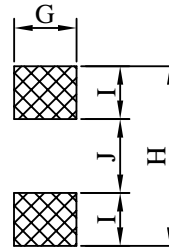
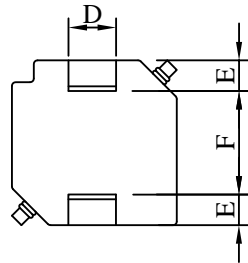
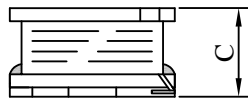
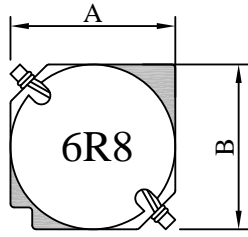


SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SB1305□□□□L□-□□□		
		REV.	20140108-C	PAGE	1

I . Configuration and dimensions :



(PCB Pattern)

Unit : m/m

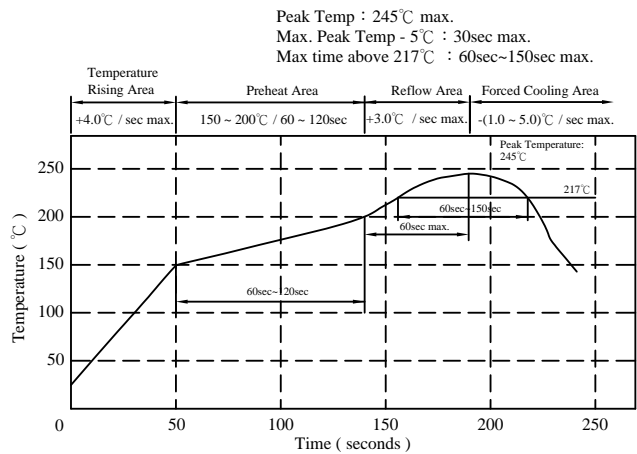
A	B	C	D	E	F	G	H	I	J
12.70±0.3	12.70±0.3	4.80±0.3	3.00 typ.	2.00 typ.	8.60 typ.	3.60 ref.	13.60 ref.	2.60 ref.	8.40 ref.

II . Description :

- a . Ferrite drum core construction.
- b . Enamelled copper wire : F class
- c . Product weight : 2.0g (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 : 245°C .10 secs.



AR-001C

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SB1305□□□□L□-□□□		
		REV.	20140108-C	PAGE	2

IV . Electrical characteristics :

DWG No.	L (uH)	Q ref.	Test Freq.		SRF (MHz) typ.	RDC (mΩ) max.	Irms (A)	Isat (A)
			L (Hz)	Q (MHz)				
SB13052R5YL□-□□□	2.5±25%	20	100K/10mV	7.96	61.0	14	7.20	8.00
SB13053R5YL□-□□□	3.5±25%	18	100K/10mV	7.96	43.0	16	6.00	7.00
SB13054R6YL□-□□□	4.6±25%	20	100K/10mV	7.96	35.0	18	5.20	6.00
SB13056R8YL□-□□□	6.8±25%	18	100K/10mV	7.96	32.0	24	4.30	5.20
SB1305100ML□-□□□	10.0±20%	25	100K/10mV	2.52	27.0	37	3.60	4.40
SB1305150ML□-□□□	15.0±20%	25	100K/10mV	2.52	24.0	46	3.30	3.70
SB1305220ML□-□□□	22.0±20%	26	100K/10mV	2.52	20.0	62	2.90	3.00
SB1305330ML□-□□□	33.0±20%	22	100K/10mV	2.52	16.0	85	2.50	2.60
SB1305470ML□-□□□	47.0±20%	20	100K/10mV	2.52	13.0	130	1.90	2.00
SB1305680ML□-□□□	68.0±20%	20	100K/10mV	2.52	11.0	165	1.65	1.80
SB1305101KL□-□□□	100.0±10%	18	100K/10mV	0.796	11.0	255	1.40	1.40
SB1305151KL□-□□□	150.0±10%	15	100K/10mV	0.796	8.0	380	1.20	1.15
SB1305221KL□-□□□	220.0±10%	15	100K/10mV	0.796	7.0	500	1.00	0.95
SB1305331KL□-□□□	330.0±10%	10	100K/10mV	0.796	6.0	700	0.85	0.80
SB1305471KL□-□□□	470.0±10%	10	100K/10mV	0.796	4.0	1150	0.67	0.70
SB1305681KL□-□□□	680.0±10%	10	100K/10mV	0.796	3.5	1400	0.60	0.58
SB1305102KL□-□□□	1000.0±10%	32	100K/10mV	0.252	2.7	2350	0.46	0.47

- 1). □: Packaging information : □ Code
- 2). "-□□□" : Reference code
- 3). Electrical specifications at 25°C
- 4). Irms base on Temp. rise 40°C max.
- 5). Isat base on $\Delta L / L0A=25\%$ typ.

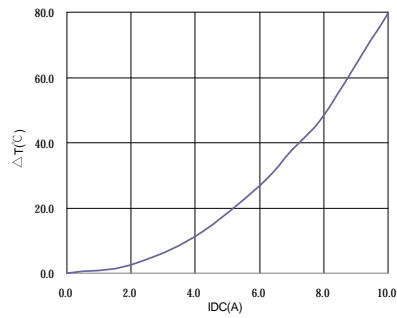
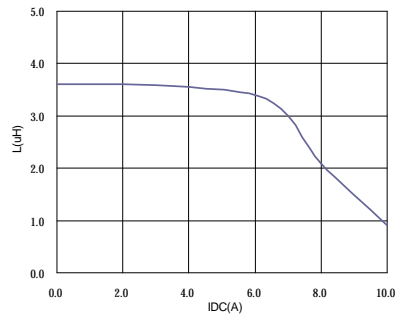
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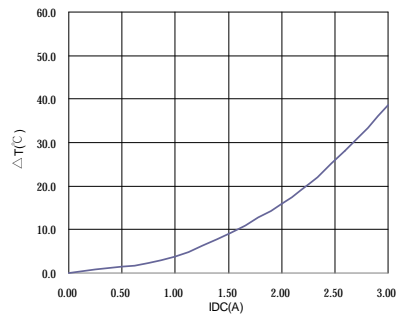
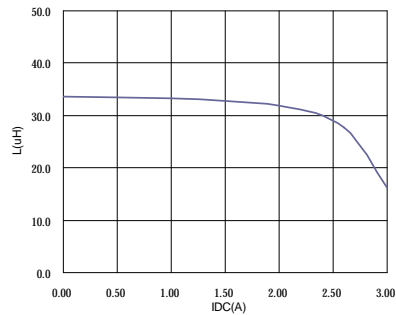
PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SB1305□□□□L□-□□□		
		REV.	20140108-C	PAGE	3

V . Curve :

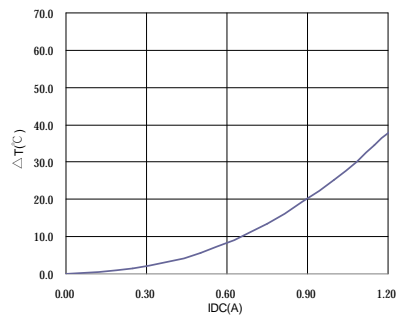
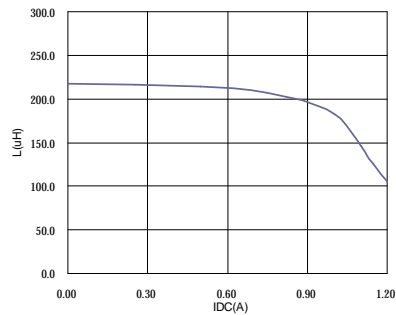
SB13053R5YL□



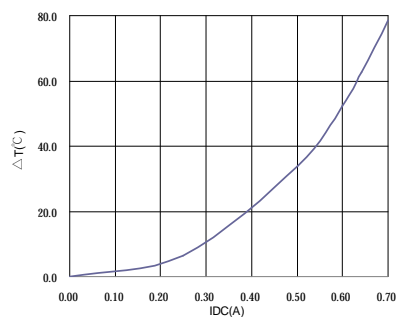
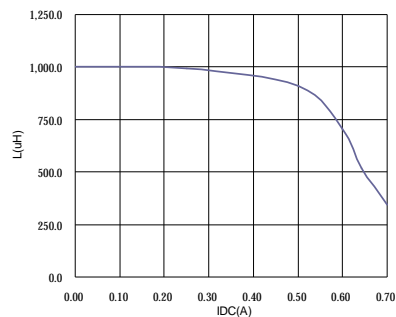
SB1305330ML□



SB1305221KL□



SB1305102KL□



AR-001C

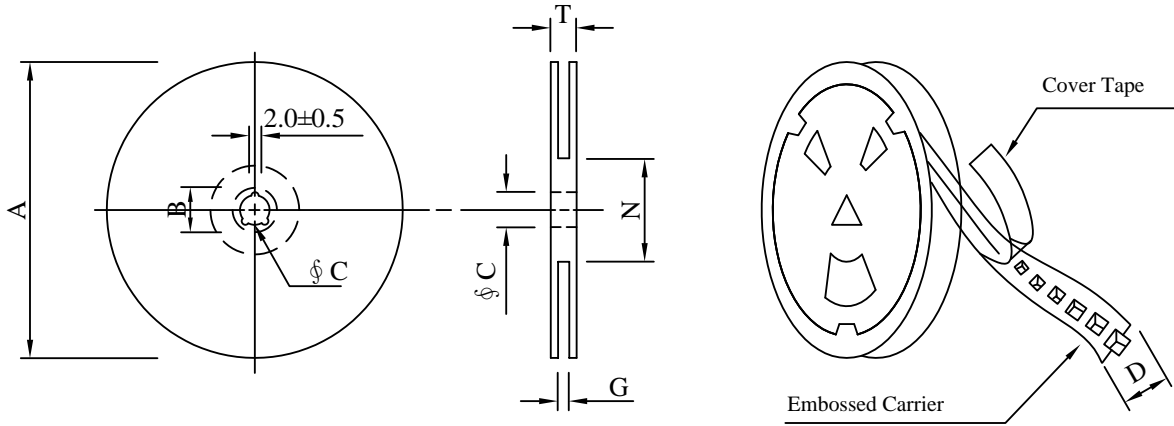
SPECIFICATION FOR APPROVAL

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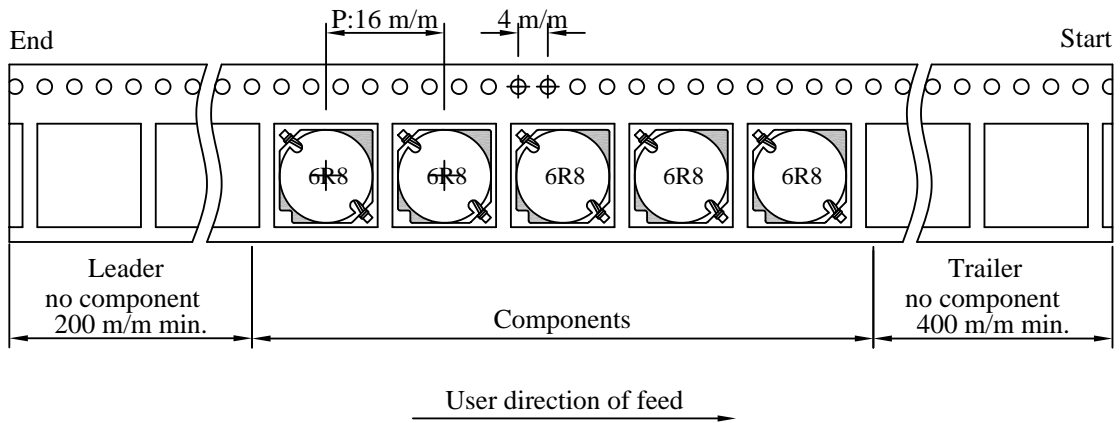
PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SB1305□□□□L□-□□□		
		REV.	20140108-C	PAGE	4

VI . Packaging information :

(1) Configuration



※Carrier Tape Width : D



(2) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
13 - 24	330	21±0.8	13±0.5	24	26 ⁺⁰	60 ⁻⁰	30.4

(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	1,430	13 - 24	2,400	6.8	38 x 37 x 22

AR-001C

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SB1305□□□□L□-□□□		
		REV.	20140108-C	PAGE	5

VII . Reliability test :

Item	Reference documents	Test Condition	Test Specification
1.High Temperature Exposure	MIL-STD-202 Method 108	1.Temperature: 125°C 2.Time:96 hours.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
2.Temperature Cycling	JESD22 Method JA-104	1.Temperature: -40°C ~ 125°C 2.Number of cycle:96 cycle 3.Dwell time:30 minutes	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
3.Biased Humidity Test	MIL-STD-202 Method 103	1.Temperature:85±5 °C 2.Time:96 Hours 3.Humidity: 85±5% RH.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
4.Operational Life	MIL-PRF-27	1.Temperature: 125°C 2.Time:96 hours. 3.Apply rated current.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
5.External Visual	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 Method JB-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 appearance. 2.No marking blurred. 3.Inductance shall not change more than ±10%.
8.Vibration Test	MIL-STD-202 Method 204	1.Frequency and Amplitude : 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 and electrical damage. 2.Inductance shall not change more than ±10%.
9.Resistance To Soldering Heat Test	MIL-STD-202 Method 210	1.Highest temperature : 245±5°C 2.Time (temp. ≥ 217°C) : 60~150 Second. 3.IR reflow times : 3 times.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
10.Rated current	MIL-STD-202 Method 330	Apply rated current for 5 second.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
11.Temperature rise	MIL-PRF-27	Apply rated current for 10 minutes.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
12.Over load	MIL-PRF-27	Apply double as rated current for 5 minutes. (It's not application to some special design)	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
13.Solderability Test	J-STD-002	1.Baking in pre-testing : 155±5°C / 16Hours±30 min. 2.Peak temperature : 240±5°C 3.Time (temp. ≥ 217°C) : 60~150 second. 4.IR reflow times : 1 times.	The terminal shall be at least 95% covered with fresh solder.
14.Electrical Characterization	User Spec.	1.Operating temperature : -40°C~125°C 2.Room temperature : 25°C.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
15.Withstanding Voltage Test	MIL-STD-202 Method 201	1.DC:500V 2.Time:1minutes	1.During the test no breakdown. 2.The characteristic is normal after test.
16.Drop	JESD22-B111	Packaged & Drop down from 1m.In 1 angle 1ridges & 2 surfaces orientation.	1.No case deformation or change in appearance. 2.Inductance shall not change more than ±10%.
17.Terminal Strength Test	JIS-C-6429	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.

AR-001C

