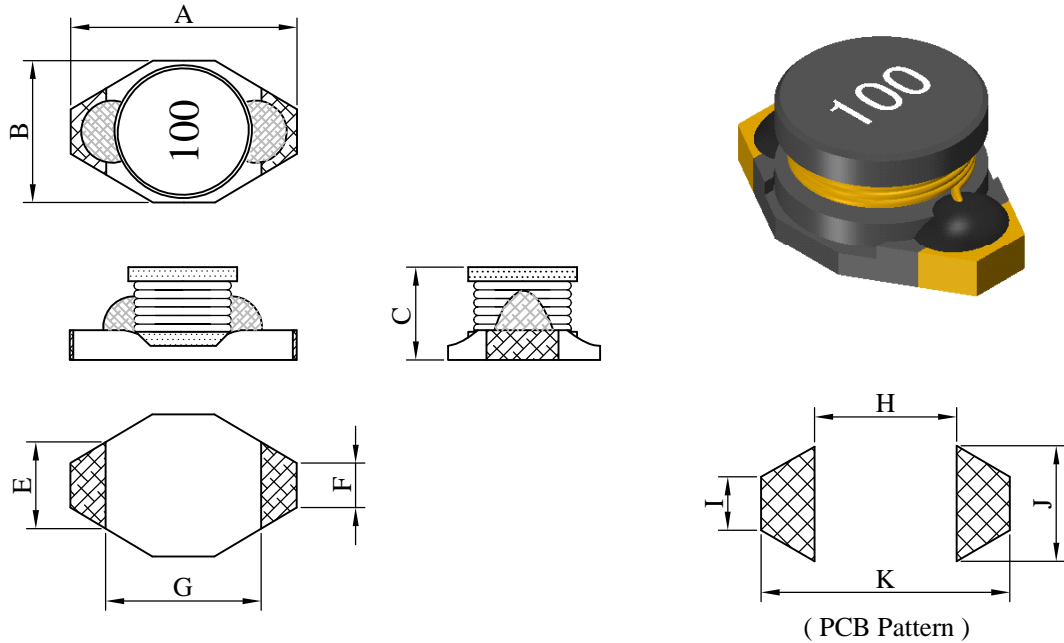


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I . Configuration and dimensions :



Unit : m/m

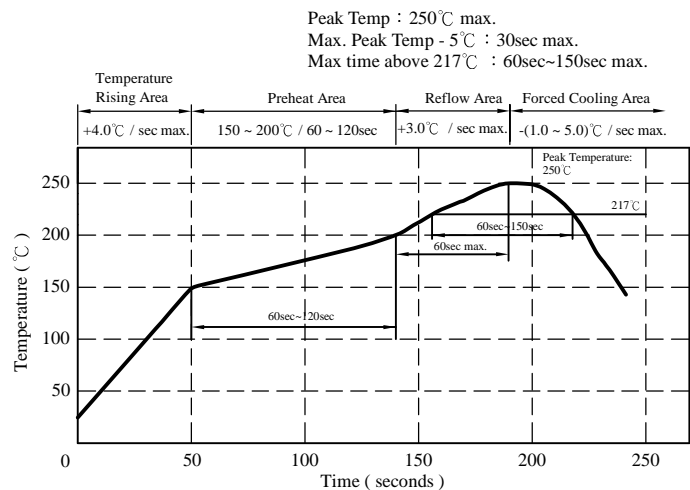
A	B	C	E	F	G	H	I	J	K
6.60 max.	4.45 max.	2.92 max.	3.05 typ.	1.27 typ.	4.32 typ.	4.10 ref.	1.60 ref.	3.00 ref.	7.00 ref.

II . Description :

- a . Ferrite drum core construction.
- b . Enamelled copper wire : F & H class
- c . Product weight : 0.10g (ref.)
- d . Moisture sensitivity Level 1
- e . Products comply with RoHS' requirements
- f . Halogen free available.

III . General specification :

- a . Storage temp. : -40°C ----+125°C
- b . Operating temp. : -40°C ----+125°C
(Temp. rise included)
- c . Resistance to solder heat : 250°C.10 secs.



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IV . Electrical characteristics :

DWG No.	Inductance (μ H)	SRF (MHz) typ.	RDC (Ω) max.	Irms (A)	Isat (A)
SB16081R0M2□-□□□	1.0 \pm 20%	130.0	0.05	2.90	2.90
SB16081R5M2□-□□□	1.5 \pm 20%	115.0	0.05	2.80	2.60
SB16082R2M2□-□□□	2.2 \pm 20%	90.0	0.07	2.40	2.30
SB16083R3M2□-□□□	3.3 \pm 20%	70.0	0.08	2.00	2.00
SB16084R7M2□-□□□	4.7 \pm 20%	50.0	0.09	1.50	1.50
SB16086R8M2□-□□□	6.8 \pm 20%	45.0	0.13	1.40	1.20
SB1608100M2□-□□□	10.0 \pm 20%	35.0	0.16	1.10	1.10
SB1608150M2□-□□□	15.0 \pm 20%	30.0	0.23	1.00	0.90
SB1608220M2□-□□□	22.0 \pm 20%	20.0	0.37	0.80	0.70
SB1608330M2□-□□□	33.0 \pm 20%	15.0	0.51	0.60	0.58
SB1608470M2□-□□□	47.0 \pm 20%	14.0	0.64	0.50	0.50
SB1608680M2□-□□□	68.0 \pm 20%	11.0	0.86	0.40	0.40
SB1608101M2□-□□□	100.0 \pm 20%	9.0	1.27	0.30	0.31
SB1608151M2□-□□□	150.0 \pm 20%	6.0	2.00	0.25	0.27
SB1608221M2□-□□□	220.0 \pm 20%	5.5	3.11	0.20	0.22
SB1608331M2□-□□□	330.0 \pm 20%	5.0	3.80	0.16	0.18
SB1608471M2□-□□□	470.0 \pm 20%	4.0	5.06	0.15	0.16
SB1608681M2□-□□□	680.0 \pm 20%	3.0	9.20	0.12	0.14
SB1608102M2□-□□□	1000.0 \pm 20%	2.0	13.80	0.07	0.10

- 1). □ : Packaging information : □ Code
- 2). "-□□□" : Reference code
- 3). Electrical specifications at 25°C
- 4). Irms base on Temp. rise 15°C typ.
- 5). Isat base on $\Delta L/L0A=10\%$ typ.
- 6). Inductance Tested at 0.1V/100kHz

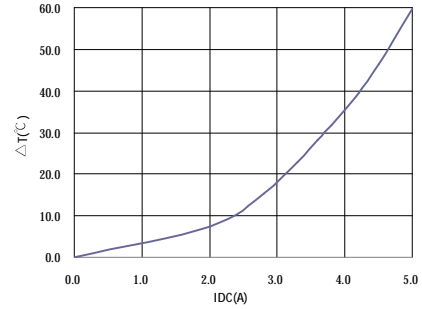
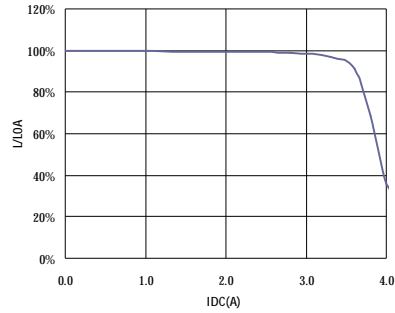
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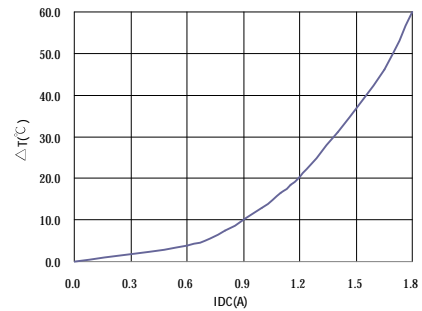
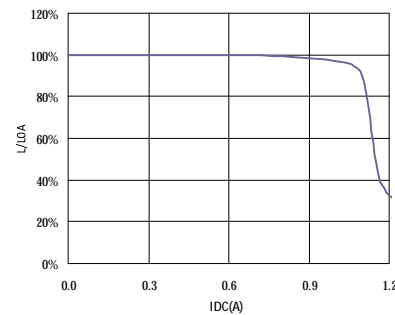
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V . Curve :

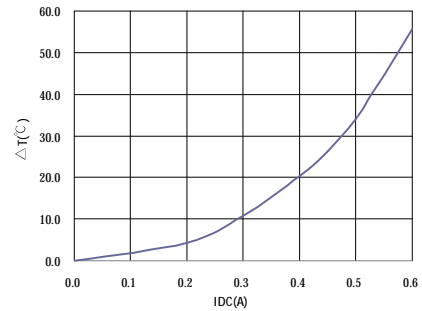
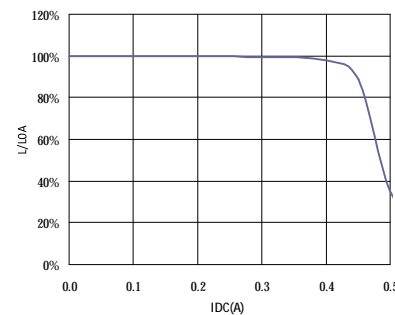
SB16081R5M2□



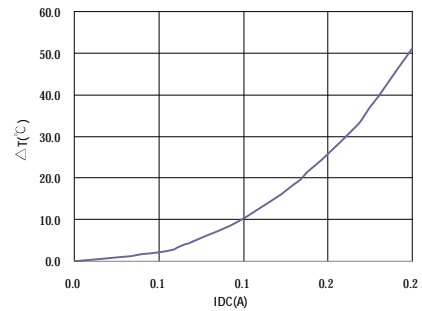
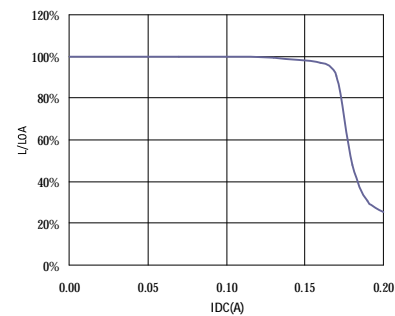
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SB1608101M2□



SB1608681M2□



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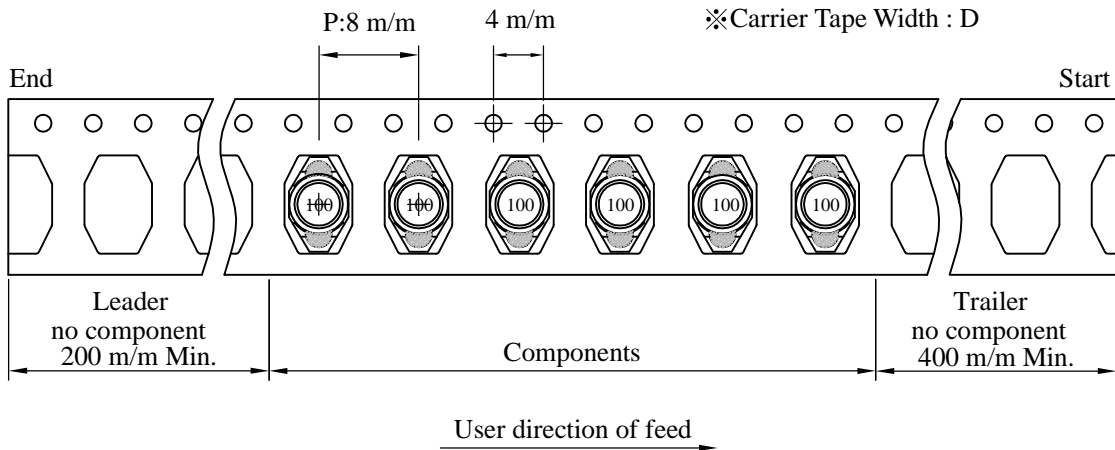
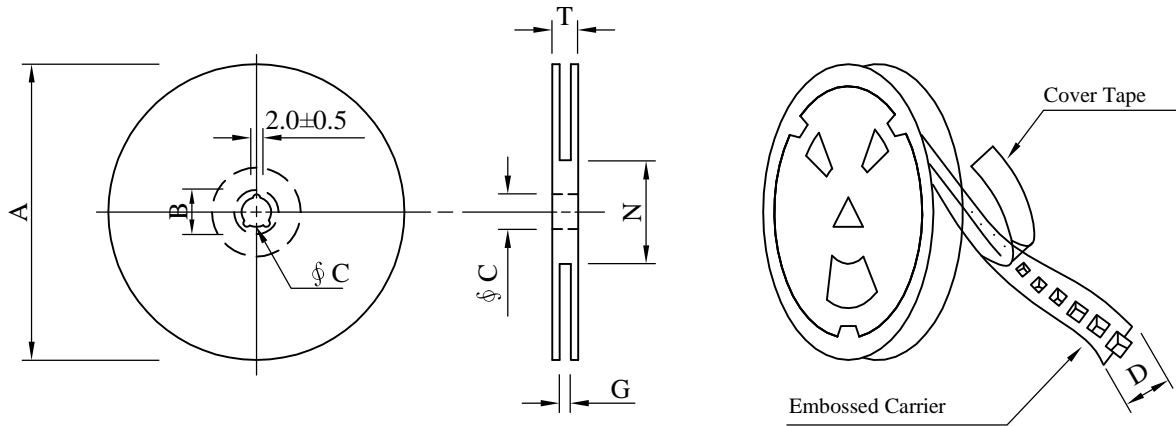
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VI . Packaging information :

(1) Configuration



(2) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
07-12	178	21±0.8	13	12	14 ⁺⁰	50 ⁻⁰	16.5
13-12	330	21±0.8	13±0.5	12	14 ⁺⁰	50 ⁻⁰	18.4

(3) Q'TY & G.W. Per Package

Code	Inner : Reel			Outer : Carton		
	Q'TY (pcs)	G.W. (gw)	Style	Q'TY (pcs)	G.W. (Kg)	Size (cm)
B	600	190	07-12	24,000	9.0	42 x 41 x 24
C	2,500	720	13-12	20,000	7.1	38 x 37 x 22

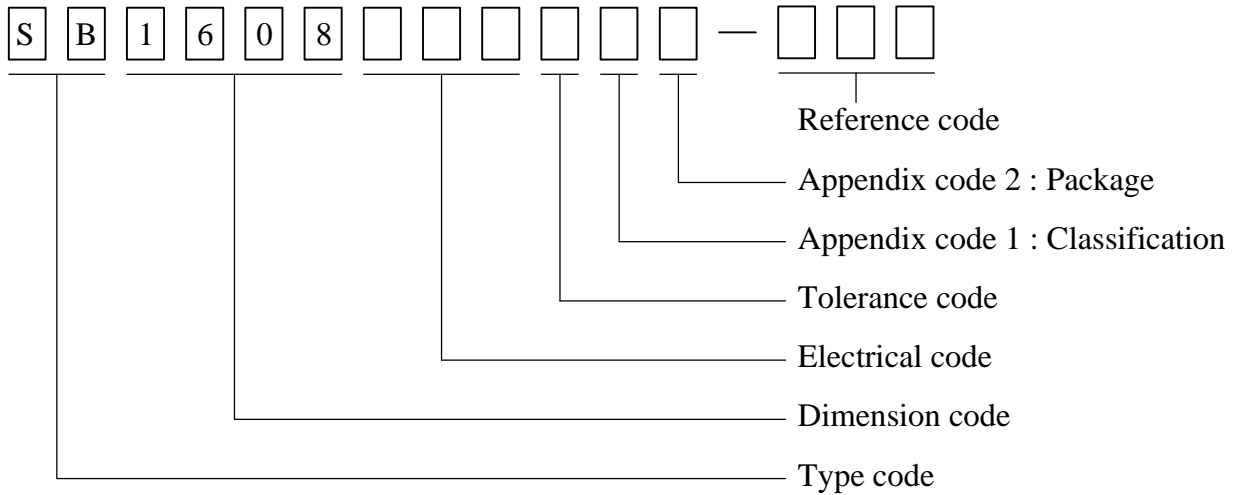
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VII . Drawing number expression :



Appendix code 1 : Product Classification

Appendix code 2 : Package Information

Code	Inner package	Cover tape	Carrier tape	Bag	Package Q'TY	Remark
B	T/R (Reel package)	UCT	Antistatic	Antistatic	600 pcs	
C	T/R (Reel package)	UCT	Antistatic	Antistatic	2500 pcs	

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VIII . Reliability test :

Item	Reference documents	Test Condition	Test Specification
1.High Temperature Exposure	MIL-STD-202 Method 108	1.Temperature: 125±2℃ 2.Time:96±2 hours.	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%.
2.Temperature Cycling	JESD22-A 104	1.Temperature: -40℃ ~ +125℃ 2.Number of cycle:100 cycles 3.Dwell time:30 minutes	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%.
3.Biased Humidity Test	MIL-STD-202 Method 103	1.Temperature : 85±2℃ 2.Humidity: 85% RH. 3.Time:96±2 Hours	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%.
4.Operational Life	JESD22-A 108	1.Temperature: 125℃ (Temp. rise included) 2.Time:96±2 hours. 3.Rated current	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%.
5.External Visual	JESD22-B 101 & MIL-STD-883 Method 2009	Inspect product constructions, marking and workmanship.	1.No pollution on the surface of products. 2.Clear marking. 3.No crack.
6.Physical Dimensions	JESD22-B 100	Verify physical dimensions to the applicable product detail specification.	Per product specification standard
7.Resistance to solvents	MIL-STD-202 Method 215	Immerse into solvent for 3±0.5 minutes & brush 10 times for 3 cycles.	1.No body change in apperance. 2.No marking blurred. 3.Inductance shall not change more than ±10%.
8.Vibration Test	MIL-STD-202 Method 204	1.Frequency and Amplitud : 10-2000-10 Hz, 1.5 mm. 2.Direction:X, Y, Z 3.Test duration:2 hours for each direction, 6 hours in total.	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%.
9.Resistance To Soldering Heat Test	MIL-STD-202 Method 210 & J-STD020D.1	1.Highest temperature : 250±5℃. 2.Time (temp. ≥ 217℃) : 60~150 Seconds. 3.IR reflow times : 3 times.	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%.
10.Saturation Current	JIS C 6436 & User SPEC.	1.Applied rated current for 5 seconds. 2.Saturation current	Inductance shall not drop more than 10% typ.
11.Over load	JIS C 6436 & User SPEC.	1.Applied one and half rated current for a period of 5 minutes. 2.Rated current	No electrical or mechanical damage
12.Temperature Rise Current	JIS C 6436 & User SPEC.	1.Applied rated current for 10 minutes. 2.Temperature measure by digital surface thermometer. 3.Irms current	Surface temperature rise is less than 15℃ typ.
13.Solderability Test	J-STD-002 & JESD22-B 102	1.Baking in pre-testing : 150±5℃ / 16Hours±30 min. 2.Peak temperature : 240±5℃ 3.Time (temp. ≥ 217℃) : 60~150 seconds. 4.IR reflow times : 1 time.	More than 95% soldering coverage min on terminations.
14.Electrical Characteriazation	MIL-STD-202 Method 304 & User SPEC.	1.Operating temperature : -40℃~125℃ 2.Room temperature : 25℃.	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%.
15.Drop	CNS-C6354 & GB/T 2423.8	1.Products shall be mounted on SPEC. pcb and dropped down from a heigh of 1m 2.Drop total time : 6 time (Every side ofsample drop 2 times)	1. Adhesion on PCB shall be enough. 2. Product appearance shall not break. 3. No electrical damage.
16.Terminal Strength Test	IEC 60068-2-21	1.Apply push force to samples mounted on PCB. 2.Force of 1.8 kg for 60±1 seconds.	After test, inductors shall be no mechanical damage.

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