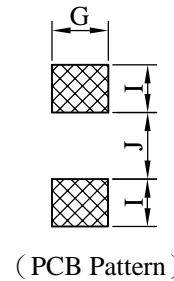
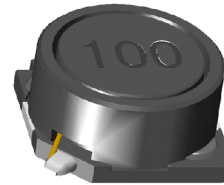
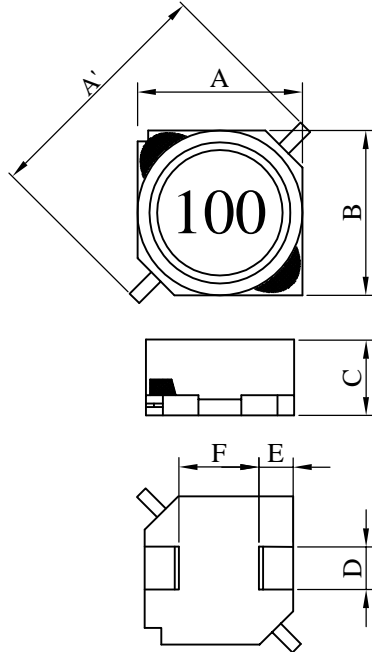


# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SS1045□□□□L□-□□□		
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**I . Configuration and dimensions :**



Unit : m/m

A	A'	B	C	D	E	F	G	I	J
10.10 ±0.3	14.50 ±0.5	10.10 ±0.3	4.50 ±0.3	3.00 typ.	2.15 typ.	5.80 typ.	3.20 ref.	2.50 ref.	5.60 ref.

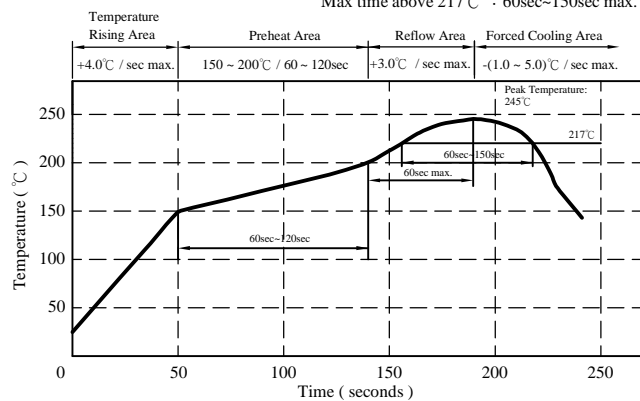
**II . Description :**

- a . Ferrite drum core construction.
- b . Magnetically shielded.
- c . Enamelled copper wire : H class
- d . Product weight : 1.30 g ( ref. )
- e . Moisture sensitivity Level 1
- f . Products comply with RoHS' requirements

**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.

Peak Temp : 245°C max.  
Max. Peak Temp - 5°C : 30sec max.  
Max time above 217°C : 60sec-150sec max.



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# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SS1045□□□□L□-□□□		
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## IV . Electrical characteristics :

Dwg. No.	Inductance (uH)	Test Freq. (Hz)	RDC (Ω) ±20%	Isat (A) typ.	Irms (A) typ.
SS10452R7YL□-□□□	2.7±30%	1k	0.0161	4.90	3.70
SS10454R7YL□-□□□	4.7±30%	1k	0.0220	3.80	3.20
SS1045100ML□-□□□	10.0±20%	1k	0.0364	3.00	2.50
SS1045150ML□-□□□	15.0±20%	1k	0.0472	2.40	2.20
SS1045220ML□-□□□	22.0±20%	1k	0.0591	2.10	1.90
SS1045330ML□-□□□	33.0±20%	1k	0.0815	1.60	1.70
SS1045470ML□-□□□	47.0±20%	1k	0.1100	1.40	1.50
SS1045680ML□-□□□	68.0±20%	1k	0.1400	1.20	1.30
SS1045101ML□-□□□	100.0±20%	1k	0.2300	1.00	1.10
SS1045151ML□-□□□	150.0±20%	1k	0.3500	0.79	0.81
SS1045221ML□-□□□	220.0±20%	1k	0.4900	0.65	0.70
SS1045331ML□-□□□	330.0±20%	1k	0.7400	0.54	0.58
SS1045471ML□-□□□	470.0±20%	1k	1.0800	0.40	0.47
SS1045681ML□-□□□	680.0±20%	1k	1.6000	0.35	0.38
SS1045102ML□-□□□	1000.0±20%	1k	2.4000	0.32	0.29
SS1045152ML□-□□□	1500.0±20%	1k	3.4000	0.22	0.26

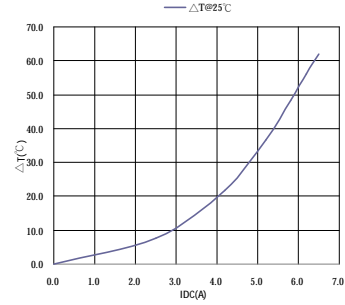
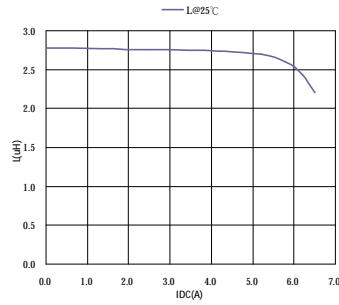
- 1). □: Packaging information : □ Code
- 2). "-□□□" : Reference code
- 3). Electrical specifications at 25°C
- 4). Inductance Test Condition. : 1kHz / 0.5V
- 5). Irms base on Temp. rise 30°C typ.
- 6). Isat base on  $\Delta L/L0A = 10\%$  typ.

# SPECIFICATION FOR APPROVAL

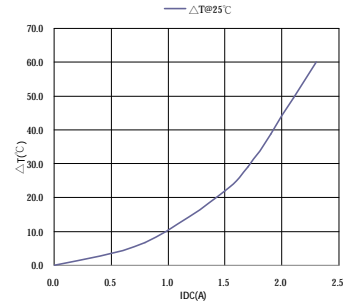
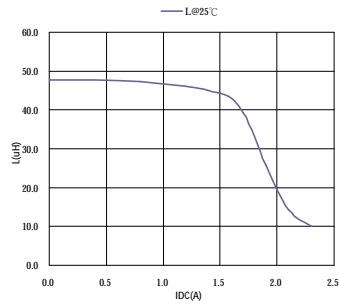
REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SS1045□□□□L□-□□□		
		REV.	20160516-E	PAGE	3

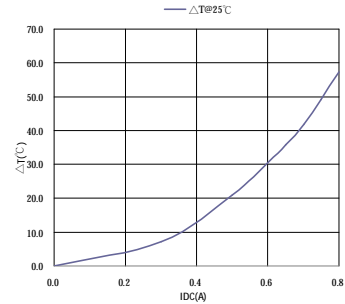
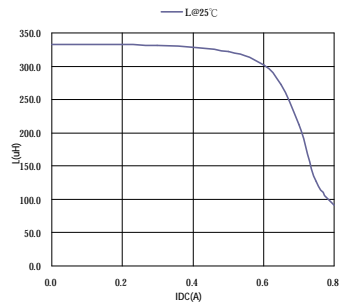
V . Curve :  
SS10452R7YLB



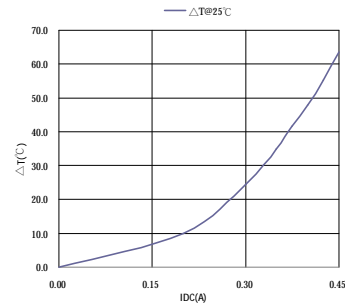
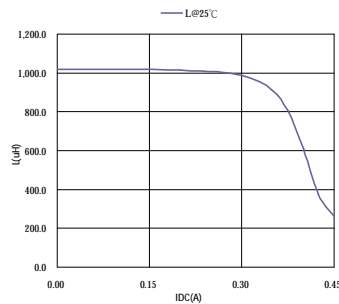
SS1045470MLB



SS1045331MLB



SS1045102MLB



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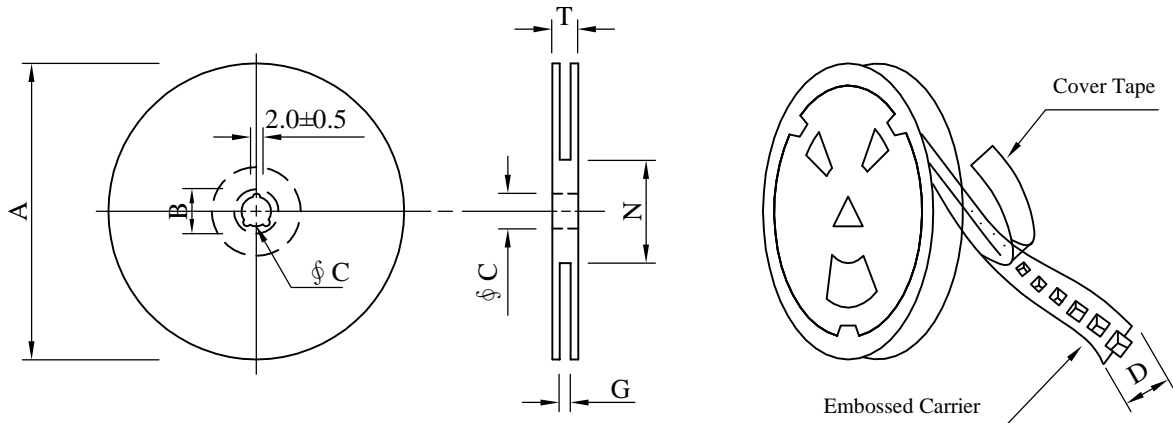
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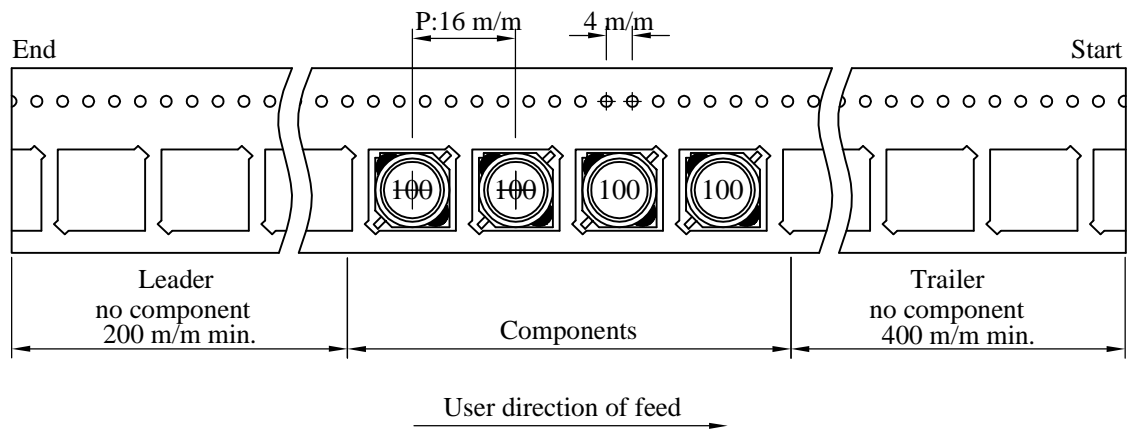
PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SS1045□□□□L□-□□□		
		REV.	20160516-E	PAGE	4

## 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 <sup>+0</sup>	60 <sup>-0</sup>	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	700	1360	13 - 24	2,800	6.7	38 x 37 x 22

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# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SS1045□□□□L□-□□□		
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## VII . 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 ±20%.
2.Temperature Cycling	JESD22-A 104	1.Temperature: -40℃ ~ +125℃ 2.Number of cycle:100 cycle 3.Dwell time:30 minutes	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%.
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 ±20%.
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 ±20%.
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 ±20%.
8.Vibration Test	MIL-STD-202 Method 204	1.Frequency and Amplitued : 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 ±20%.
9.Resistance To Soldering Heat Test	MIL-STD-202 Method 210 & J-STD020D.1	1.Highest temperature : 245±5℃. 2.Time ( temp. ≥ 217℃ ) : 60~150 Second. 3.IR reflow times : 3 times.	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%.
10.Saturation Current	JIS C 6436 & User SPEC.	1.Applied rated current for 5 second. 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 30℃ 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 second. 4.IR reflow times : 1 times.	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 ±20%.
15.Drop	CNS-C6354 & GB/T 2423.8	1.Products shall be mounted on SPEC. PCB and dropped down from a height of 1m 2.Drop total time : 6 time (Every side of sample drop 2 time)	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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