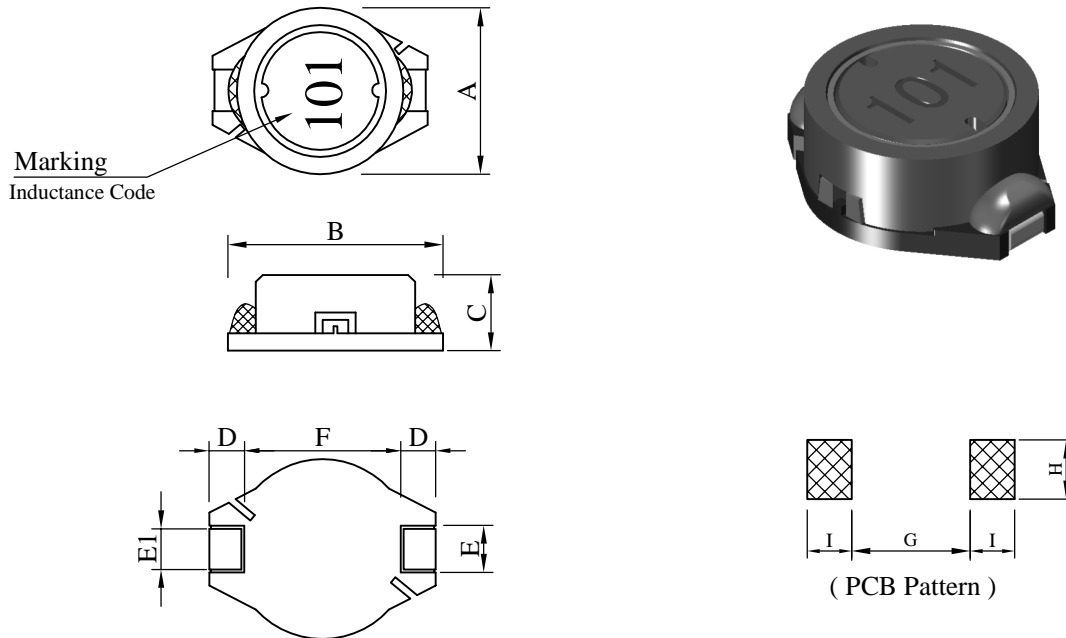


# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SS1005□□□□L□-□□□		
		REV.	20160629-G	PAGE	1

## I . Configuration and dimensions :



Unit : m/m

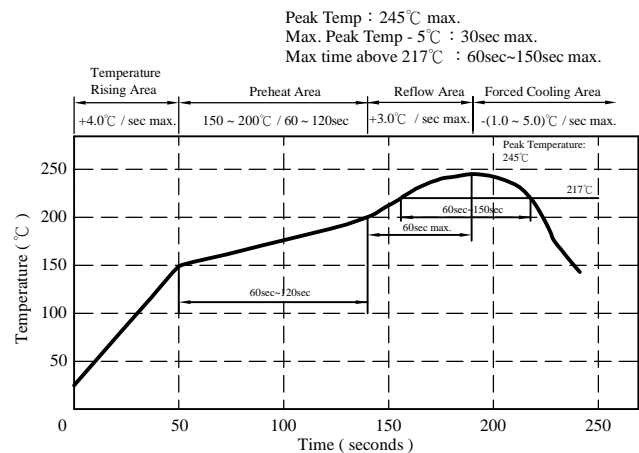
A	B	C	D	E	EI	F	G	H	I
10.00 ±0.3	12.70 ±0.3	4.90 ±0.3	2.40 ±0.2	2.20 ±0.2	1.95 ±0.1	7.60 ±0.3	7.30 ref.	2.80 ref.	3.00 ref.

## II . Description :

- a . Ferrite drum core construction.
- b . Magnetically shielded.
- c . Enamelled copper wire : F class
- d . Product weight : 1.26 g ( ref. )
- e . Moisture sensitivity Level 1
- f . Products comply with RoHS' requirements
- g . 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	Shielded SMD Power Inductor	ABC'S DWG NO.	SS1005□□□□L□-□□□		
		REV.	20160629-G	PAGE	2

## IV . Electrical characteristics :

DWG No.	Inductance ( $\mu$ H)	Q ref.	Test Freq. ( Hz )		SRF ( MHz ) nom.	RDC ( $\Omega$ ) max.	IDC ( A ) max.
			L	Q			
SS10051R0ML□-□□□	1.0±20%	25	1k	7.960M	120.0	0.017	4.50
SS10051R5ML□-□□□	1.5±20%	25	1k	7.960M	100.0	0.020	3.60
SS10052R2ML□-□□□	2.2±20%	25	1k	7.960M	90.0	0.027	3.10
SS10053R0ML□-□□□	3.0±20%	25	1k	7.960M	80.0	0.030	2.90
SS10054R7ML□-□□□	4.7±20%	25	1k	7.960M	50.0	0.040	2.50
SS10057R0ML□-□□□	7.0±20%	22	1k	7.960M	32.0	0.055	2.20
SS1005100ML□-□□□	10.0±20%	48	1k	2.520M	30.0	0.065	2.00
SS1005120ML□-□□□	12.0±20%	45	1k	2.520M	25.0	0.080	1.80
SS1005150ML□-□□□	15.0±20%	40	1k	2.520M	20.0	0.085	1.70
SS1005180YL□-□□□	18.0±15%	35	1k	2.520M	19.0	0.090	1.60
SS1005220YL□-□□□	22.0±15%	42	1k	2.520M	18.0	0.100	1.40
SS1005270YL□-□□□	27.0±15%	40	1k	2.520M	17.0	0.120	1.30
SS1005330YL□-□□□	33.0±15%	40	1k	2.520M	15.0	0.160	1.20
SS1005390YL□-□□□	39.0±15%	40	1k	2.520M	13.0	0.180	1.05
SS1005470YL□-□□□	47.0±15%	35	1k	2.520M	12.0	0.190	1.00
SS1005560YL□-□□□	56.0±15%	35	1k	2.520M	11.0	0.210	0.90
SS1005680YL□-□□□	68.0±15%	35	1k	2.520M	9.0	0.340	0.82
SS1005820YL□-□□□	82.0±15%	35	1k	2.520M	8.0	0.380	0.75
SS1005101KL□-□□□	100.0±10%	35	1k	0.796M	7.5	0.420	0.68
SS1005121KL□-□□□	120.0±10%	30	1k	0.796M	7.2	0.460	0.60
SS1005151KL□-□□□	150.0±10%	28	1k	0.796M	6.2	0.520	0.55
SS1005181KL□-□□□	180.0±10%	28	1k	0.796M	5.8	0.700	0.50
SS1005221KL□-□□□	220.0±10%	30	1k	0.796M	5.2	0.800	0.45
SS1005271KL□-□□□	270.0±10%	30	1k	0.796M	4.8	1.100	0.40
SS1005331KL□-□□□	330.0±10%	30	1k	0.796M	4.5	1.200	0.35
SS1005391KL□-□□□	390.0±10%	25	1k	0.796M	4.2	1.400	0.33
SS1005471KL□-□□□	470.0±10%	40	1k	0.796M	3.0	1.600	0.30
SS1005561KL□-□□□	560.0±10%	40	1k	0.796M	2.7	1.800	0.28
SS1005681KL□-□□□	680.0±10%	37	1k	0.796M	2.6	2.300	0.26
SS1005821KL□-□□□	820.0±10%	37	1k	0.796M	2.5	2.600	0.24
SS1005102KL□-□□□	1000.0±10%	65	1k	0.252M	2.0	3.200	0.22
SS1005122KL□-□□□	1200.0±10%	58	1k	0.252M	2.0	3.600	0.20
SS1005152KL□-□□□	1500.0±10%	53	1k	0.252M	1.6	5.200	0.17
SS1005182KL□-□□□	1800.0±10%	65	1k	0.252M	1.4	5.700	0.16
SS1005222KL□-□□□	2200.0±10%	55	1k	0.252M	1.4	6.500	0.14
SS1005272KL□-□□□	2700.0±10%	55	1k	0.252M	1.2	8.600	0.12
SS1005332KL□-□□□	3300.0±10%	50	1k	0.252M	1.2	10.000	0.10

1). □ : Packaging information : □ Code

2). "- □□□ " : Reference code

3). Electrical specifications at 25°C

4). IDC base on Temp. rise 40°C max.

&  $\Delta$ L/LOA=10% max.

AR-001C



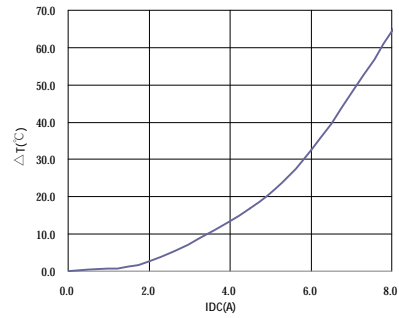
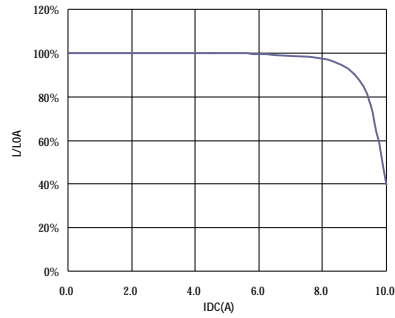
# SPECIFICATION FOR APPROVAL

REF. :

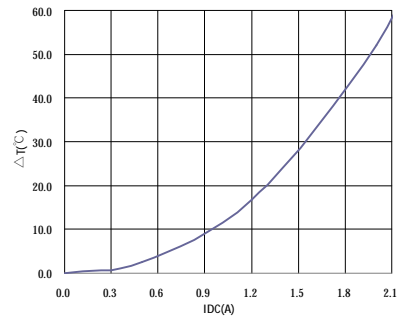
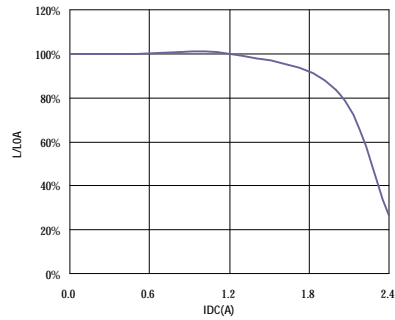
PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SS1005□□□□L□-□□□		
		REV.	20160629-G	PAGE	3

V . Curve :

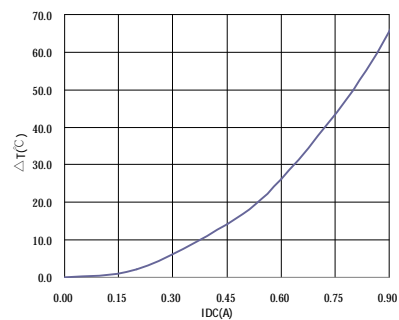
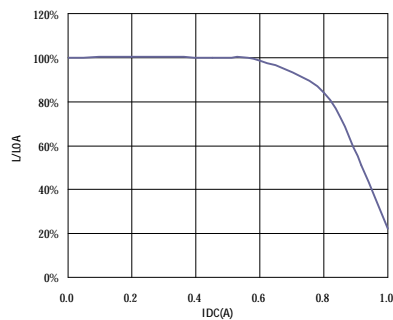
SS10051R0ML□



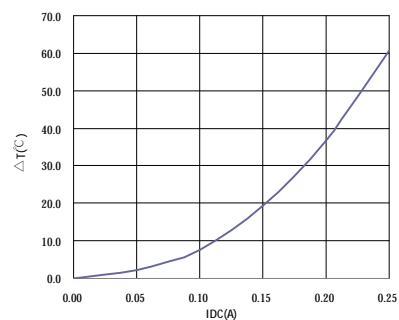
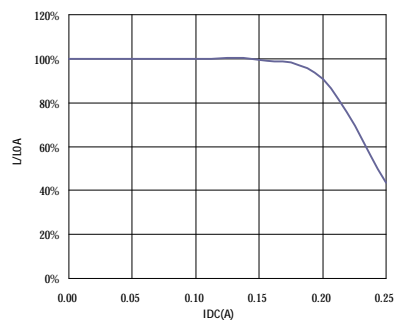
SS1005330YL□



SS1005221KL□



SS1005332KL□



AR-001C

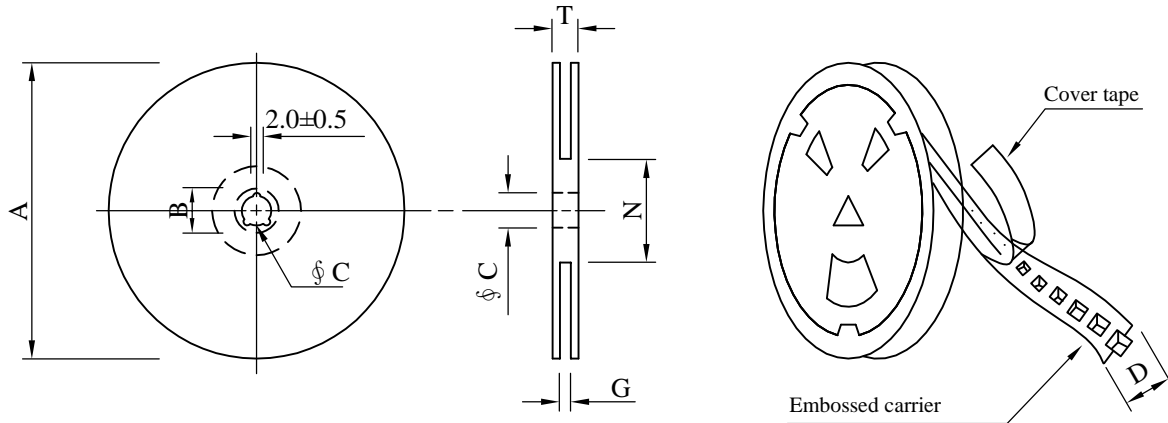
# SPECIFICATION FOR APPROVAL

REF. :

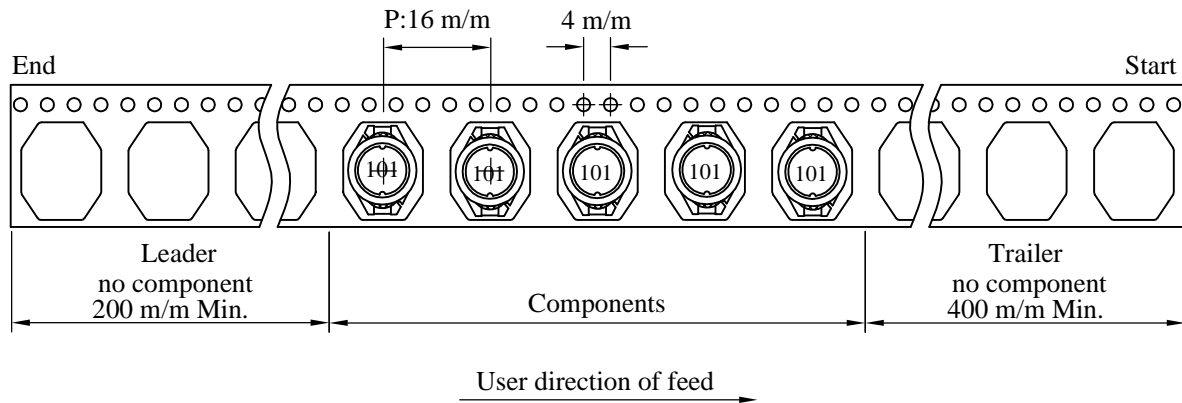
PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SS1005□□□□L□-□□□		
		REV.	20160629-G	PAGE	4

## 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	600	1,260	13 - 24	2,400	6.3	38 x 37 x 22
C	500	1,120	13 - 24	2,000	5.8	38 x 37 x 22

AR-001C

# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SS1005□□□□L□-□□□		
		REV.	20160629-G	PAGE	5

## 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 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 ±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% 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.

AR-001C