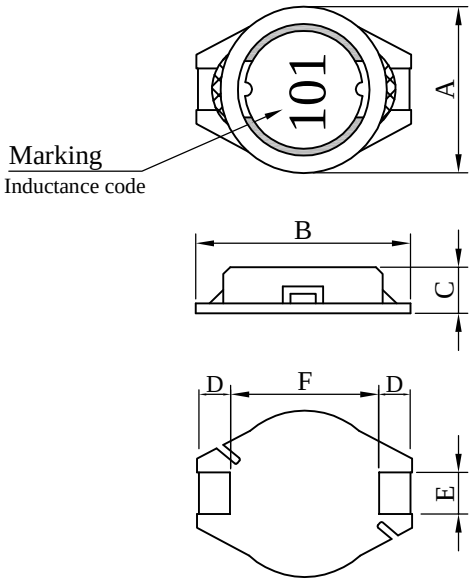
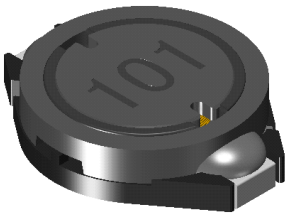
SPECIFICATION FOR APPROVAL

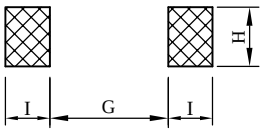
REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SS1003□□□□L□-□□□		
		REV.	20150708-E	PAGE	1

Ⅰ．Configuration and dimensions：







(PCB Pattern)

Unit：m/m

A	B	C	D	E	F	G	H	I
10.10 ±0.3	12.70 ±0.3	2.70 ±0.3	2.40 ±0.2	2.20 ref.	7.60 ±0.3	7.30 ref.	2.80 ref.	3.00 ref.

Ⅱ．Description：

a．Ferrite drum core construction.

b．Magnetically shielded.

c．Enamelled copper wire：F class

d．Product weight： 0.74 g（ref.）

e．Moisture sensitivity Level 1

f．Products comply with RoHS' requirements

g．Halogen free available

Ⅲ．General specification：

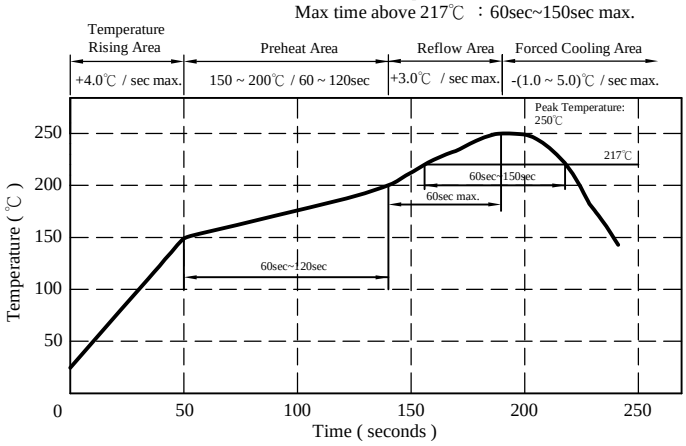
a．Storage temp.：-40℃ ----+125℃

b．Operating temp.：-40℃----+125℃

(Temp. rise included)

c．Resistance to solder heat：250℃.10 secs.

Peak Temp：250℃ max.
Max. Peak Temp - 5℃：30sec max.
Max time above 217℃ ：60sec~150sec max.



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PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SS1003□□□□L□-□□□		
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Ⅳ．Electrical characteristics：

DWG No.	Inductance (μH)	Q ref.	Test Freq. (Hz)		RDC (Ω) max.	Irms (A) max.	Isat (A) max.
			L	Q			
SS10031R8ML□-□□□	1.8±20%	10	1k	7.96 M	0.038	3.00	3.60
SS10032R2ML□-□□□	2.2±20%	11	1k	7.96 M	0.045	2.76	3.40
SS10033R0ML□-□□□	3.0±20%	11	1k	7.96 M	0.062	2.20	2.60
SS10033R9ML□-□□□	3.9±20%	10	1k	7.96 M	0.070	2.10	2.40
SS10034R7ML□-□□□	4.7±20%	10	1k	7.96 M	0.078	1.90	2.30
SS10037R5ML□-□□□	7.5±20%	10	1k	7.96 M	0.100	1.44	1.70
SS1003100ML□-□□□	10.0±20%	18	1k	2.52 M	0.145	1.24	1.50
SS1003120ML□-□□□	12.0±20%	20	1k	2.52 M	0.185	1.10	1.30
SS1003150ML□-□□□	15.0±20%	20	1k	2.52 M	0.200	1.02	1.20
SS1003180ML□-□□□	18.0±20%	20	1k	2.52 M	0.270	0.90	1.10
SS1003220ML□-□□□	22.0±20%	17	1k	2.52 M	0.300	0.80	1.00
SS1003270ML□-□□□	27.0±20%	17	1k	2.52 M	0.400	0.75	0.90
SS1003330ML□-□□□	33.0±20%	17	1k	2.52 M	0.450	0.70	0.85
SS1003390ML□-□□□	39.0±20%	18	1k	2.52 M	0.560	0.65	0.80
SS1003470ML□-□□□	47.0±20%	18	1k	2.52 M	0.650	0.60	0.72
SS1003560ML□-□□□	56.0±20%	15	1k	2.52 M	0.680	0.52	0.65
SS1003680ML□-□□□	68.0±20%	15	1k	2.52 M	0.800	0.48	0.58
SS1003820ML□-□□□	82.0±20%	20	1k	2.52 M	1.200	0.42	0.52
SS1003101ML□-□□□	100.0±20%	23	1k	0.796M	1.400	0.40	0.48
SS1003121ML□-□□□	120.0±20%	22	1k	0.796M	1.520	0.35	0.44
SS1003151ML□-□□□	150.0±20%	23	1k	0.796M	1.800	0.32	0.40
SS1003181ML□-□□□	180.0±20%	20	1k	0.796M	2.200	0.28	0.35
SS1003221ML□-□□□	220.0±20%	20	1k	0.796M	2.200	0.26	0.32
SS1003271YL□-□□□	270.0±15%	26	1k	0.796M	3.100	0.22	0.28
SS1003331YL□-□□□	330.0±15%	26	1k	0.796M	3.600	0.20	0.26
SS1003391YL□-□□□	390.0±15%	28	1k	0.796M	4.600	0.18	0.22
SS1003471YL□-□□□	470.0±15%	28	1k	0.796M	5.100	0.16	0.20

1). □：Packaging information：□ Code

2). "-□□□"：Reference code

3). Electrical specifications at 25℃

4). Irms base on Temp. rise 40℃ max.

5). Isat base on △L/L0A=10% max.

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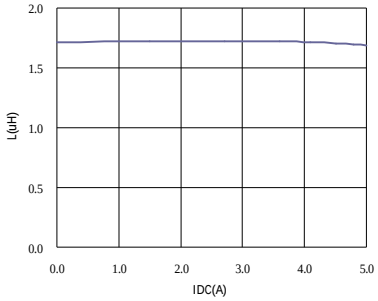
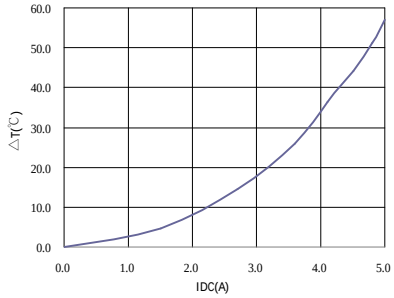
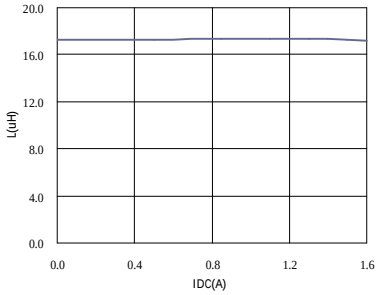
V ．Curve：

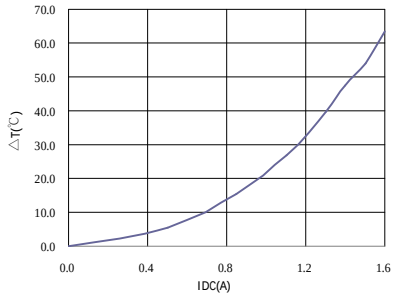
SS10031R8ML□



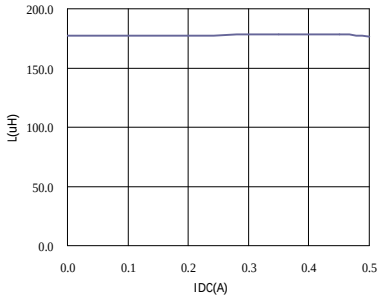


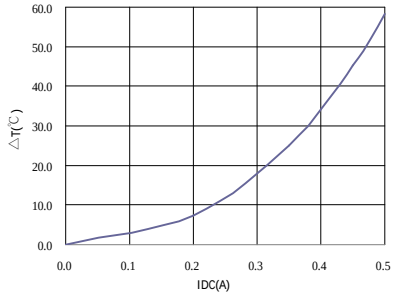
SS1003180ML□



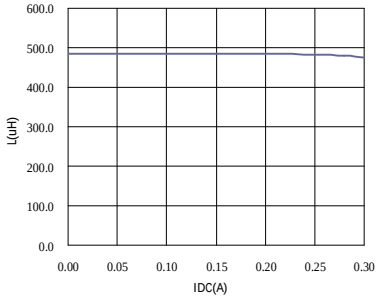


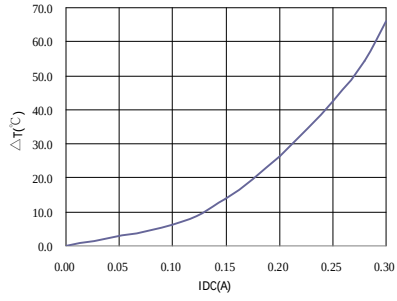
SS1003181ML□





SS1003471YL□





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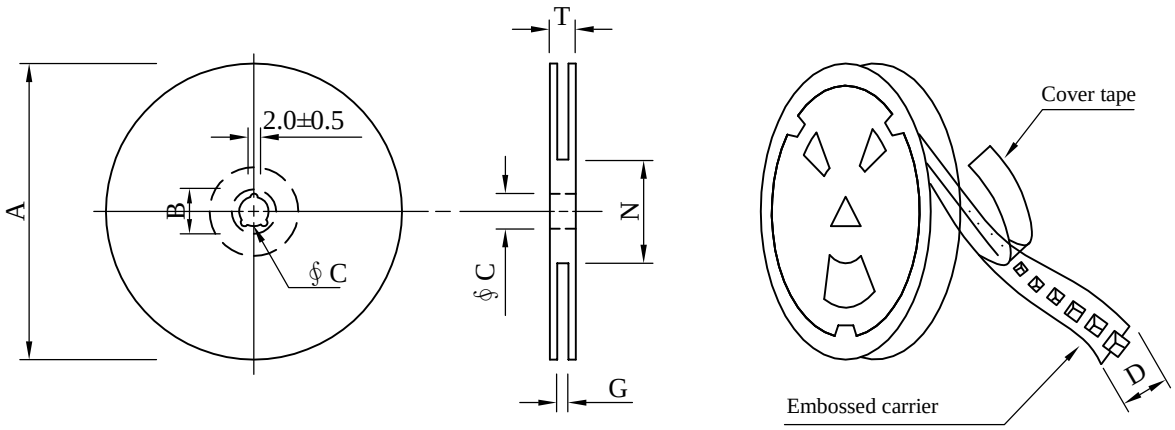
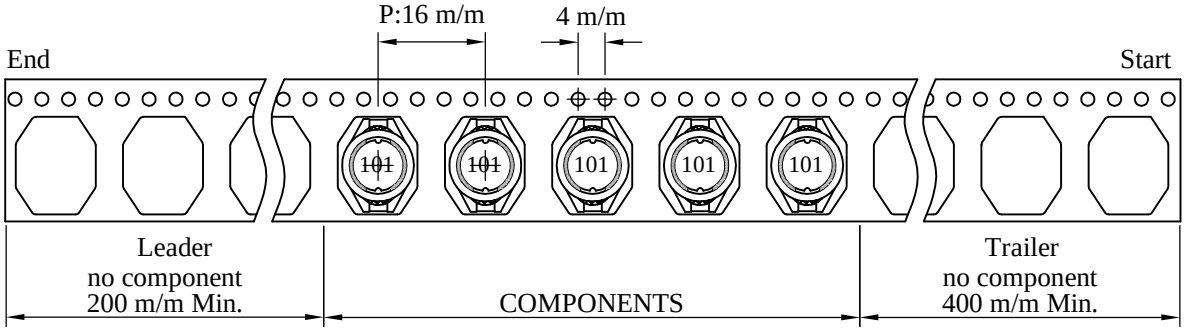
Ⅵ．Packaging information：

(1) Configuration



※Carrier tape width : D



User direction of feed

(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	1,000	1,180	13 - 24	4,000	6.0	38 x 37 x 22

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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 apperarance. 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：250±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% max.
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 40℃ max.
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.