INFORMATION

7.1 Tape Dimensions (mm)

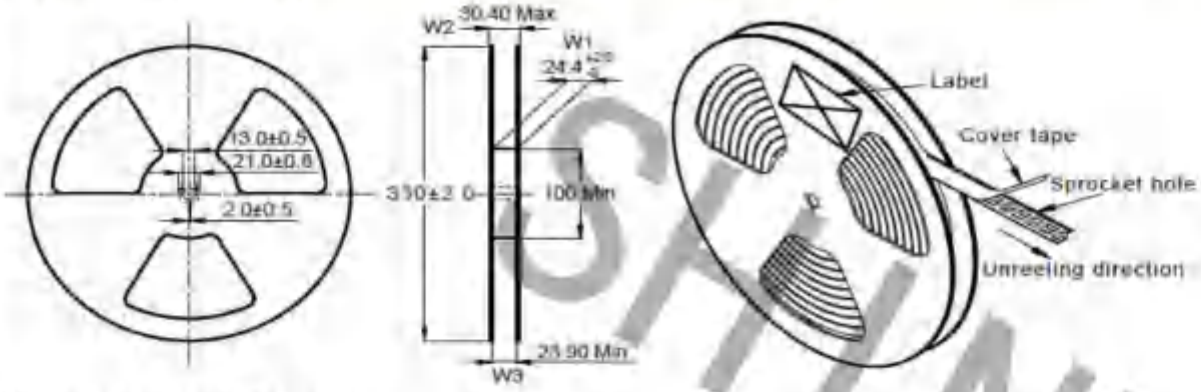


P/N	A(mm)	B(mm)	K(mm)
HCB100709R18 SERIES	7.1±0.1	10.2±0.1	9.2±0.1

7.2 Product Packing in Tape

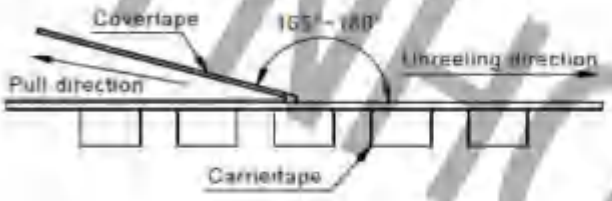


7.3 Reel Dimensions (mm)



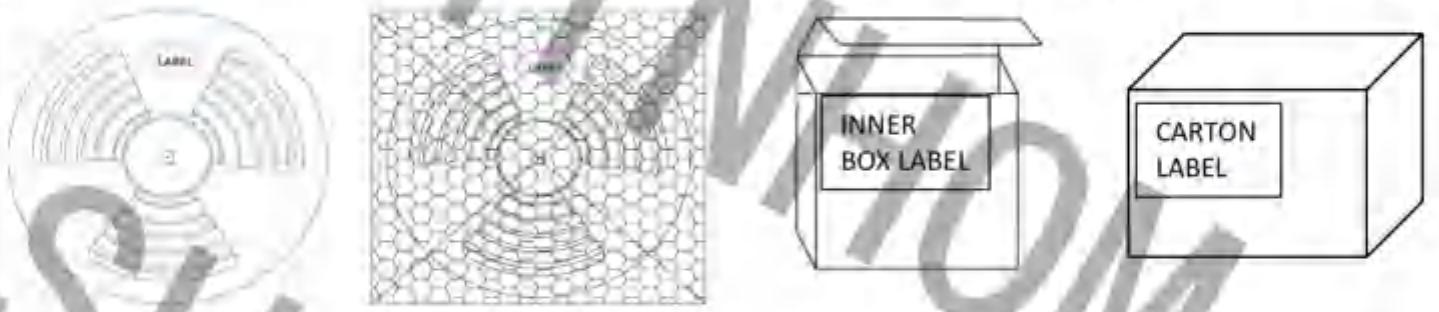
7.4 Cover tape peel off condition

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



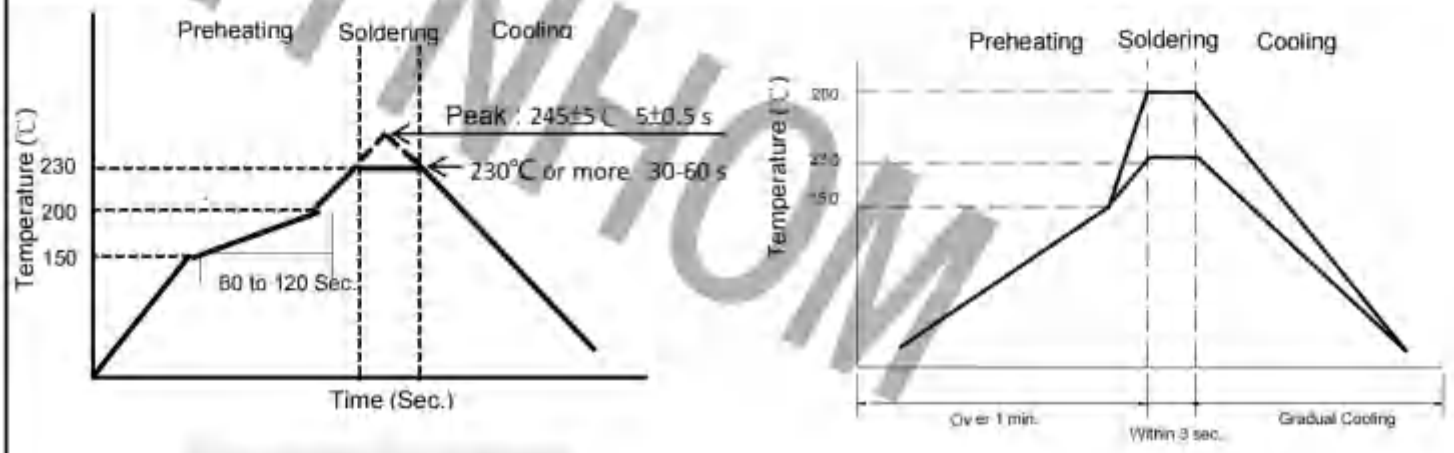
7.5 Packing Quantity

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



REEL 2 REELS IN A PE BAG 1 PE BAG IN A INNER BOX 3 INNER BOXES IN A CARTON

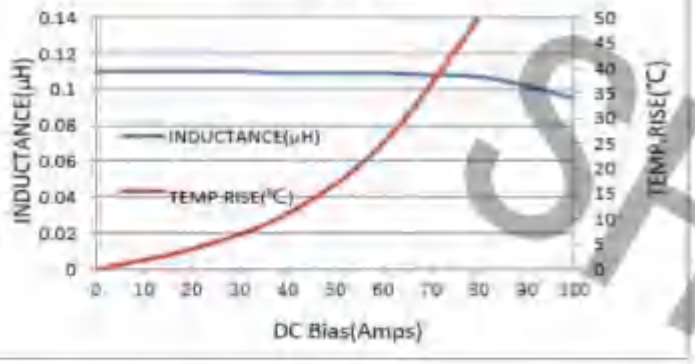
8. RECOMMENDED SOLDERING PROFILE



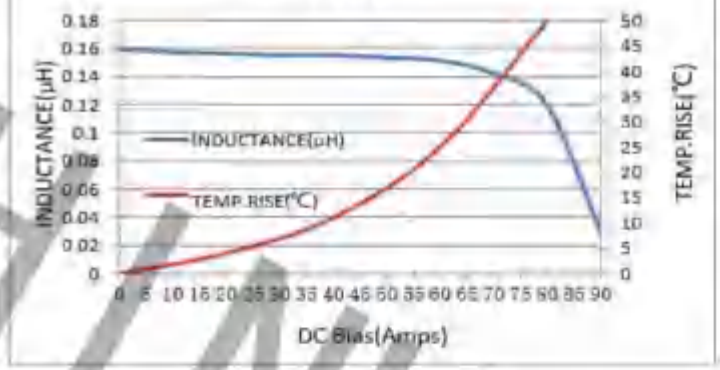
REFLOW SOLDERING HAND SOLDERING

9. INDUCTANCE CHARACTERISTICS

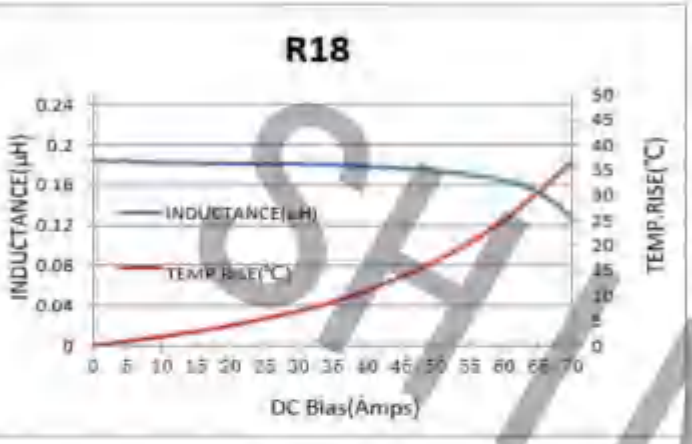
R12



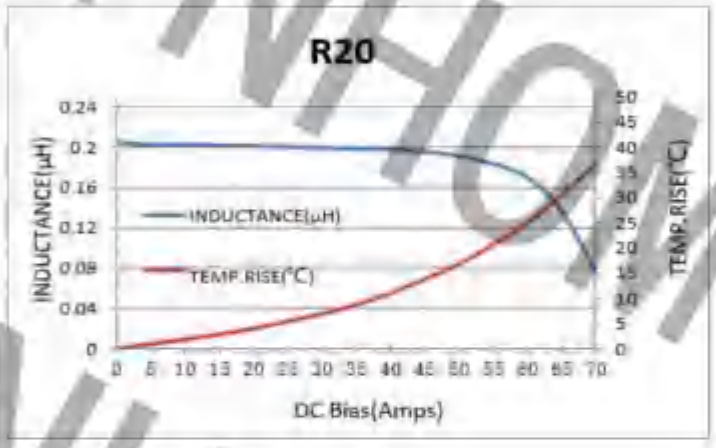
R15



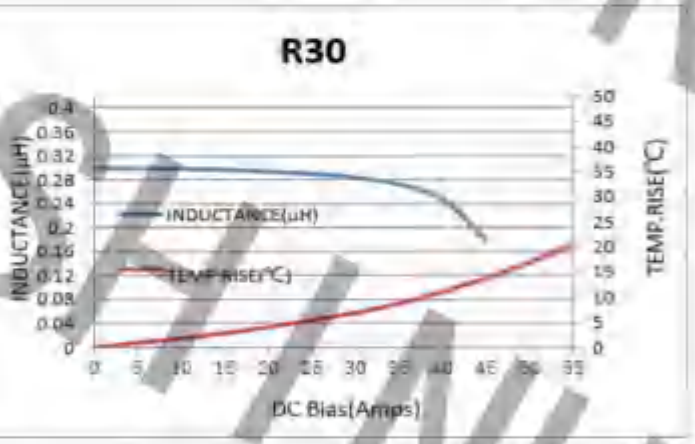
R18



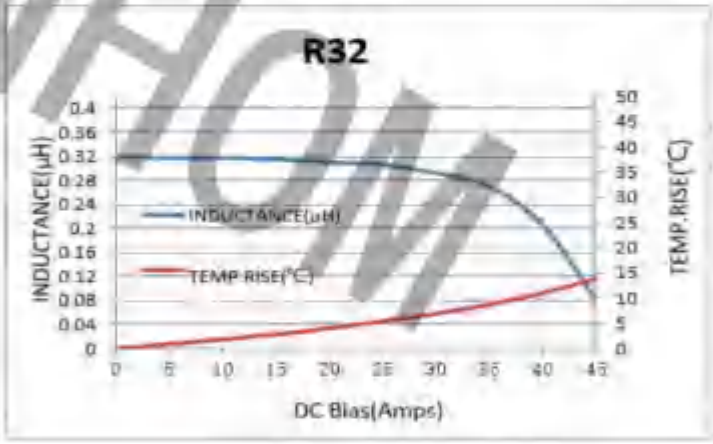
R20



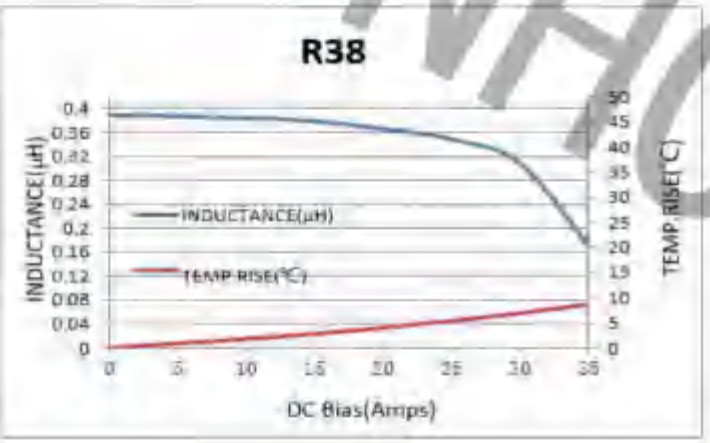
R30



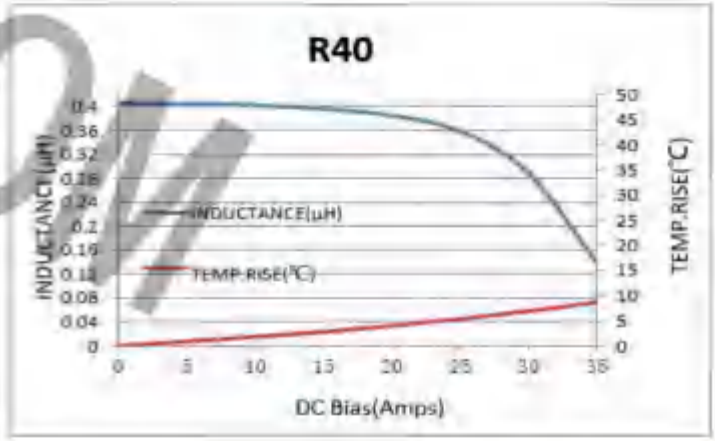
R32



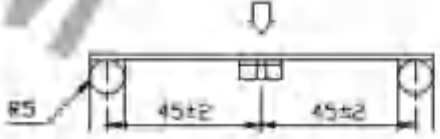
R38



R40

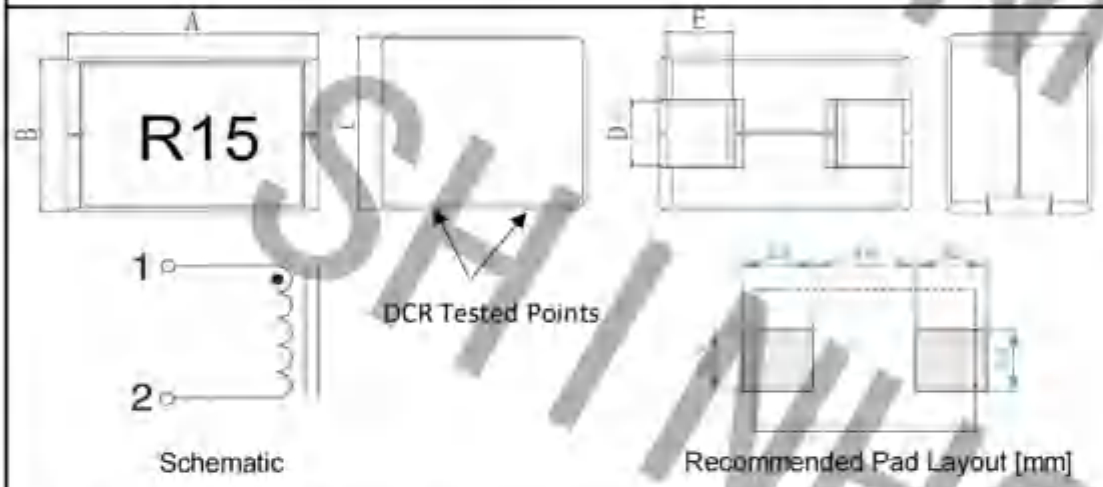


10. RELIABILITY TEST SPECIFICATIONS FOR POWER BEAD INDUCTORS

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±1minutes under room temperature, and test under 125℃±5℃ and 30±2 minutes, finally put 3±1minutes 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 1hour, 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 BEAD INDUCTORS

1. SHAPE AND DIMENSIONS



Schematic

Recommended Pad Layout [mm]

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%	Irms[2] (Amps)	Isat[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. Irms: 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. Isat : 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

4. PRODUCT IDENTIFICATION

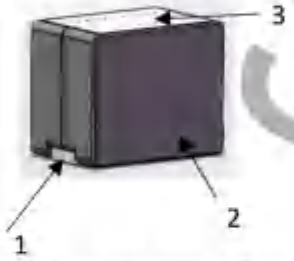
HCB	100709	RXX	-	RXX
1	2	3		4

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

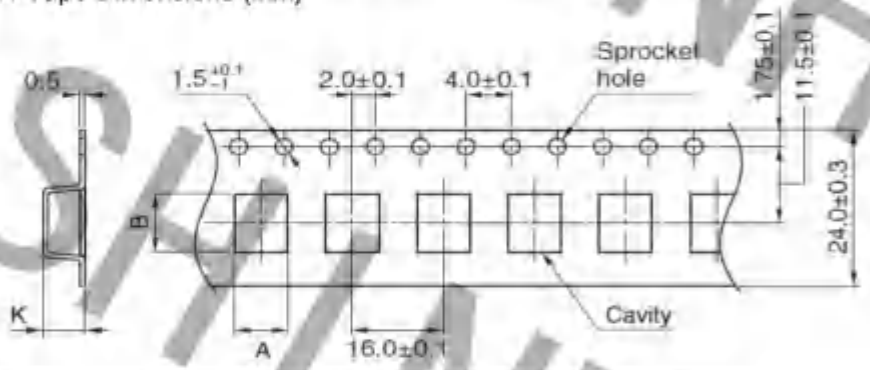
6. CONSTRUCTION AND MATERIAL LIST



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

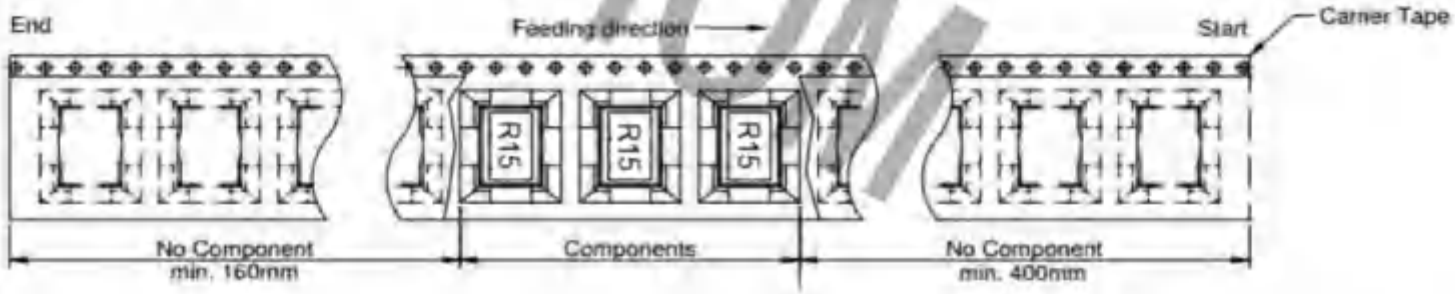
7.PACKAGING INFORMATION

7.1 Tape Dimensions (mm)

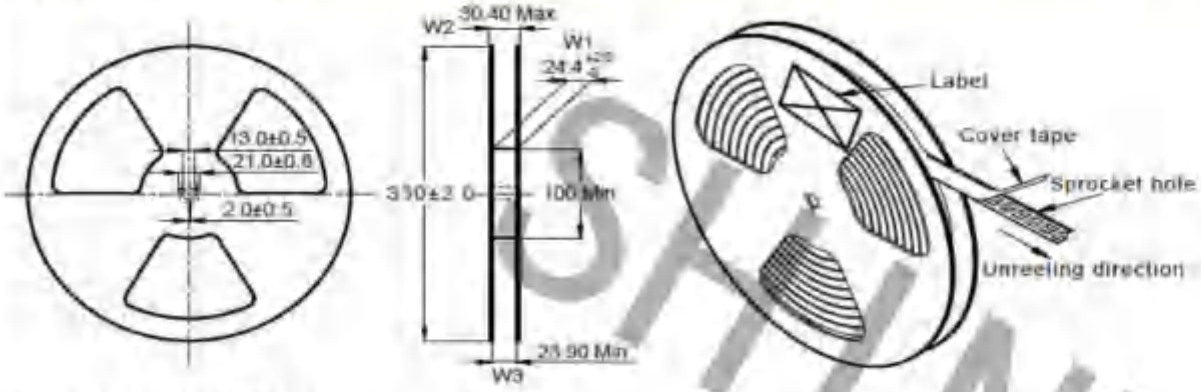


P/N	A(mm)	B(mm)	K(mm)
HCB100709R18 SERIES	7.1±0.1	10.2±0.1	9.2±0.1

7.2 Product Packing in Tape

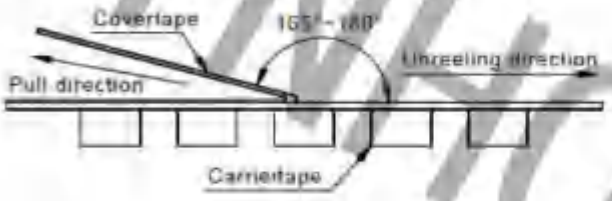


7.3 Reel Dimensions (mm)



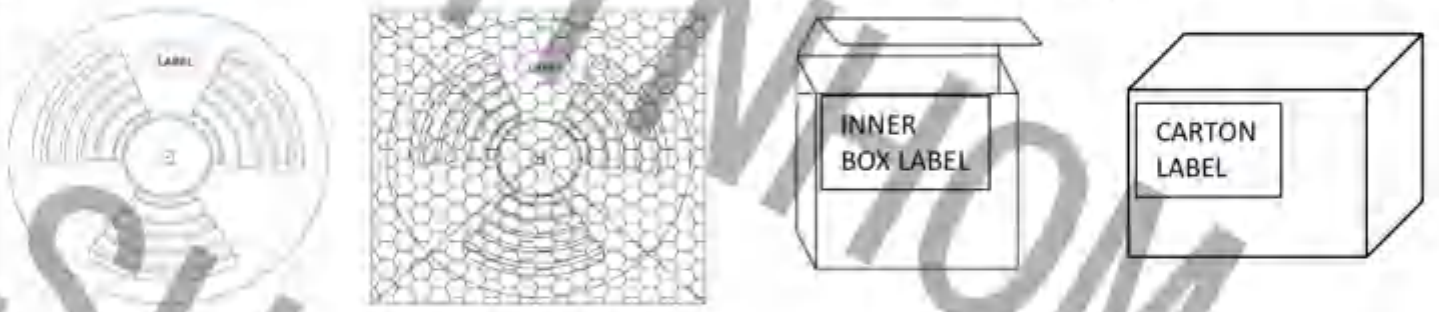
7.4 Cover tape peel off condition

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



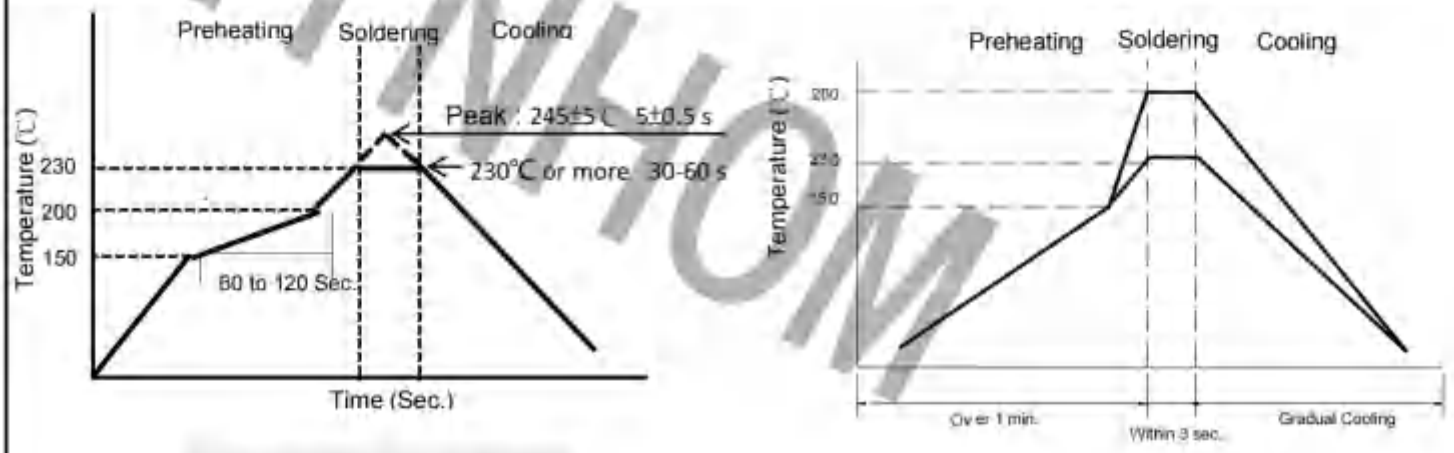
7.5 Packing Quantity

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



REEL 2 REELS IN A PE BAG 1 PE BAG IN A INNER BOX 3 INNER BOXES IN A CARTON

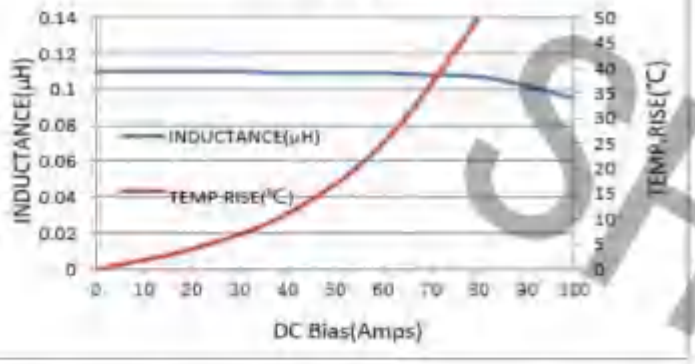
8. RECOMMENDED SOLDERING PROFILE



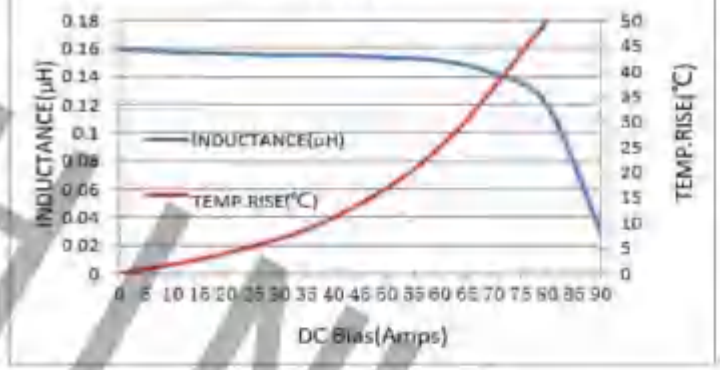
REFLOW SOLDERING HAND SOLDERING

9. INDUCTANCE CHARACTERISTICS

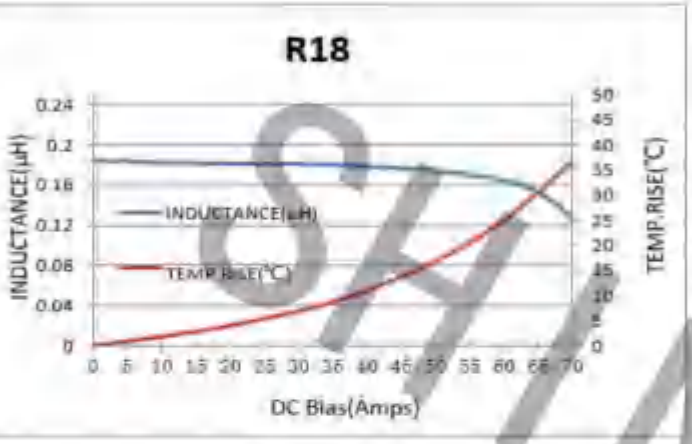
R12



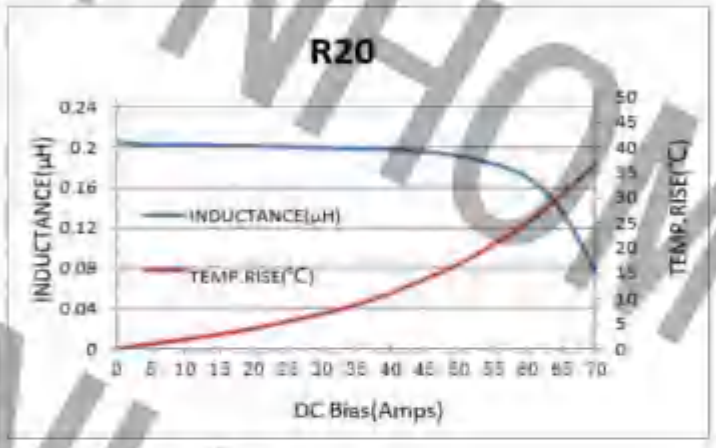
R15



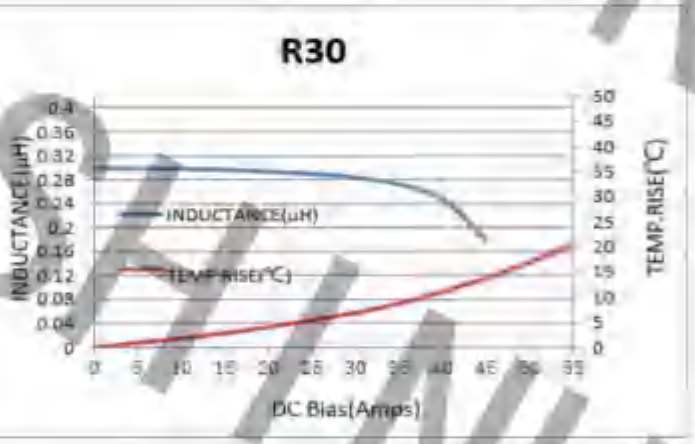
R18



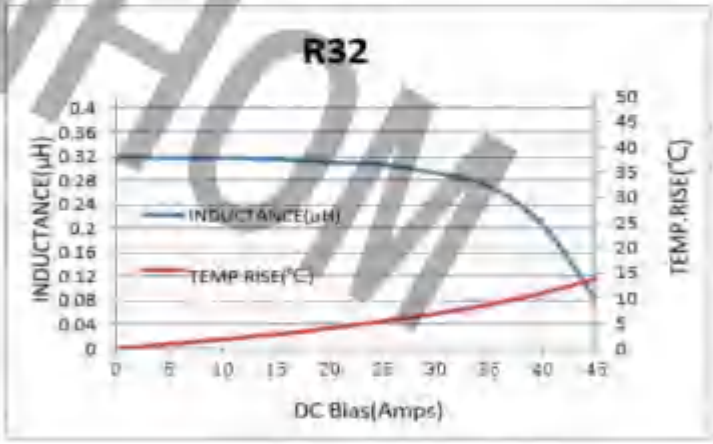
R20



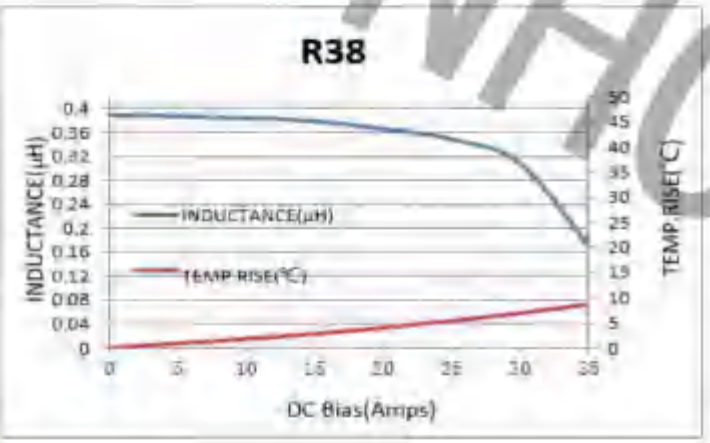
R30



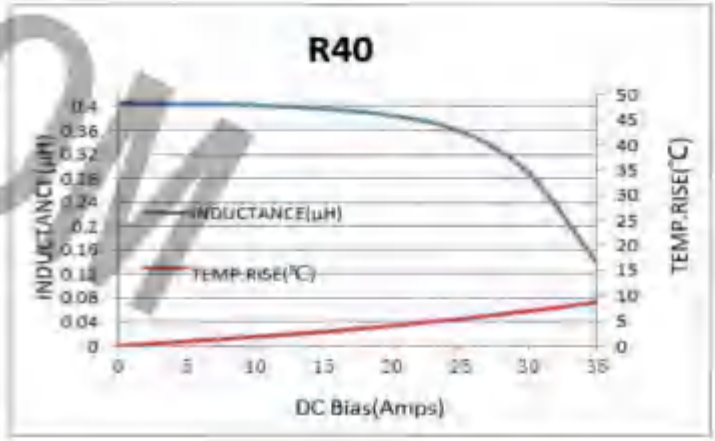
R32



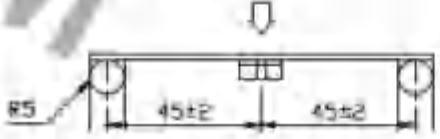
R38



R40

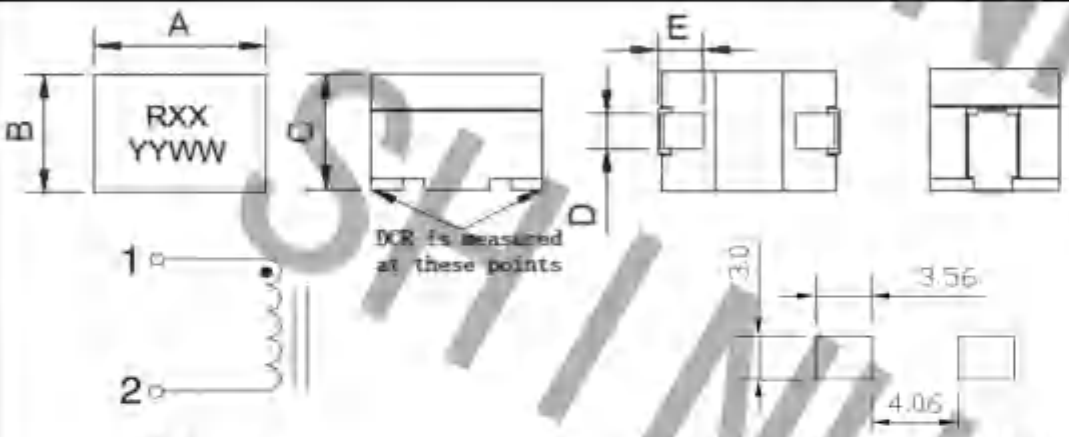


10. RELIABILITY TEST SPECIFICATIONS FOR POWER BEAD INDUCTORS

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±1minutes under room temperature, and test under 125℃±5℃ and 30±2 minutes, finally put 3±1minutes 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 1hour, 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 BEAD INDUCTORS

1. SHAPE AND DIMENSIONS



Schematic

Recommended Pad Layout [mm]

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%	Irms[2] (Amps)	Isat[3] (Amps)	Height[4] (max.)	DCR(mΩ) @ +20 °C
HCB100808AR18-R12	120	70	94	8.0	0.18±6%
HCB100808AR18-R15	150	70	79	8.0	0.18±6%
HCB100808AR18-R18	180	70	65	8.0	0.18±6%
HCB100808AR18-R20	200	70	59	8.0	0.18±6%
HCB100808AR18-R30	300	70	38	8.0	0.18±6%
HCB100808AR18-R32	320	70	35	8.0	0.18±6%
HCB100808AR18-R38	380	70	28	8.0	0.18±6%
HCB100808AR18-R40	400	70	26	8.0	0.18±6%

Notes:

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

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)

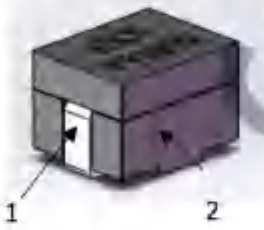
5. PRODUCT MARKING

RXX
YYWW

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

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

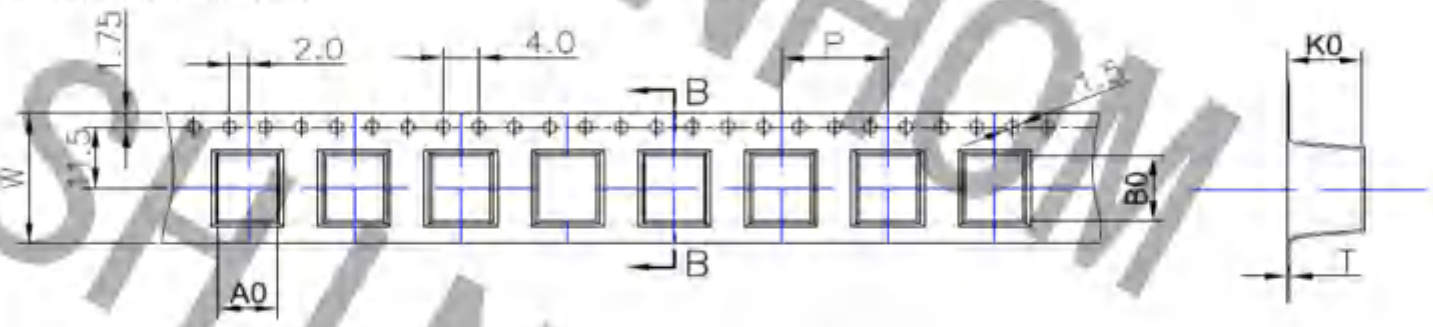
6. CONSTRUCTION AND MATERIAL LIST



No.	Part	Material
1	Clip	C1100
2	Core	Ferrite

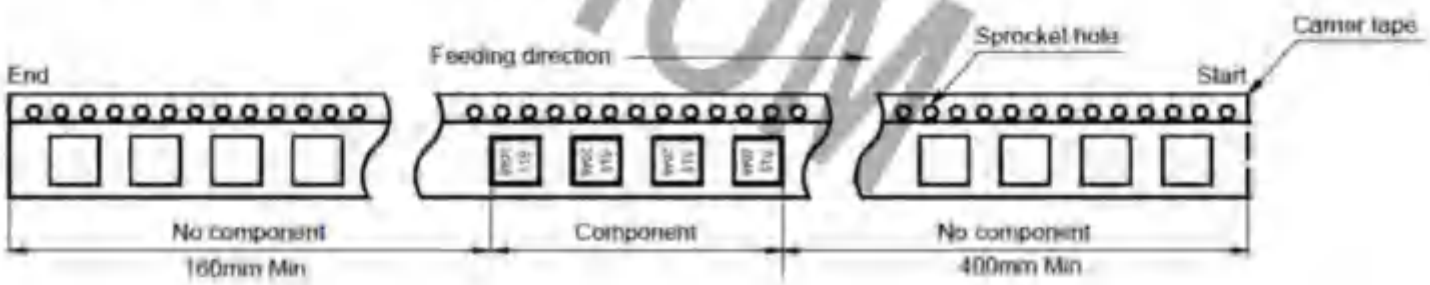
7.PACKAGING INFORMATION

7.1 Tape Dimensions (mm)

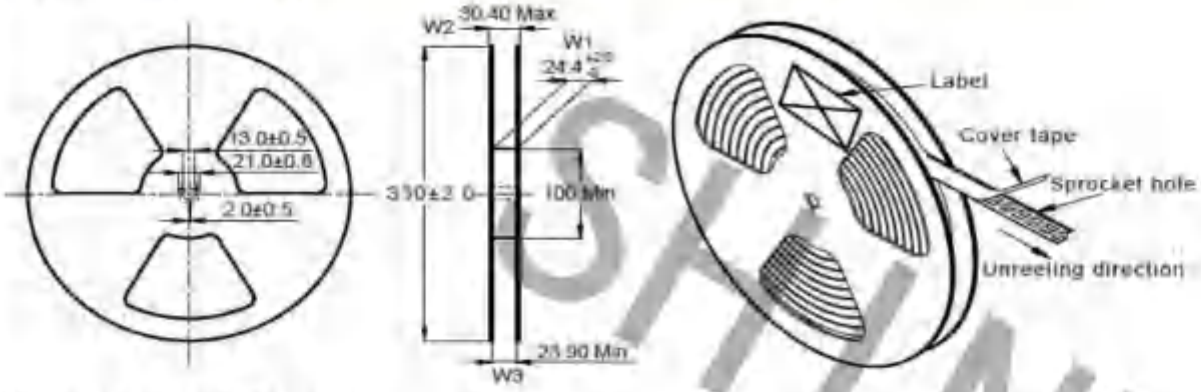


P/N	A0(mm)	B0(mm)	K0(mm)	P(mm)	T(mm)	W(mm)
HCB100808AR18 SERIES	8.2±0.1	10.2±0.1	8.2±0.1	12.0±0.1	0.4±0.05	24.0±0.3

7.2 Product Packing in Tape

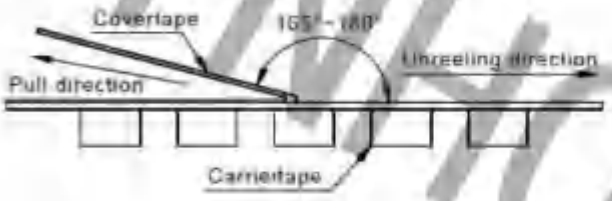


7.3 Reel Dimensions (mm)



7.4 Cover tape peel off condition

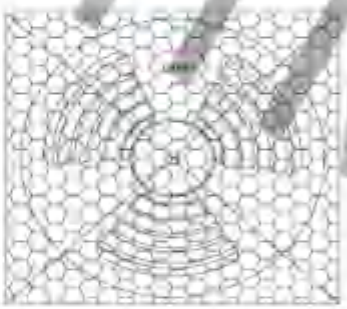
Tape Width	Tape Type	Peel-off Force	Peel Speed
24mm	Heat-sealing	0.1~1.3N	300±10mm/M



7.5 Packing Quantity

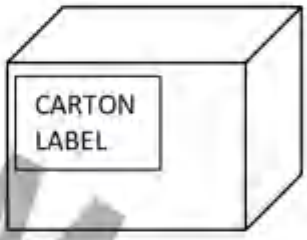
Part Number	Chips/Reel	Chips/Inner Box	Chips/Carton
HCB100808AR18 SERIES	600	1200 (2 reels/ PE bag / inner box)	3600 (3 inner boxes/ Carton)

REEL



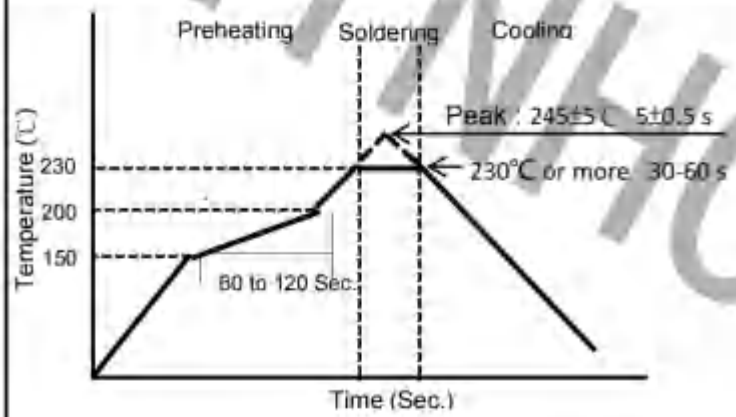
2 REELS IN A PE BAG

1 PE BAG IN A INNER BOX

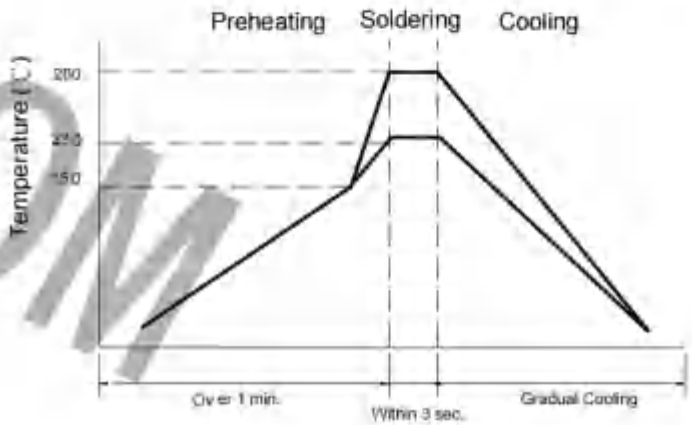


3 INNER BOXES IN A CARTON

8. RECOMMENDED SOLDERING PROFILE



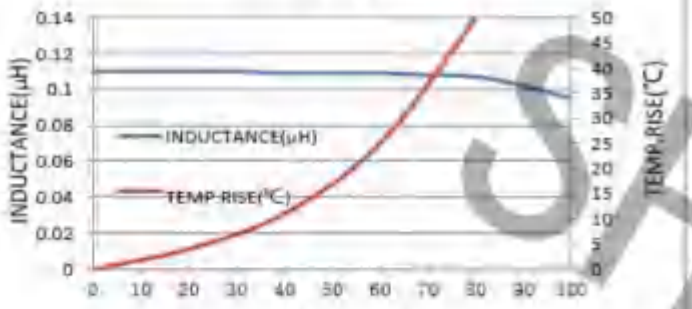
REFLOW SOLDERING



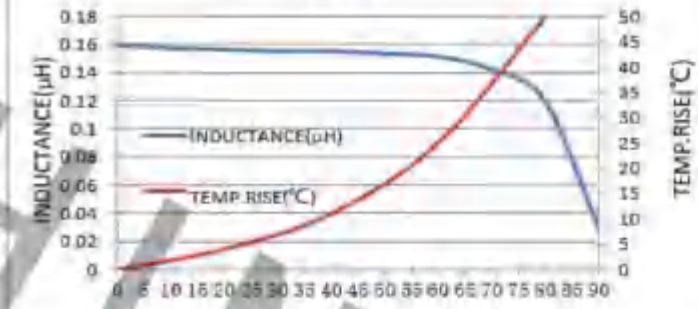
HAND SOLDERING

9. INDUCTANCE CHARACTERISTICS

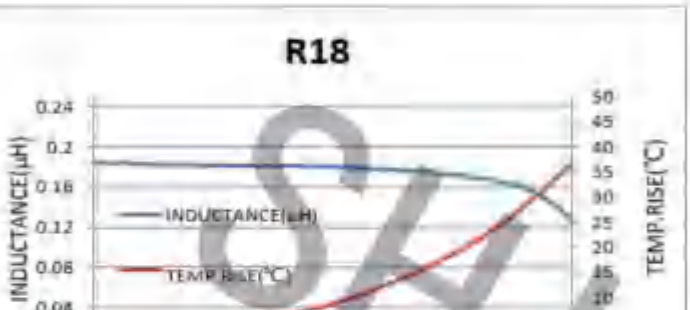
R12



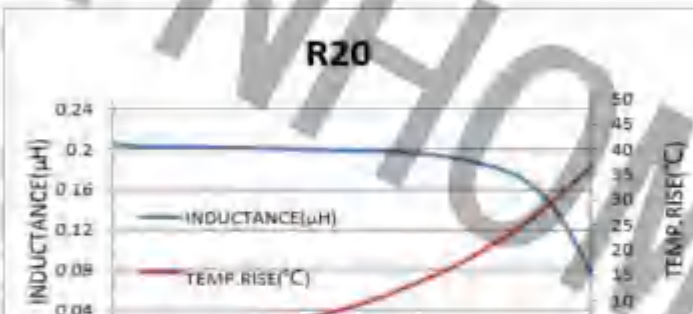
R15



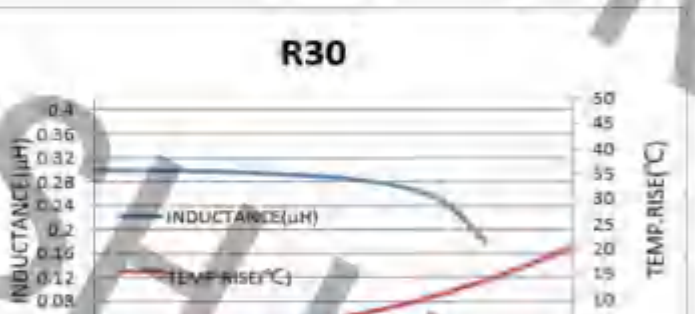
R18



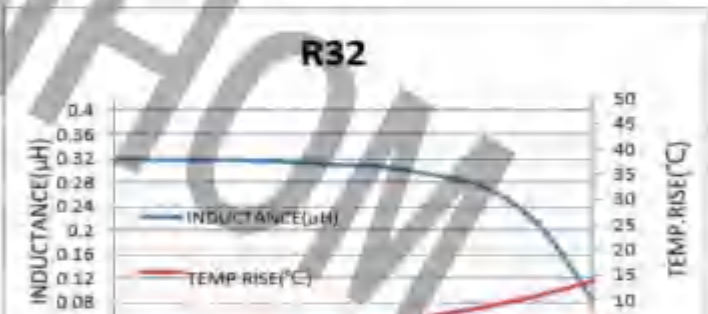
R20



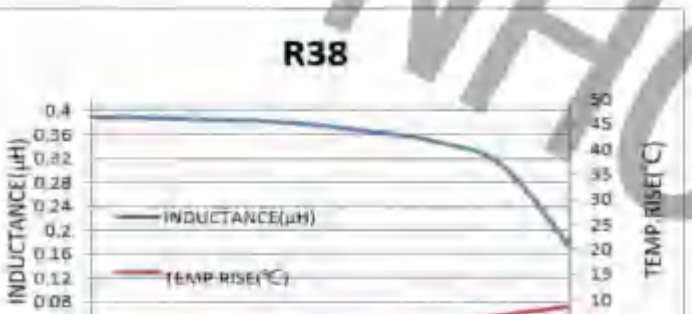
R30



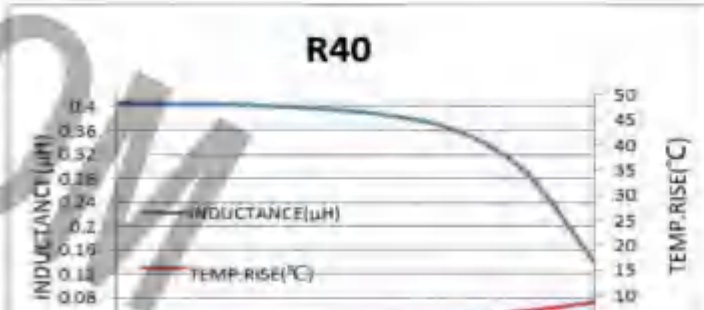
R32



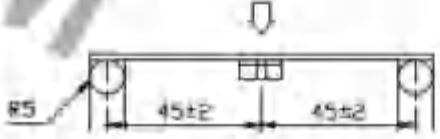
R38



R40



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±1minutes under room temperature, and test under 125℃±5℃ and 30±2 minutes, finally put 3±1minutes 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 1hour, 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

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

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%	Irms[2] (Amps)	Isat[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. Irms: 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. Isat : Peak current for approximately 20% rolloff @+25 °C
4. Height: Product shape dimensions of height for different P/N
Remark: Measurement Equipment: WK3260B+WK3265B

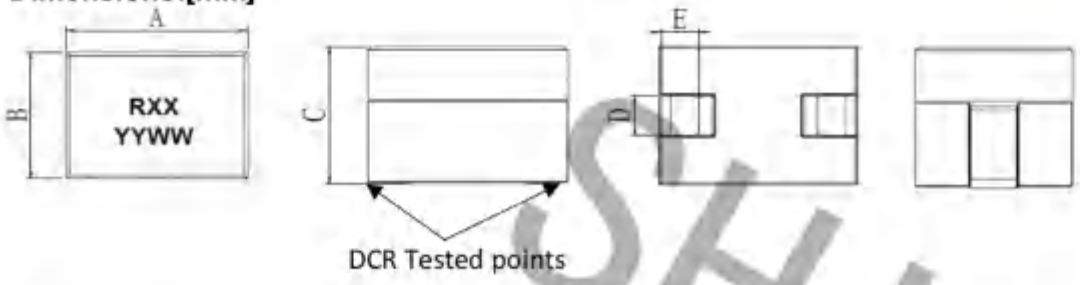
5. Part Number Definition:

HCB 100808 Rxxx - Ryy

- Ryy: Inductance value in µH, R = decimal point
- Rxxx: DCR value in mΩ, R = decimal point
- 100808: Max. product size (L*W*H)=10.6*8.0*8.2(Max.)
- HCB: Product code

Technical Data — HCB100808R18 Series

Dimensions:[mm]

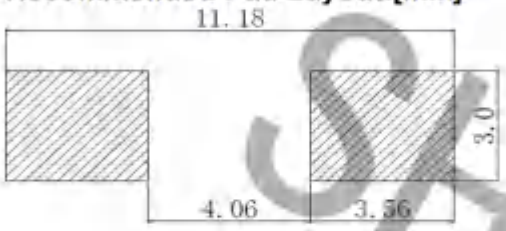


TYPE	SIZE
A	10.6 (Max.)
B	8.0 (Max.)
C	See Height column in table of Product Specifications
D	2.25 (Typ.)
E	2.2 (Typ.)

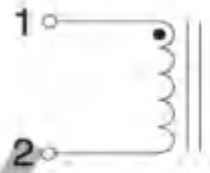
Product Marking:

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

Recommended Pad Layout:[mm]

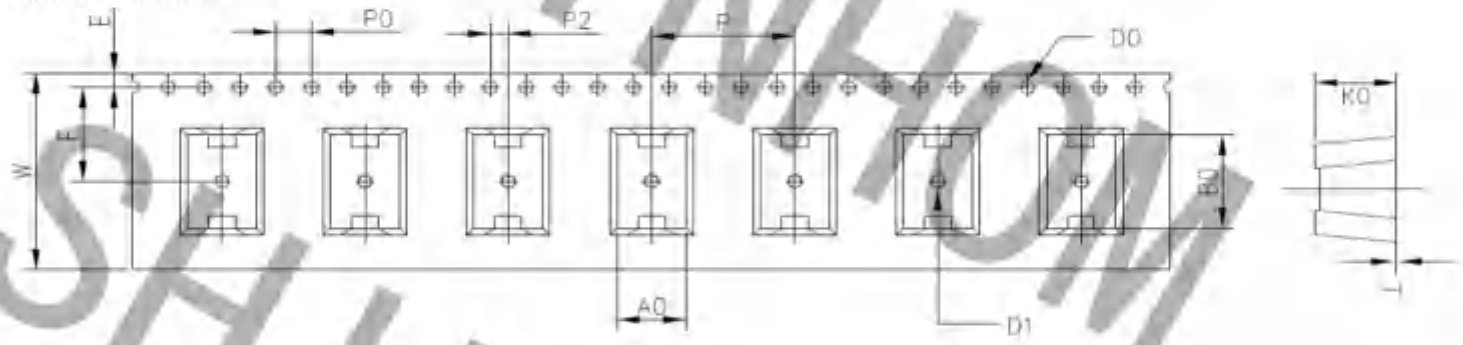


Schematic:

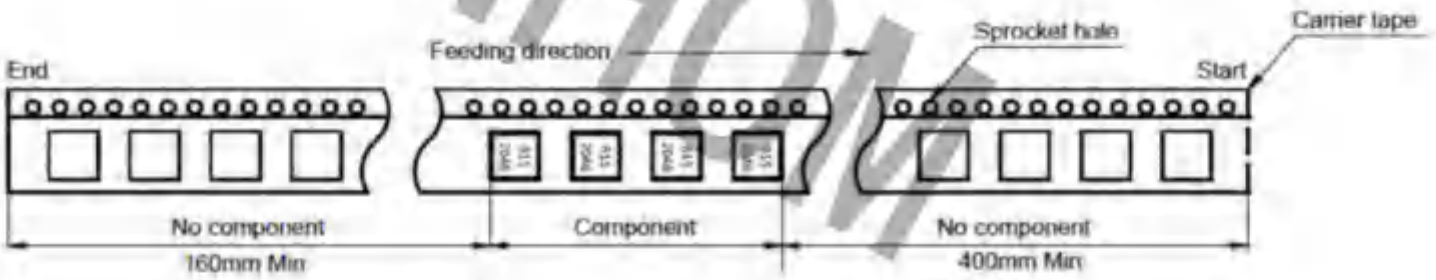


Packaging Information:[mm]

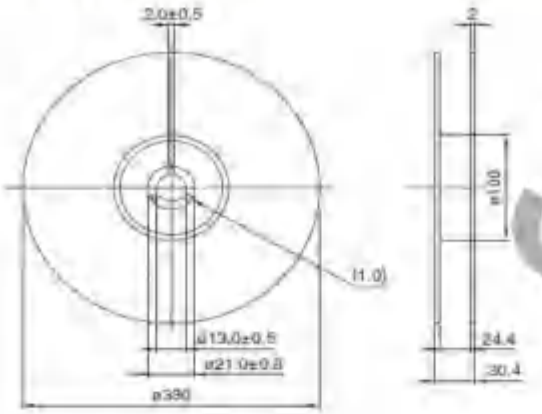
Tape Dimensions



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

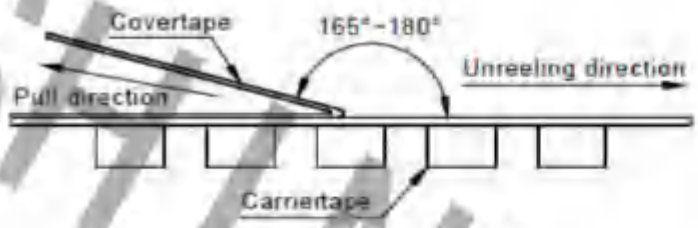


Reel Dimensions



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:

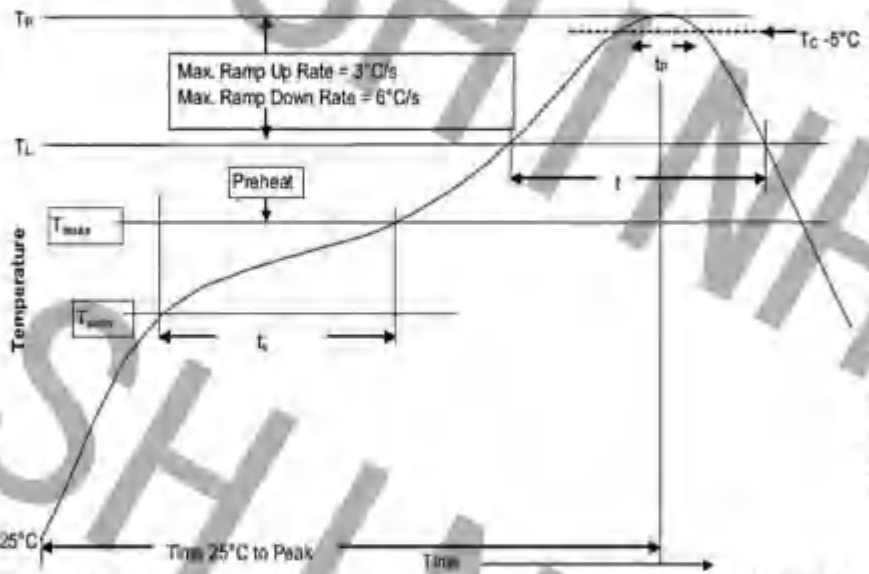


Table 1 - Standard SnPb Solder (T_C)

Package Thickness	Volume mm3 <350	Volume mm3 ≥350
<2.5mm	235°C	220°C
≥2.5mm	220°C	220°C

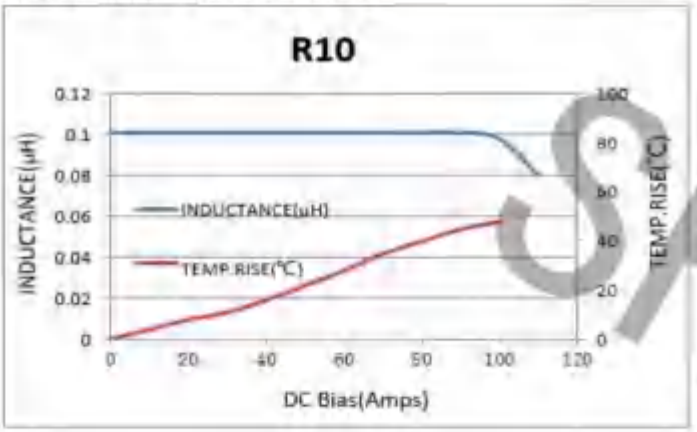
Table 2 - Lead (Pb) Free Solder (T_C)

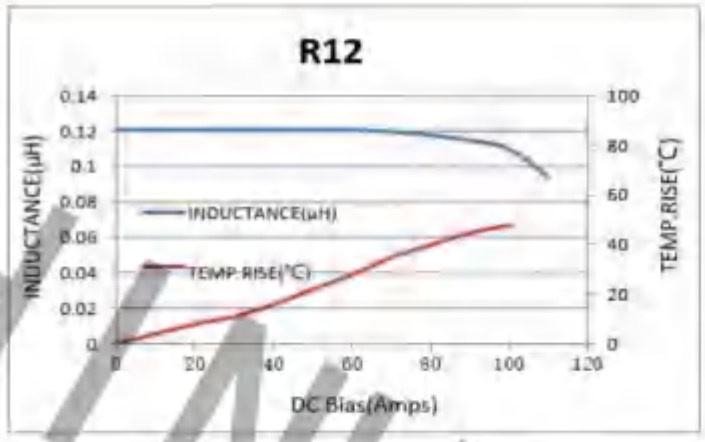
Package Thickness	Volume mm³ <350	Volume mm³ 350 - 2000	Volume mm³ >2000
<1.6mm	260°C	260°C	260°C
1.6 – 2.5mm	260°C	250°C	245°C
>2.5mm	250°C	245°C	245°C

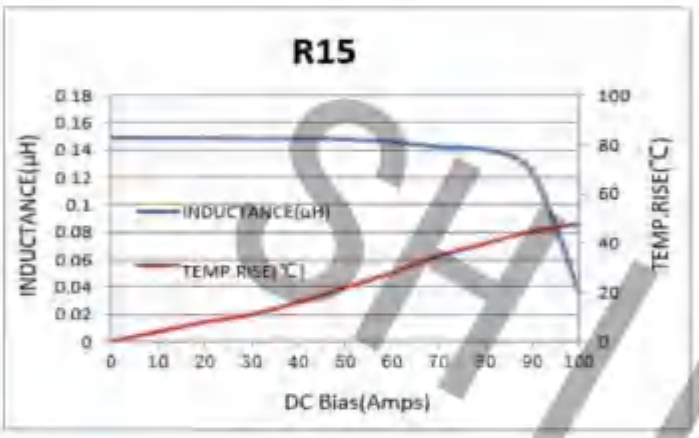
Profile Feature		Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak	• Temperature min. (T_{smin})	100°C	150°C
	• Temperature max. (T_{smax})	150°C	200°C
	• Time (T_{smin} to T_{smax}) (t_s)	60-120 Seconds	60-120 Seconds
Average ramp up rate T_{smax} to T_p		3°C/ Second Max.	3°C/ Second Max.
Liquidous temperature (T_L) Time at liquidous (t_L)		183°C 60-150 Seconds	217°C 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.

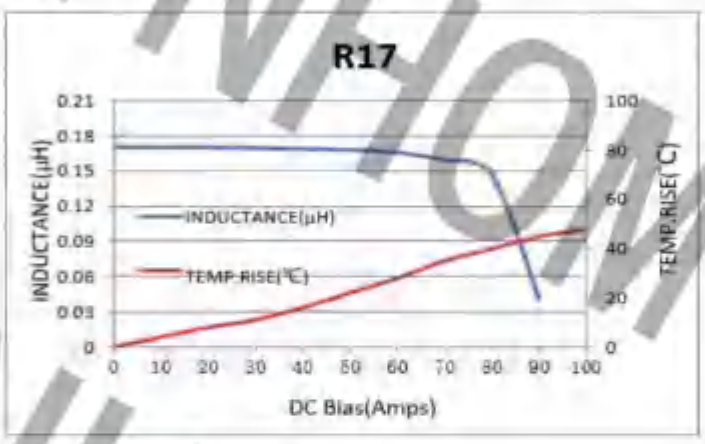
* Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.
** Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

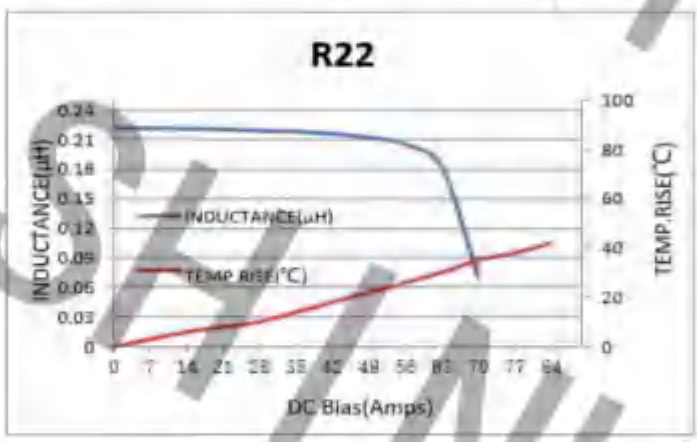
Inductance Characteristics:

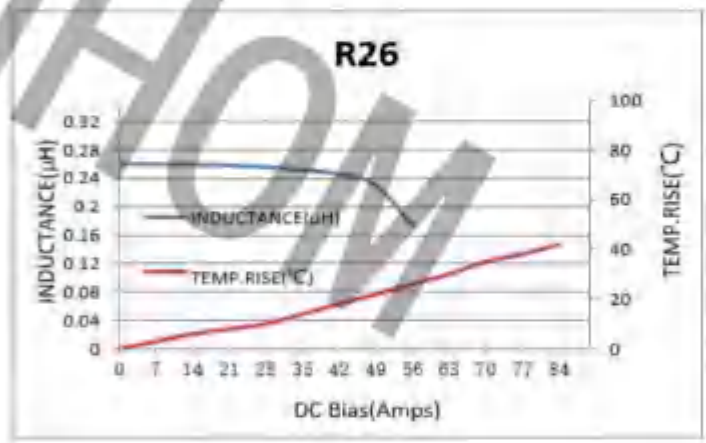


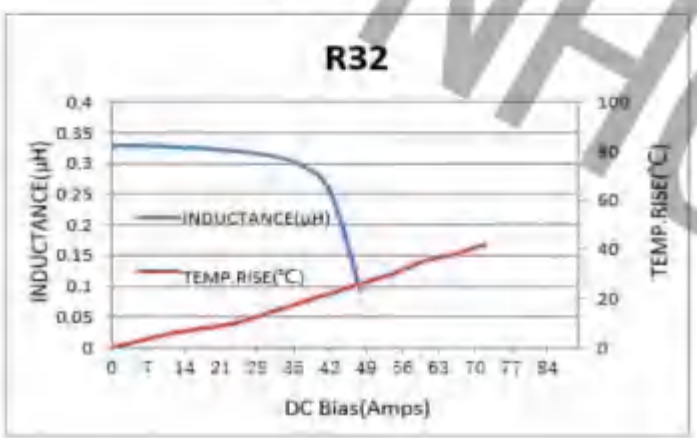












Low Profile, High Current Power Inductors

Features

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

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

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%	Irms[2] (Amps)	Isat[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 Adc, +25 °C
2. Irms: 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. Isat : Peak current for approximately 20% rolloff @+25 °C
4. Measurement Equipment: WK3260B+WK3265B

5. Part Number Definition

HCB 100875 Rxx - Ryy

- Ryy: Inductance value in µH, R = decimal point
- Rxx: DCR value in mΩ, R = decimal point
- 100875: Max. product size (L*W*H)=10.0*8.0*7.5(Max.)
- HCB: Product code

NO.8,YanTa Northern road,xi'anCity Shaanxi pro.china TEL: +86-29-87851916 FAX: +86-29-87851840 E-mail: sales@shinhom.com.cn

Technical Data — HCB100875R29 Series

Dimensions:[mm]

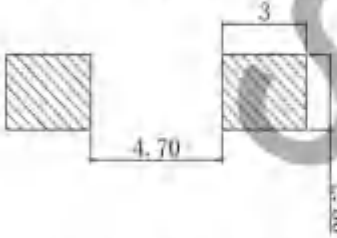
Dimensions

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

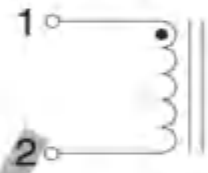
Product Marking:

Part Code	Ryy
Date Code	YYWW

Recommended Pad Layout:[mm]

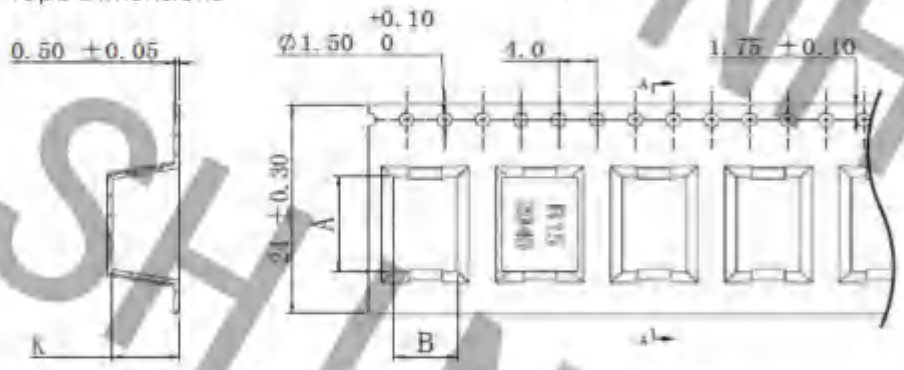


Schematic:

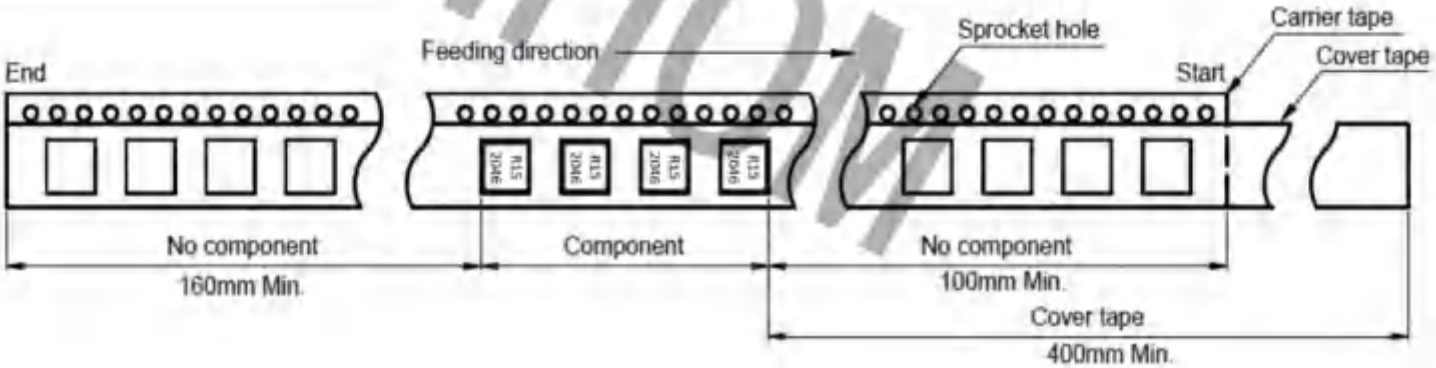


Packaging Information:[mm]

Tape Dimensions

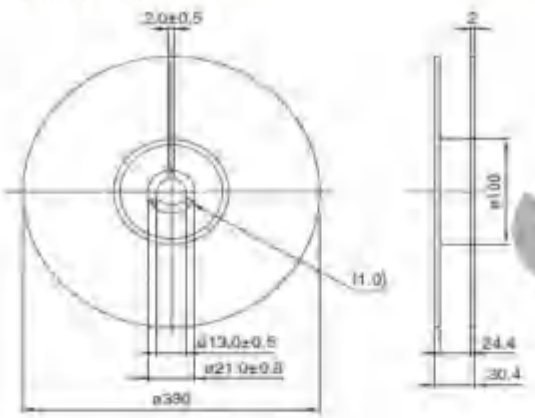


Part Number	A	B	K
HCB100875R29 Type	10.8±0.1	8.0±0.1	7.7±0.1



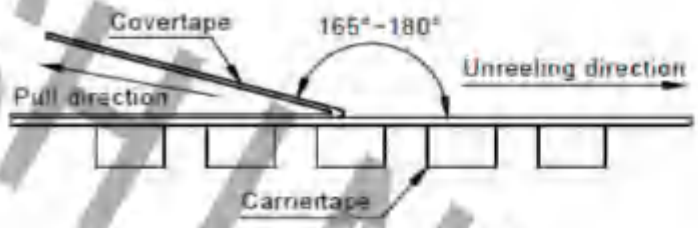
Technical Data — HCB100875R29 Series

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)
HCB100875R29 Type	700

Recommended Reflow Profile:

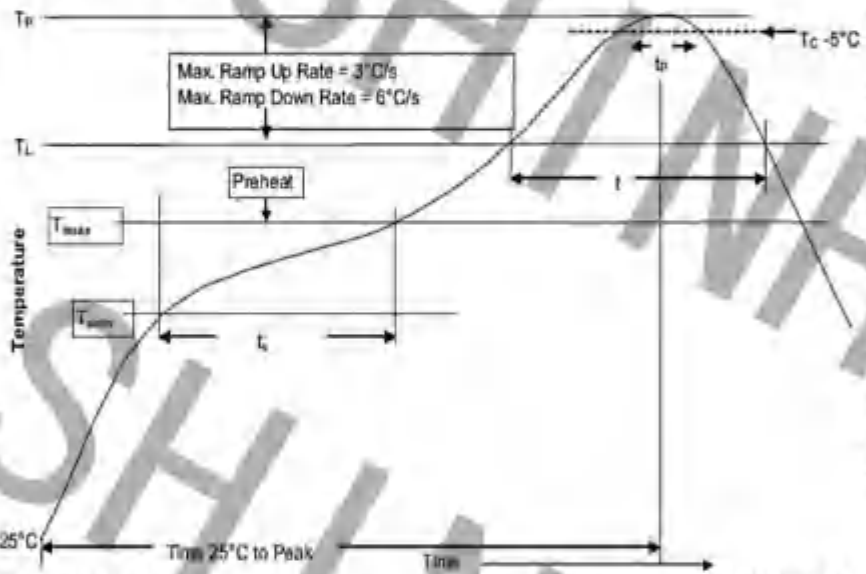


Table 1 - Standard SnPb Solder (T_C)

Package Thickness	Volume mm3 <350	Volume mm3 ≥350
<2.5mm)	235°C	220°C
≥2.5mm	220°C	220°C

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

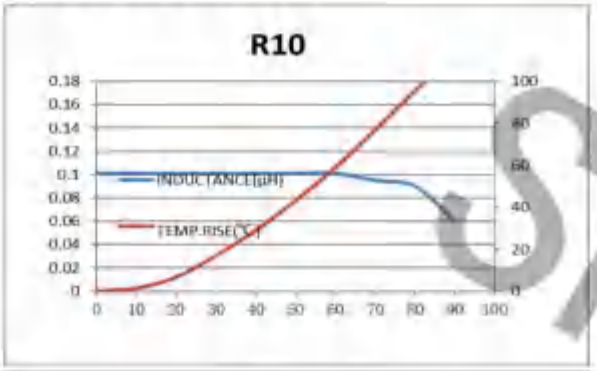
Package Thickness	Volume mm³ <350	Volume mm³ 350 - 2000	Volume mm³ >2000
<1.6mm	260°C	260°C	260°C
1.6 – 2.5mm	260°C	250°C	245°C
>2.5mm	250°C	245°C	245°C

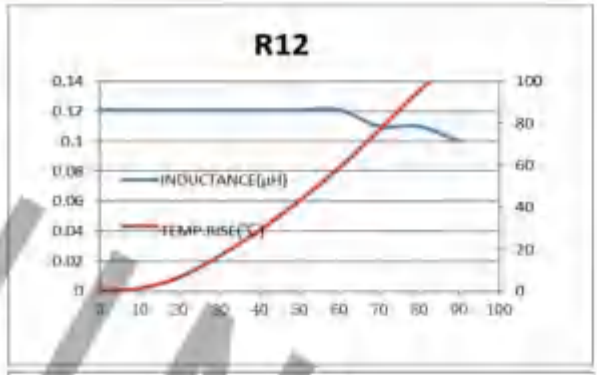
Profile Feature		Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak	• Temperature min. (T_{smin})	100°C	150°C
	• Temperature max. (T_{smax})	150°C	200°C
	• Time (T_{smin} to T_{smax}) (t_s)	60-120 Seconds	60-120 Seconds
Average ramp up rate T_{smax} to T_p		3°C/ Second Max.	3°C/ Second Max.
Liquidous temperature (T_L) Time at liquidous (t_L)		183°C 60-150 Seconds	217°C 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.

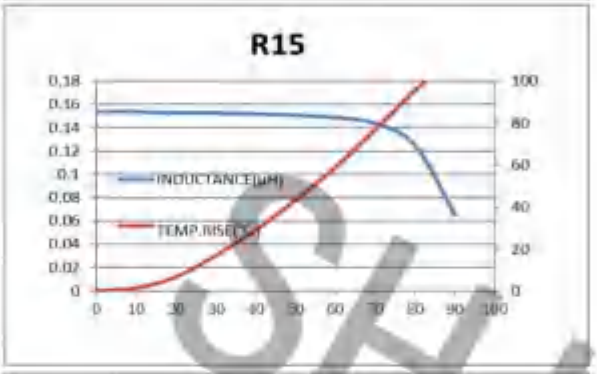
* Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.

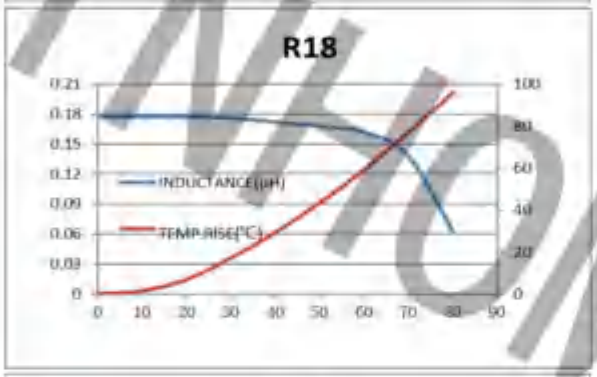
** Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

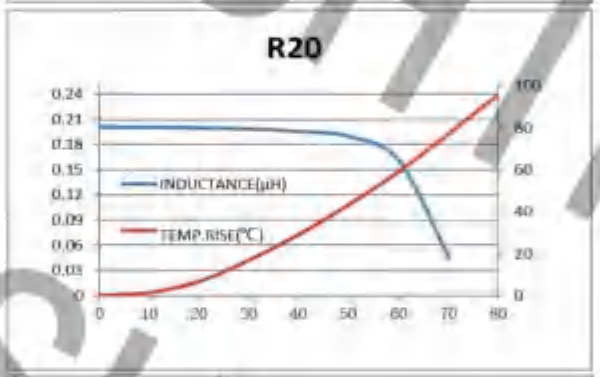
Inductance Characteristics:

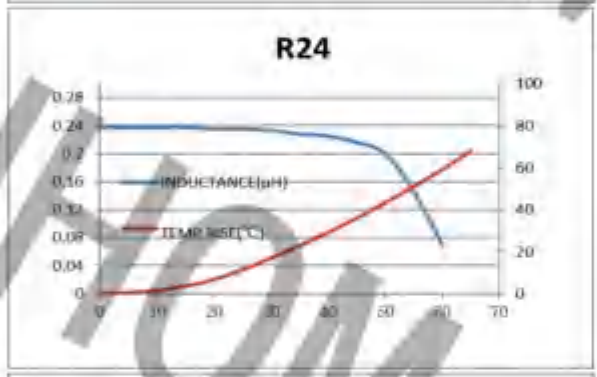


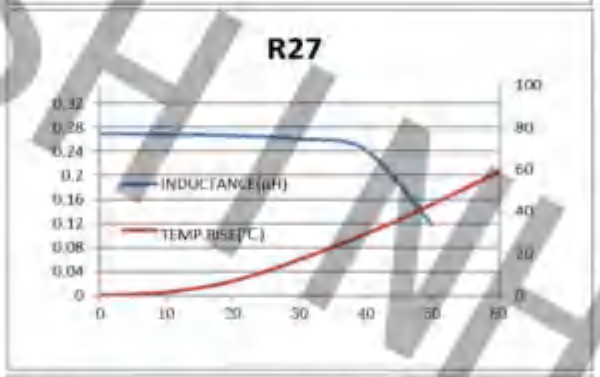


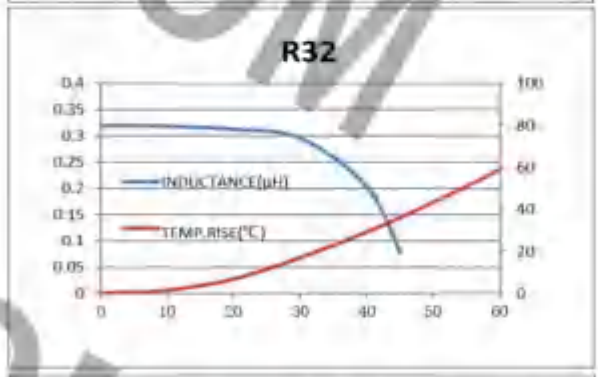


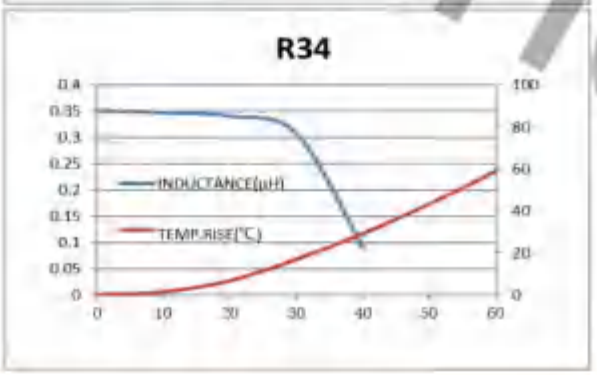


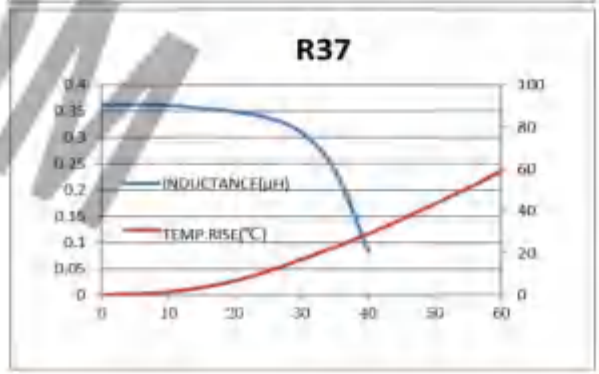












Low Profile, High Current Power Inductors

Features

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

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

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%	Irms[2] (Amps)	Isat[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 Adc, +25 °C
2. Irms: 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. Isat : Peak current for approximately 20% rolloff @+25 °C
4. Measurement Equipment: WK3260B+WK3265B

5. Part Number Definition:

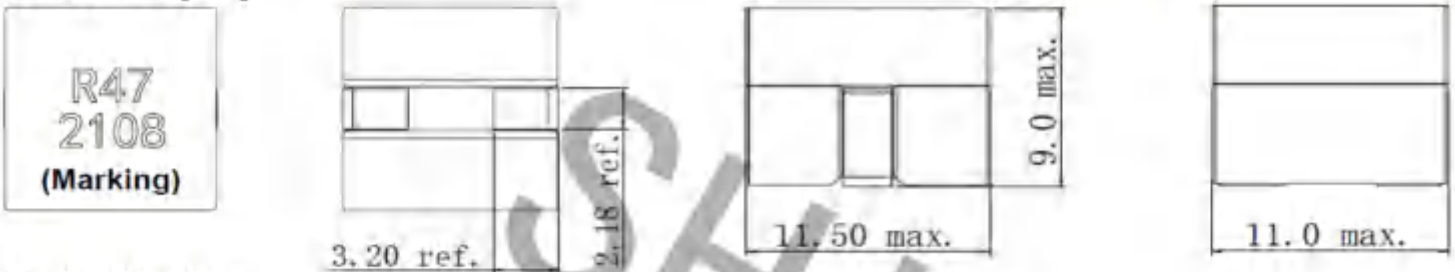
HCB 121109 Rxxx - Ryy

- Inductance value in µH, R = decimal point
- DCR value in mΩ, R = decimal point
- Max. product size (L*W*H)=11.5*11.0*9.0(Max.)
- Product code

NO.8,YanTa Northern road,xi'anCity Shaanxi pro.china TEL: +86-29-87851916 FAX: +86-29-87851840 E-mail: sales@shinhom.com.cn

Technical Data — HCB121109R30 Series

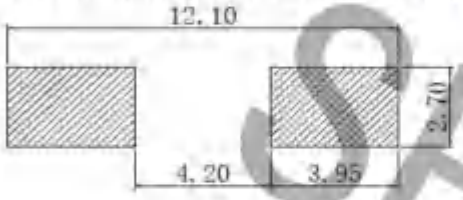
Dimensions:[mm]



Product Marking:

Part Code	Ryy
Date Code	YYWW

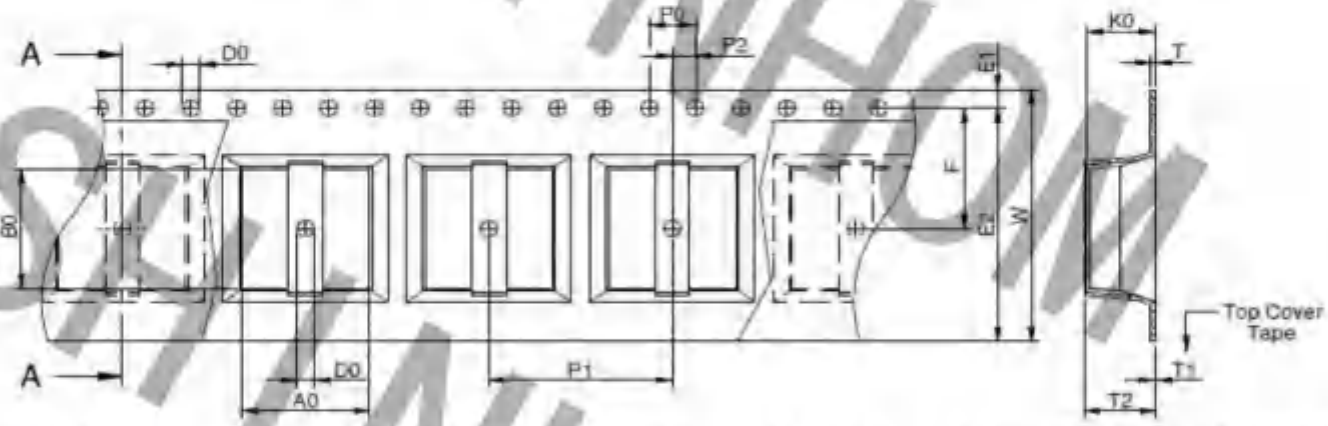
Recommended Pad Layout:[mm]



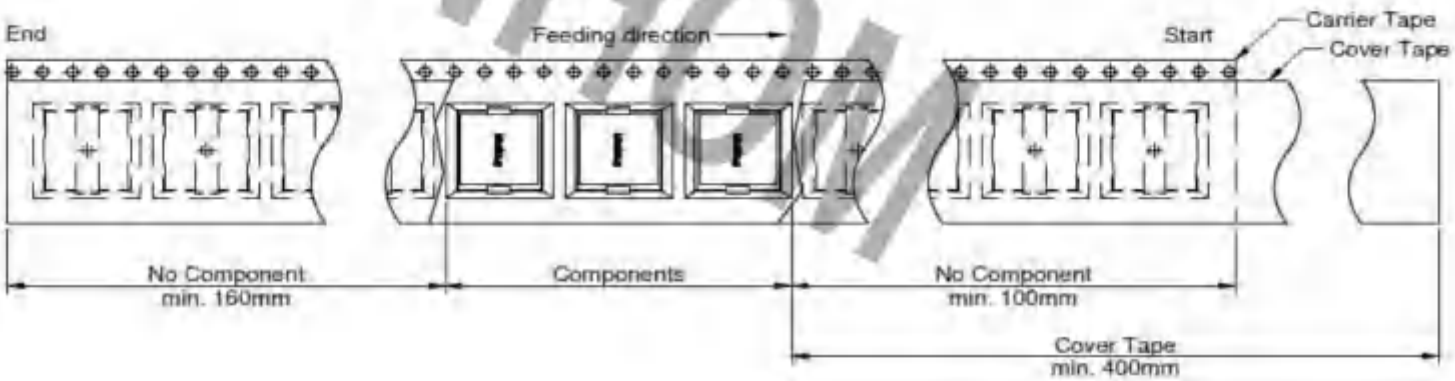
Schematic:

Packaging Information:[mm]

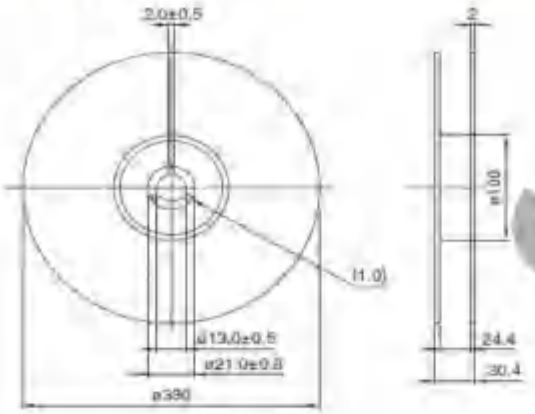
Tape Dimensions



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

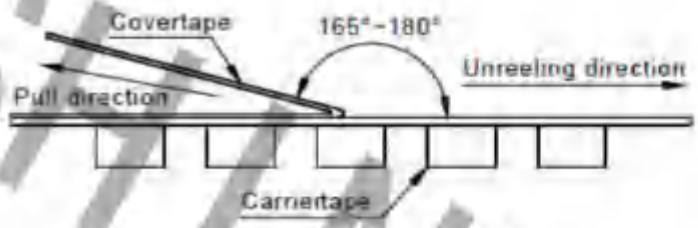


Reel Dimensions



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:

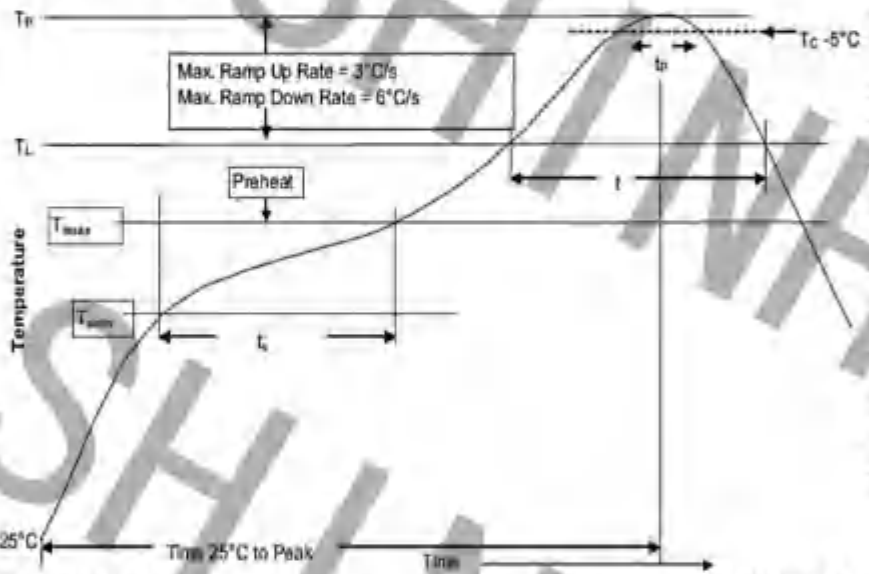


Table 1 - Standard SnPb Solder (T_C)

Package Thickness	Volume mm3 <350	Volume mm3 ≥350
<2.5mm)	235°C	220°C
≥2.5mm	220°C	220°C

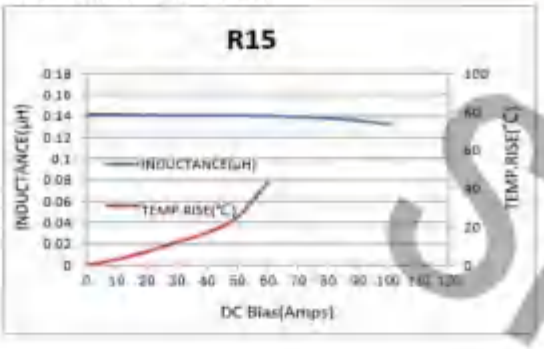
Table 2 - Lead (Pb) Free Solder (T_C)

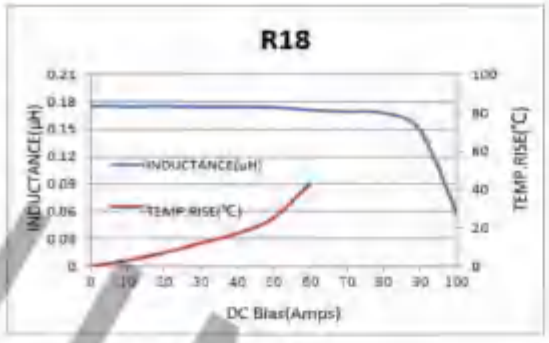
Package Thickness	Volume mm³ <350	Volume mm³ 350 - 2000	Volume mm³ >2000
<1.6mm	260°C	260°C	260°C
1.6 – 2.5mm	260°C	250°C	245°C
>2.5mm	250°C	245°C	245°C

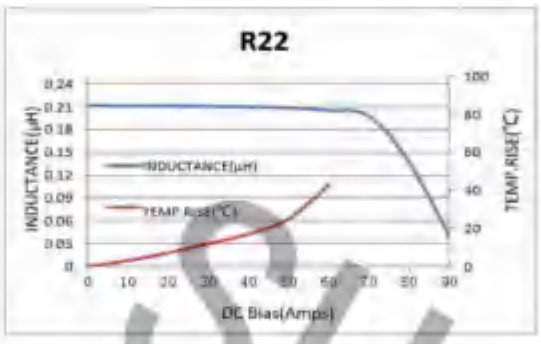
Profile Feature		Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak	• Temperature min. (T_{smin})	100°C	150°C
	• Temperature max. (T_{smax})	150°C	200°C
	• Time (T_{smin} to T_{smax}) (t_s)	60-120 Seconds	60-120 Seconds
Average ramp up rate T_{smax} to T_p		3°C/ Second Max.	3°C/ Second Max.
Liquidous temperature (T_L) Time at liquidous (t_L)		183°C 60-150 Seconds	217°C 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.

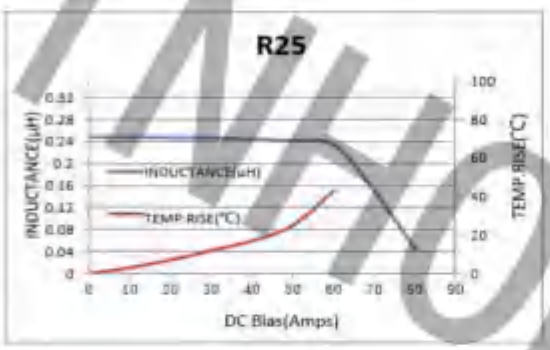
* Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.
** Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

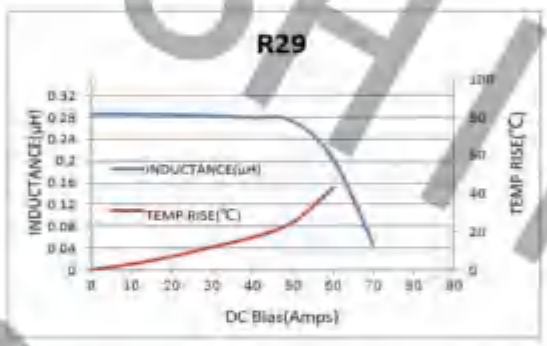
Inductance Characteristics:

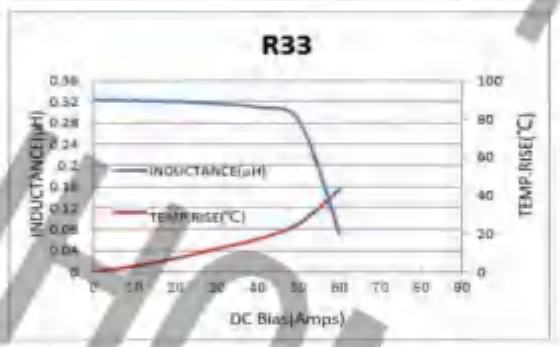


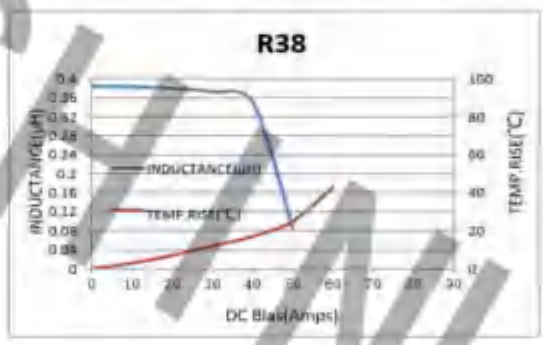


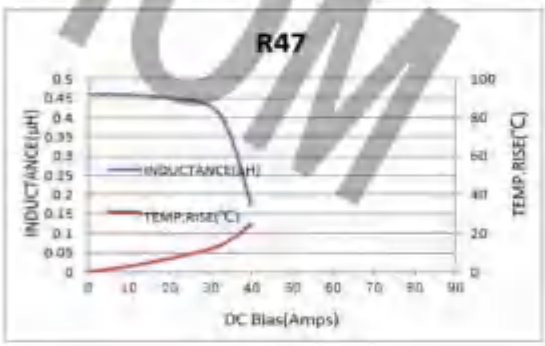


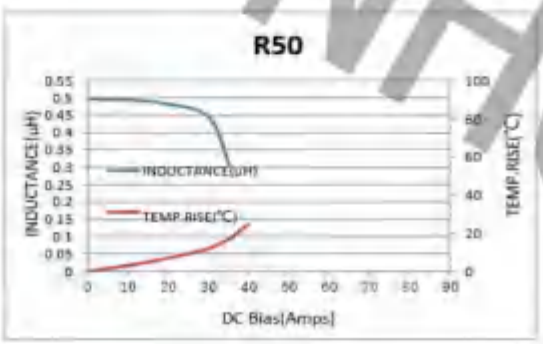












SMT POWER INDUCTOR

SMB0808B SERIES

FEATURES:

- SMD inductors
- High current and lower DCR
- Ferrite core material
- Shielded construction
- Operating Temperature: -40℃ to +125℃

APPLICATIONS:

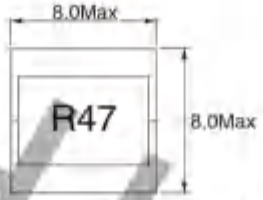
- Servers
- Multi-phase and Vcore regulators
- Notebook regulators
- Battery power systems
- Graphics cards

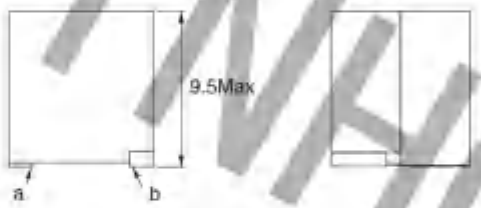
ELECTRICAL CHARACTERISTICS:

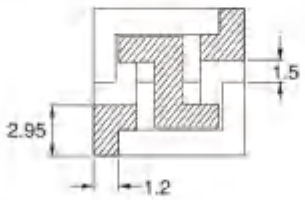
Part No.	Marking	OCL (nH) ± 10%	DCR (mΩ) ±15%	Irms (A) @25℃	Isat1 (A) @25℃
SMB0808B-R30K	R30	300	0.8	28	60
SMB0808B-R40K	R40	400	0.8	28	45
SMB0808B-R47K	R47	470	0.8	28	36
SMB0808B-R60K	R60	600	0.8	28	29
SMB0808B-R80K	R80	800	0.8	28	22
SMB0808B-1R0K	1R0	1000	0.8	28	15

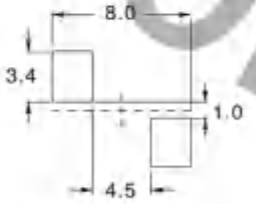
1. Open Circuit Inductance (OCL) test condition:100KHz,1Vrms,0Adc ,at 25℃
2. Irms: DC current for an approximate temperature rise of 40 ℃ without coreloss. Derating is necessary for AC currents. PCB layout, trace thickness andwidth, air-flow, and proximity of other heat generating components will affect thetemperature 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. Isat : Peak current for approximately 20% rolloff @+25 ℃
4. Marking: Denotes inductance
5. Tolerance: OCL Tolerance: K= ± 10% / L= ± 15% / M= ± 20%Measurement Equipment: WK3260B+WK3265B (or equivalent)

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS





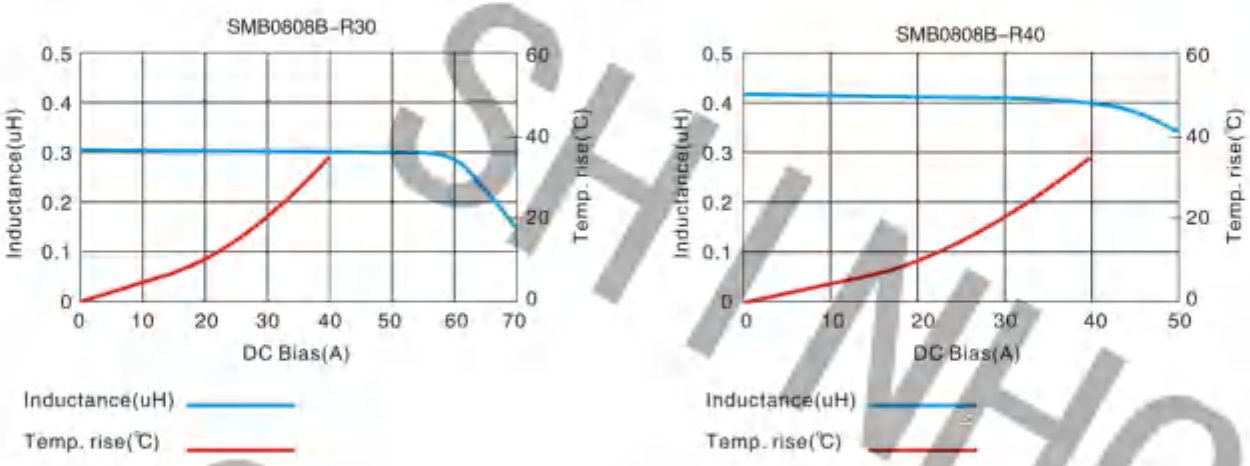


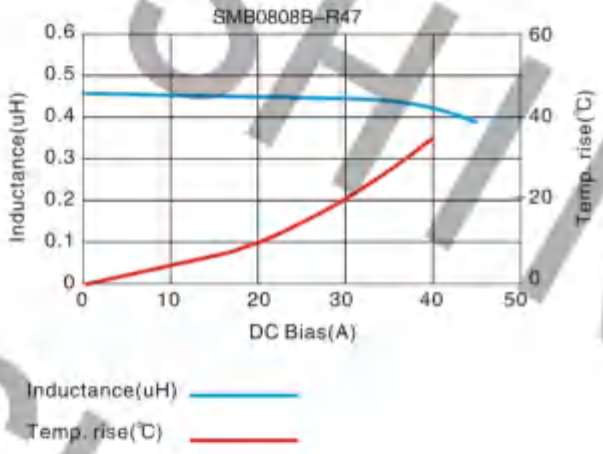


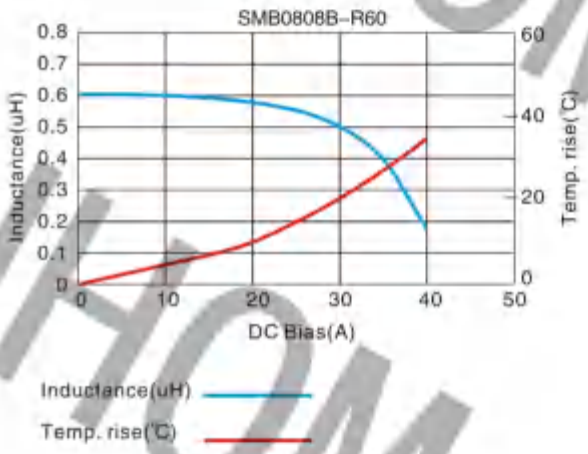
Suggested Pad Layout

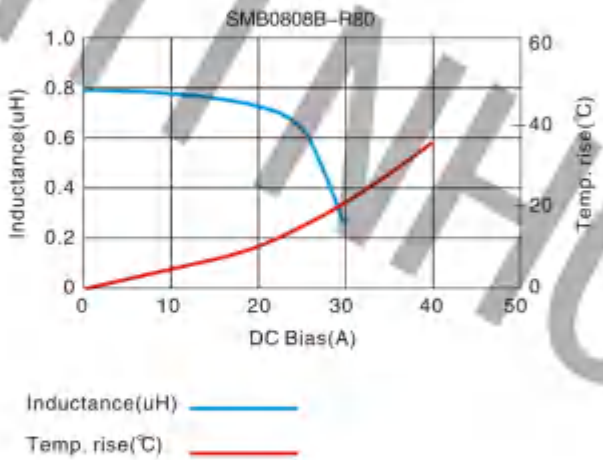
- Operating Temperature: -40℃ to +125℃ (Ambient plus self temperature rise)
- Storage Temperature: In Original Packaging, <40℃ ; <75%RH
- Moisture Sensitivity Level (MSL): 1
- Packaging: 500 pcs , 13" Reel

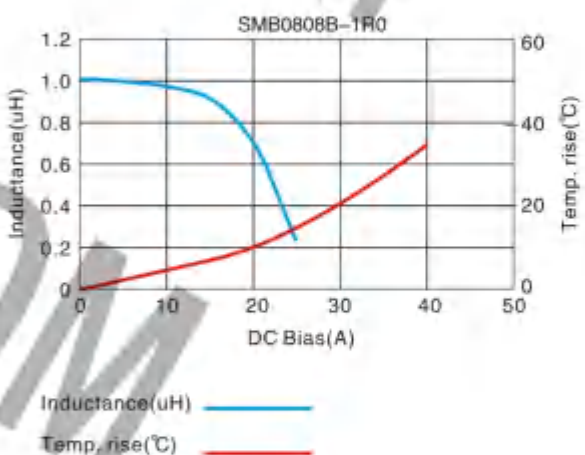
CURRENT VS INDUCTANCE & TEMPERATURE RISE:











SMT POWER INDUCTOR

SMB1007B SERIES

FEATURES:

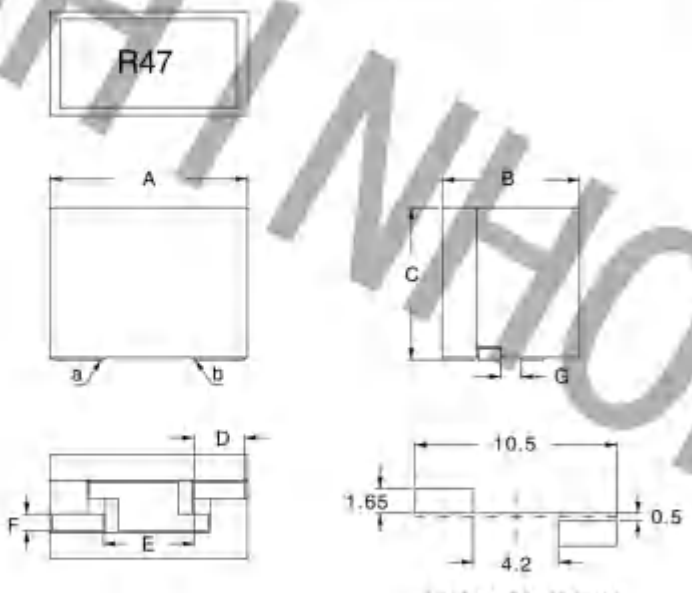
- Ferrite based SMT inductor with lower core loss.
- Inductance Range: 330.0nH to 1600.0nH, Custom values are welcomed.
- High current output chokes, up to 65.0 Amp with approx. 20% roll off
- 10.00 mm Max. height.
- Perfect for high density designs with limited board space.
- Operating frequency up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

ELECTRICAL CHARACTERISTICS:

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

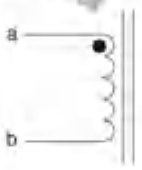
1. Open Circuit Inductance (OCL) test condition:100KHz,0.1Vrms,0Adc ,at 25℃
2. L @ Isat and L @ Irms Test condition:100KHz,0.1Vrms(Ta=25℃)
3. The nominal DCR is measured from point "a" to point "b, as shown above on the mechanical drawing (Ta=25℃)
4. Isat1,Isat2 , & Isat3 : DC current that will cause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

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



Suggested Pad Layout

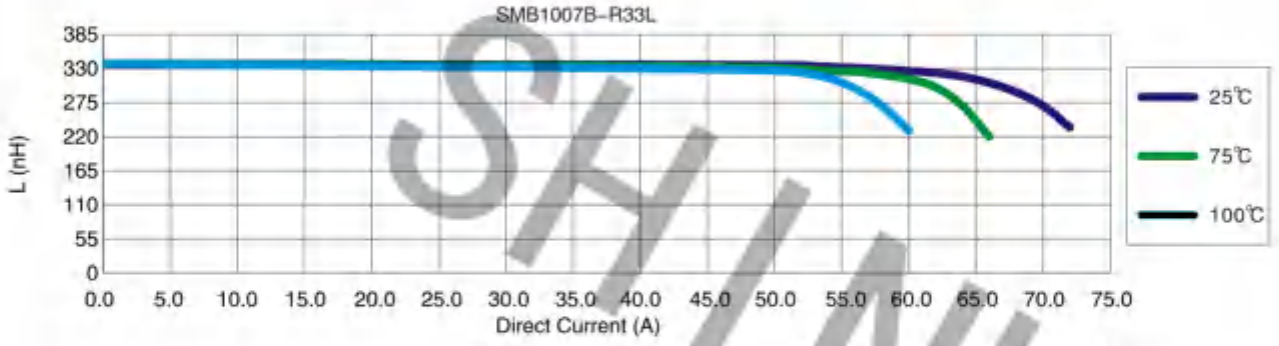
Winding

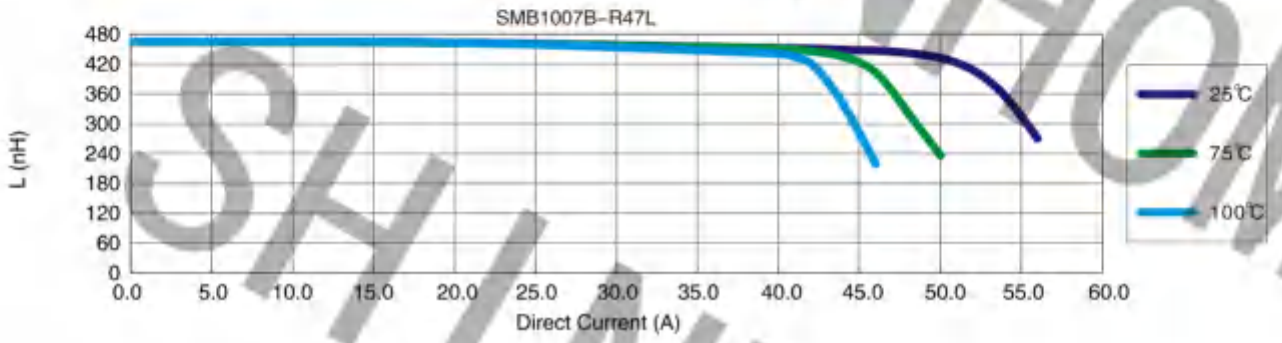


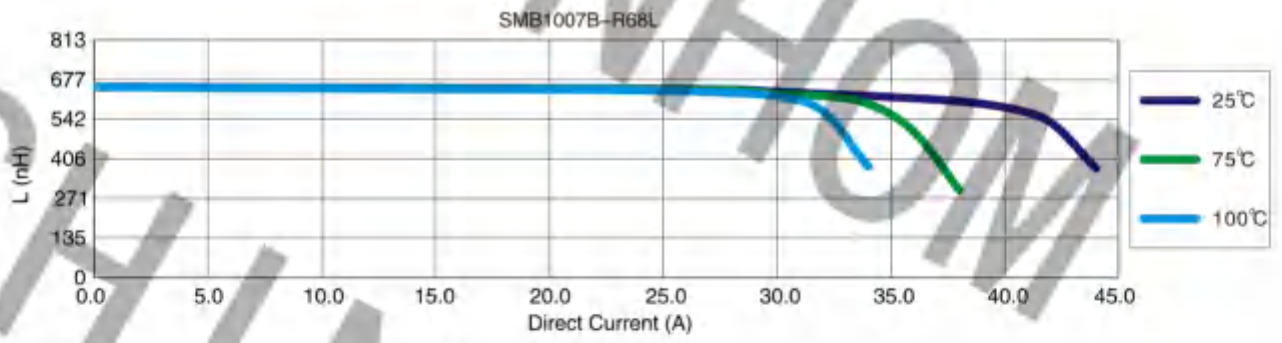
Mechanical Dimension(Unit : mm)

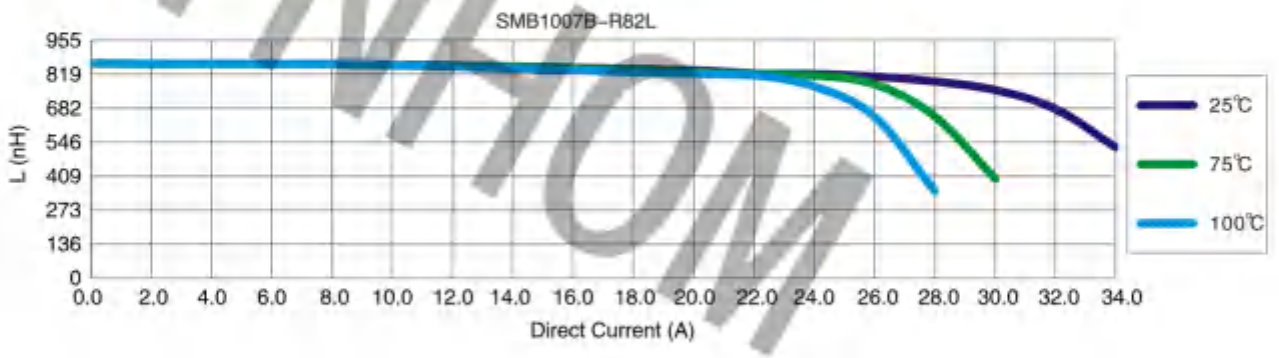
A Max	B Max	C Max	D ±0.35	E Nom	F ±0.2	G ±0.3
10.0	see above table	10.0	2.5	4.5	1.1	1.0

CURRENT VS INDUCTANCE:

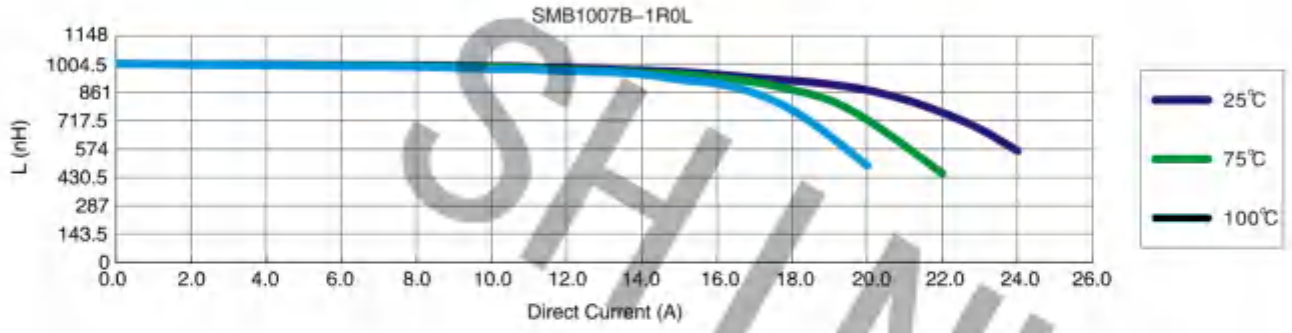


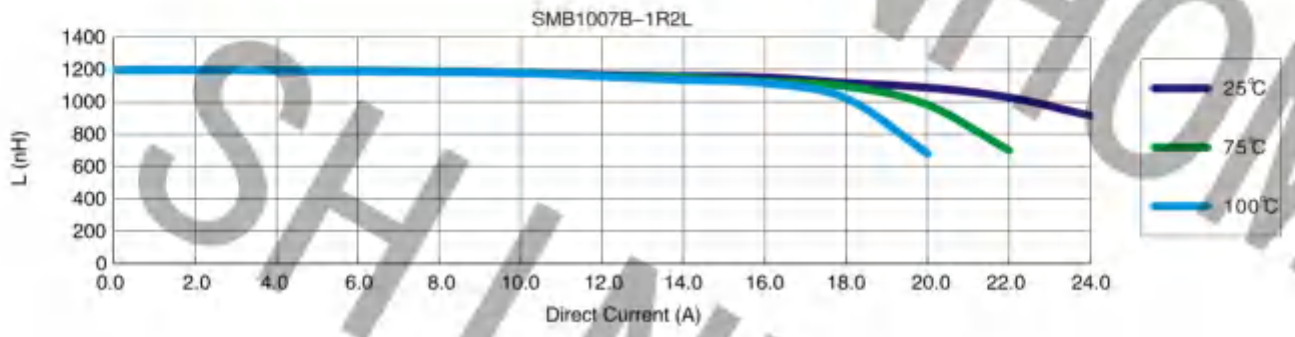


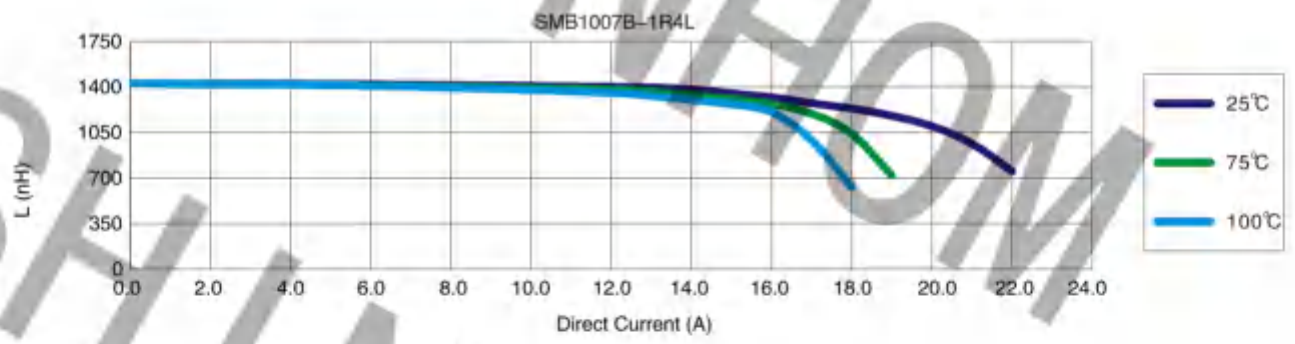


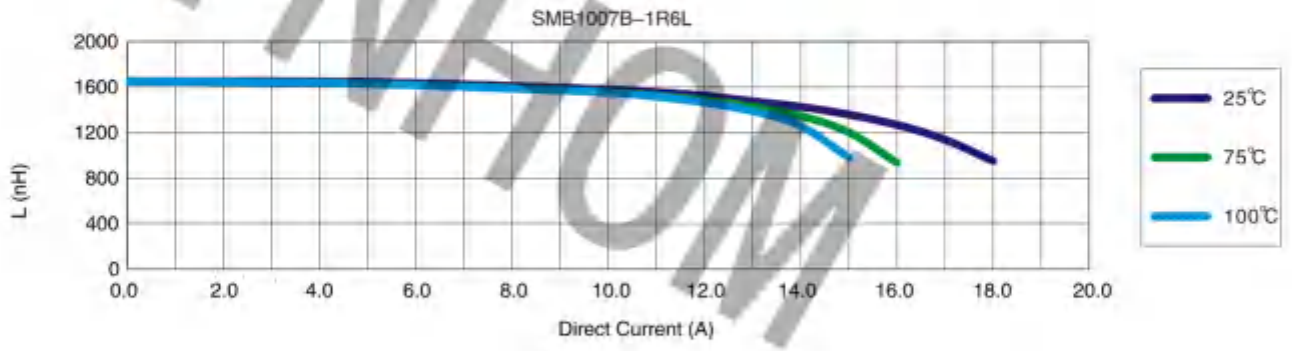


CURRENT VS INDUCTANCE:









SMD POWER BEAD

SMB SERIEIS

FEATURES

* Suitable for applications with Ultra High Current.
* High mechanical body.
* Stable characteristic.
* Operating temperature -40~+125℃ (Including self - temperature rise)

APPLICATIONS

* Computer products, mother board, TV card
* Power supplier, OA products, modem….
* Communications
* Countermeasures for complying with CE, FCC, VDE or VCCI radialiated emissions etc

PRODUCT IDENTIFICATION

SMB - 853025 C - 101 Y

① ② ③ ④ ⑤

①

Product Symbol	
SMB	SMD Power Bead

②

External Dimensions (LWXH) mm	
322522	3.10×2.50×2.15
323023	3.05×2.40×2.20
403022	4.20×3.00×2.20
405025	4.20×5.10×2.90
784730	8.00×4.70×3.20
853025	8.00×3.00×2.50

④

Shape Code	
None	Bottom Flatness
C	Bottom hollow groove

③

Nominal Impedance	
Example	Nominal Value
400	40Ω
101	100Ω

⑤

Tolerance Value	
M	±20%
Y	±25%

SHAPE AND DIMENSIONS(mm)

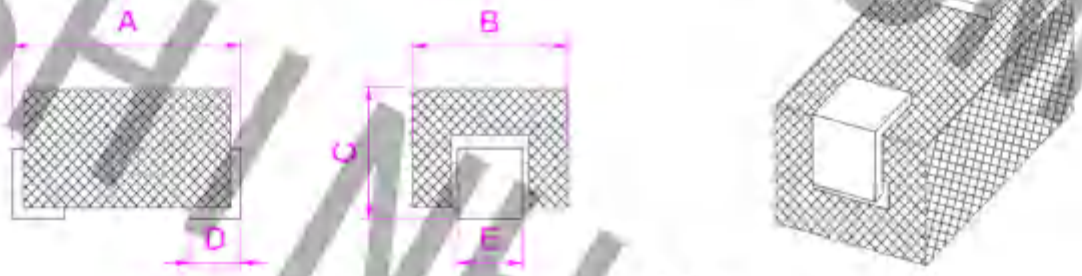


Figure 1

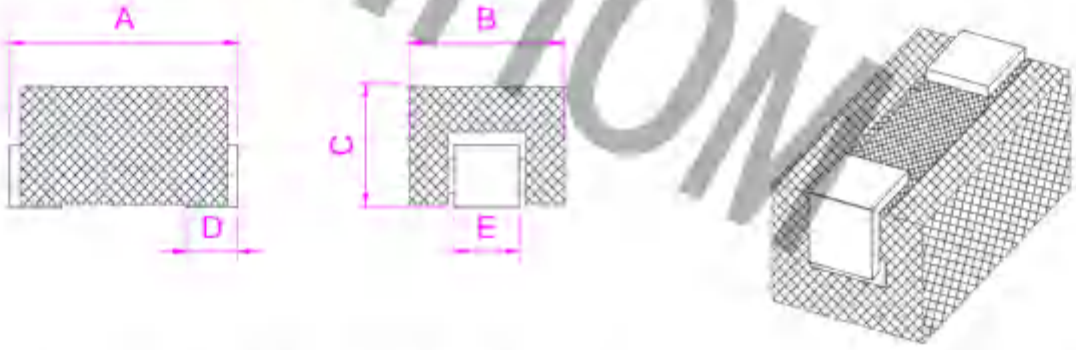
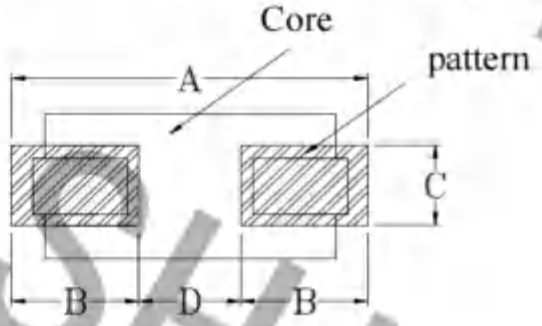


Figure 2

Part No.	A	B	C	D	E	Figure
SMB-322521C	3.20 max.	2.50±0.15	2.30 max.	0.85±0.20	0.70±0.10	2
SMB-323023C	3.20 max.	2.90±0.15	2.41 max.	0.80±0.20	0.85±0.10	2
SMB-403022C	4.20 max.	3.80±0.15	2.50 max.	1.30±0.20	1.25±0.15	2
SMB-403025	5.00 max.	3.10±0.15	3.10 max.	1.35±0.20	1.25±0.15	1
SMB-784730	8.50 max.	4.75±0.20	3.55 max.	1.45±0.30	1.25±0.15	1
SMB-853025C	9.40 max.	3.10±0.15	2.80 max.	1.45±0.30	1.25±0.15	2
SMB-853025	9.50 max.	3.00±0.15	3.10 max.	1.45±0.30	1.25±0.15	1

LAND PATTERN DIMENSIONS(mm)

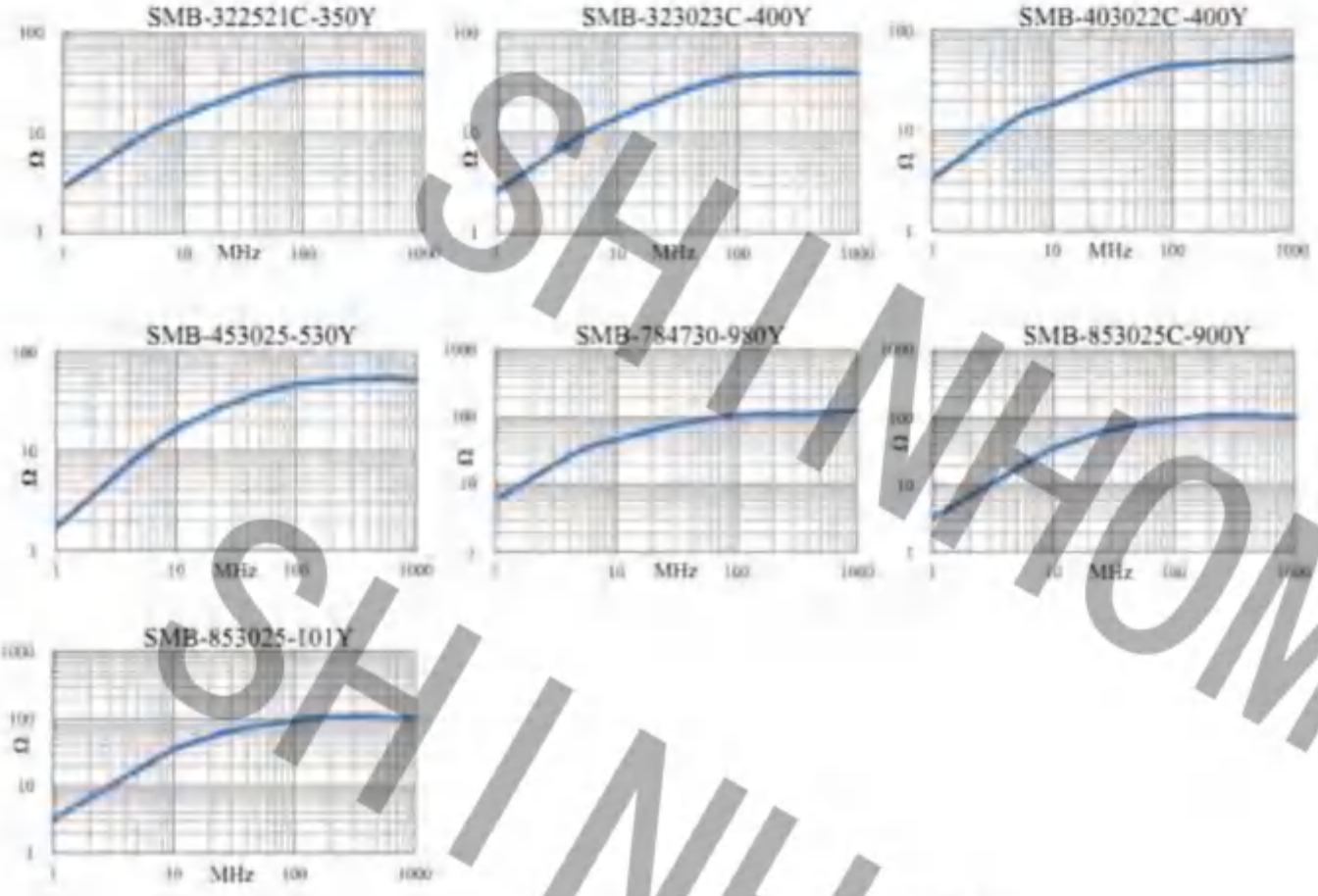


Part No.	A	B	C	D
SMB-322521C	4.20	1.50	1.50	1.20
SMB-323023C	4.20	1.50	1.50	1.20
SMB-403022C	4.80	1.40	1.50	2.00
SMB-403025	4.80	1.40	1.50	2.00
SMB-784730	10.50	3.00	1.80	4.50
SMB-853025C	10.70	3.30	1.50	4.50
SMB-853025	10.70	3.30	1.50	4.50

ELECTRICAL SPECIFICATIONS

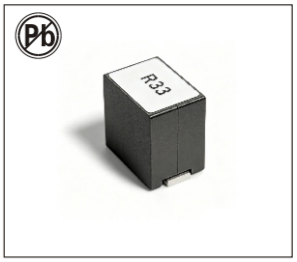
Part No.	Impedance (Ω)		DC Resistance (mΩ) max.	Rated Current (A) typ.
	25MHz	100MHz	@25℃	△T=40℃
SMB-322521C-350Y	25±25%	35±25%	0.60	14.0
SMB-323023C-400Y	23±25%	40±25%	0.60	15.0
SMB-403022C-400Y	28±25%	42±25%	0.80	15.0
SMB-403025-530Y	35±25%	53±25%	0.80	16.0
SMB-784730-980Y	65±25%	98±25%	0.90	18.0
SMB-853025C-900Y	65±25%	90±25%	1.00	17.0
SMB-853025-101Y	65±25%	100±25%	1.00	17.0

TYPICAL CHARACTERISTICS CURVE



SMT SHIELDED POWER INDUCTOR

SMB100710 SERIES



FEATURES:

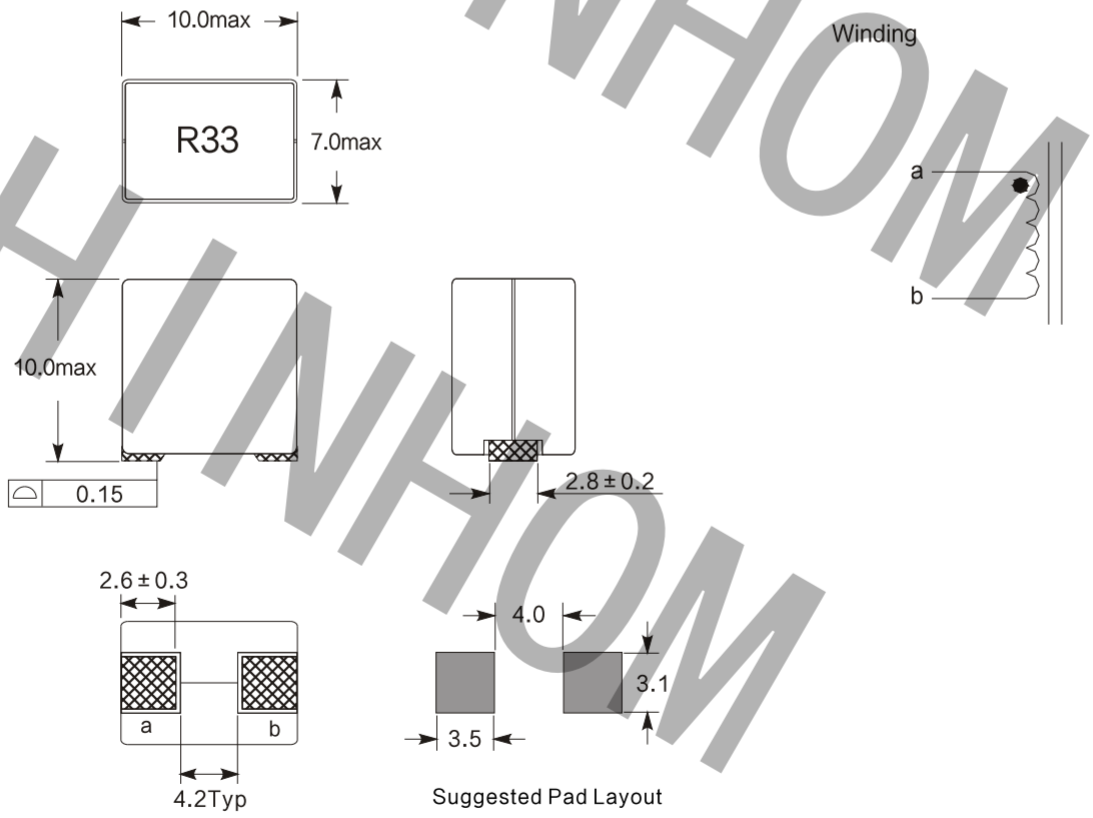
- Tight DCR tolerance for inductor-DCR-based current sensing circuits
- Excellent current handling
- 10x 7x 10 (Lx W x H) mm surface mount package
- Designed for use in multi-phase VRM/VRD/EVRD regulators
- Storage temperature: -40℃ to +145℃
- Operating temperature: -40℃ to +145℃(ambient + temp rise)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

ELECTRICAL CHARACTERISTICS:

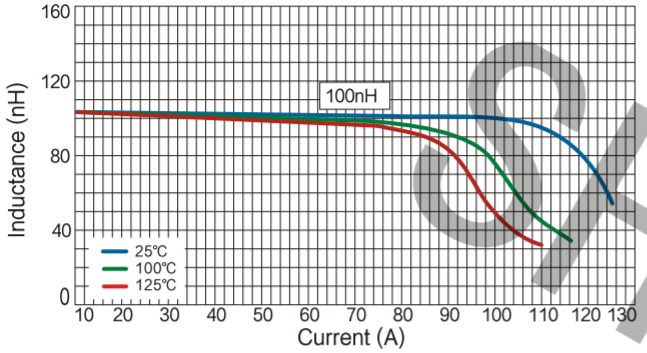
Part No.	OCL (nH)	SRF (MHz)typ	DCR (mΩ) ±10%	Isat1 (A) @25℃	Isat2 (A) @100℃	Isat3 (A) @125℃	Irms (A) 20℃ rise	Irms (A) 40℃ rise
SMB100710-R10K	100 ± 10%	222	0.17	113	100	90	72	92
SMB100710-R12K	120 ± 10%	159	0.17	98	84	80	72	92
SMB100710-R15K	150 ± 10%	150	0.17	75	65	60	72	92
SMB100710-R20K	200 ± 10%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

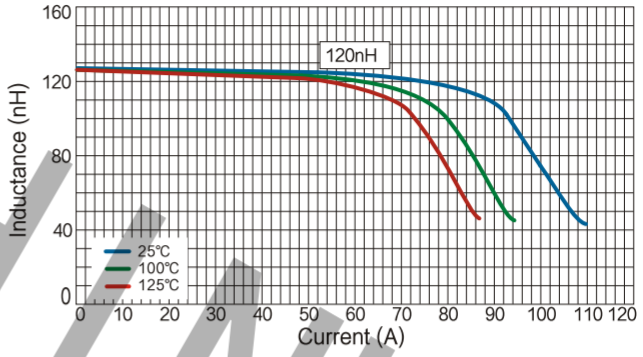
1. Inductance at 100 kHz, 0.1 Vrms, 0 Adc.
2. DC current that causes an inductance drop of 20% (typ) from its valuewithout current.
3. Electrical specifications at 25℃

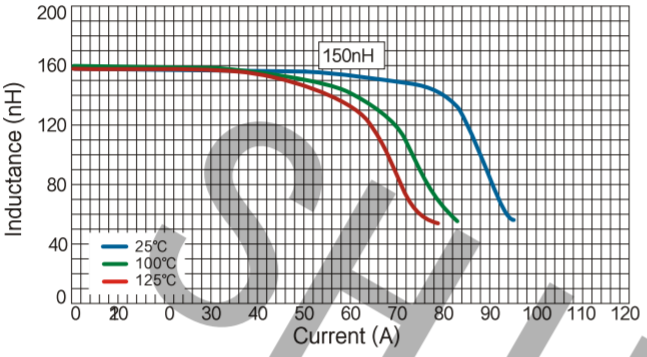
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

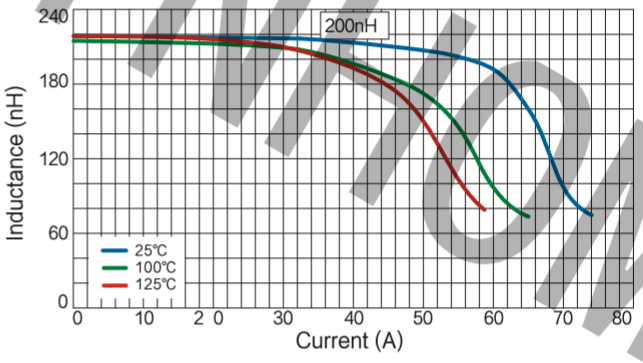


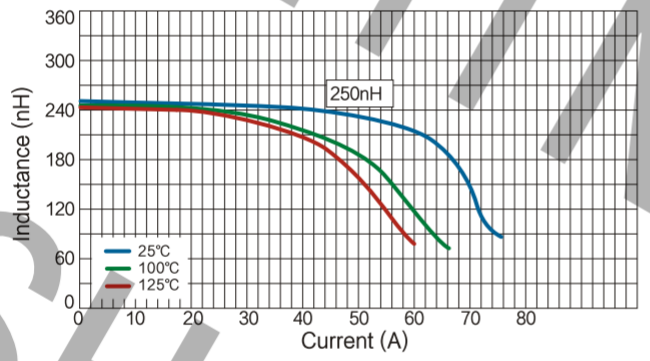
INDUCTANCE VS CURRENT:

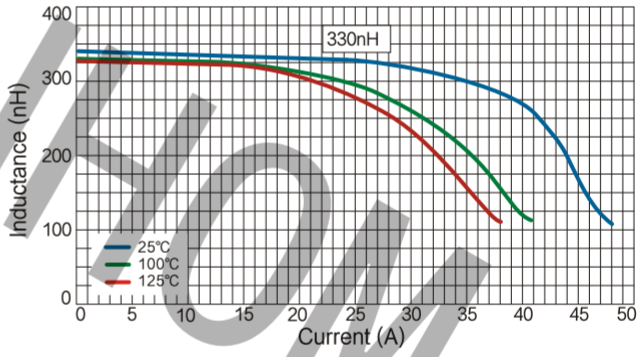












INDUCTANCE VS FREQUENCY: