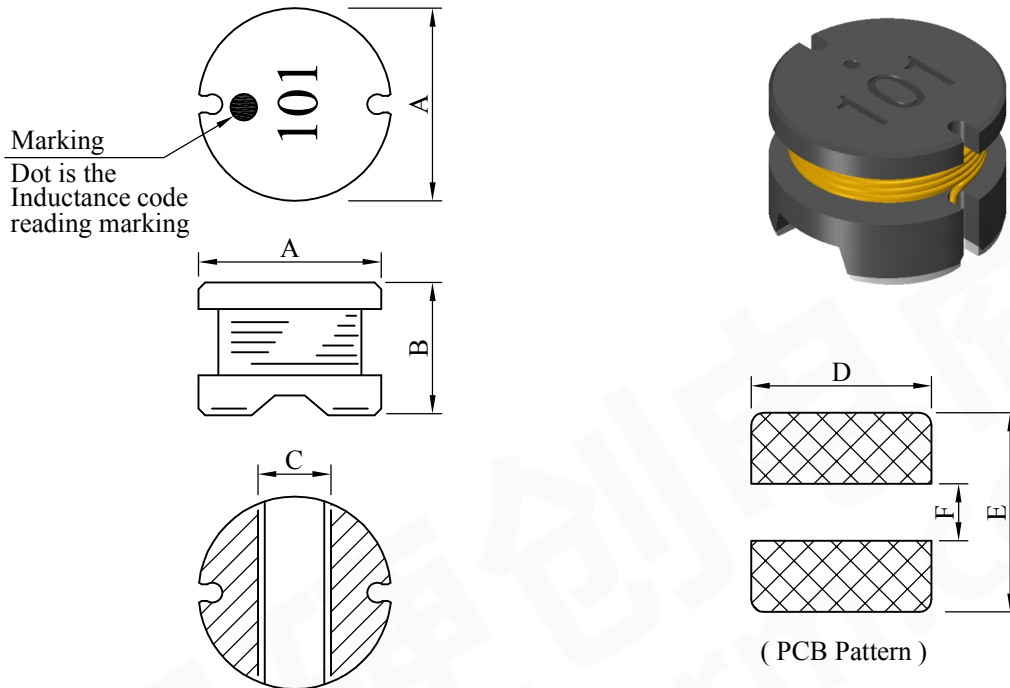


# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	<u>SR0603□□□□L□-□□□</u>		
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## I . Configuration and dimensions :



Unit : mm

A	B	C	D	E	F
5.60 ±0.2	3.70 ±0.3	2.30 ref.	5.80 ref.	6.00 ref.	1.70 ref.

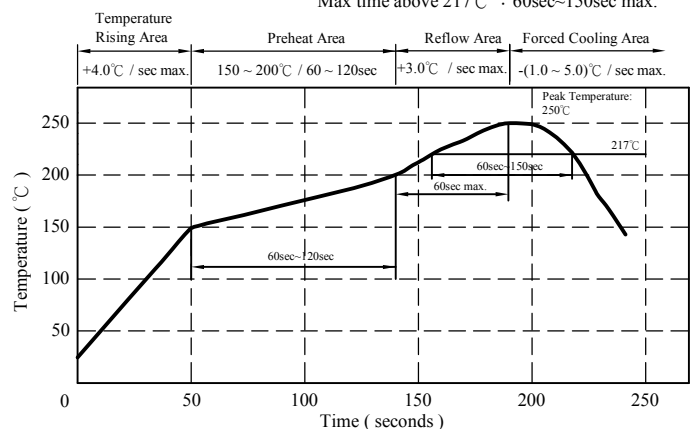
## II . Description :

- a . Ferrite drum core construction.
- b . Enamelled copper wire : H class
- c . Product weight : 0.350g ( ref. )
- d . Moisture sensitivity Level 1
- e . Products comply with RoHS' requirements
- f . Halogen free

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

## 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 : 260°C .10 secs.



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# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	<u>SR0603□□□□L□-□□□</u>		
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## IV . Electrical characteristics :

DWG No.	Inductance ( $\mu$ H)	Q ref.	Test Freq. ( Hz )		SRF ( MHz ) nom.	RDC ( $\Omega$ ) max.	IDC ( A ) max.
			L	Q			
<u>SR06031R5ML□-□□□</u>	1.5±20%	24	1k	7.960M	85.0	0.040	3.00
<u>SR06032R5ML□-□□□</u>	2.5±20%	21	1k	7.960M	74.0	0.045	2.35
<u>SR06033R3ML□-□□□</u>	3.3±20%	21	1k	7.960M	68.0	0.048	2.20
<u>SR06033R9ML□-□□□</u>	3.9±20%	22	1k	7.960M	62.0	0.050	2.10
<u>SR06034R7ML□-□□□</u>	4.7±20%	20	1k	7.960M	56.0	0.066	1.80
<u>SR06035R0ML□-□□□</u>	5.0±20%	19	1k	7.960M	50.0	0.070	1.60
<u>SR06036R8ML□-□□□</u>	6.8±20%	19	1k	7.960M	44.0	0.110	1.38
<u>SR06037R5ML□-□□□</u>	7.5±20%	19	1k	7.960M	38.0	0.120	1.29
<u>SR0603100ML□-□□□</u>	10.0±20%	24	1k	2.520M	34.0	0.150	1.14
<u>SR0603120ML□-□□□</u>	12.0±20%	23	1k	2.520M	30.0	0.160	1.02
<u>SR0603150ML□-□□□</u>	15.0±20%	22	1k	2.520M	28.0	0.180	0.93
<u>SR0603180ML□-□□□</u>	18.0±20%	23	1k	2.520M	24.0	0.250	0.82
<u>SR0603220ML□-□□□</u>	22.0±20%	20	1k	2.520M	20.0	0.275	0.75
<u>SR0603270ML□-□□□</u>	27.0±20%	19	1k	2.520M	19.0	0.300	0.67
<u>SR0603330KL□-□□□</u>	33.0±10%	23	1k	2.520M	15.0	0.450	0.61
<u>SR0603390KL□-□□□</u>	39.0±10%	22	1k	2.520M	13.0	0.460	0.56
<u>SR0603470KL□-□□□</u>	47.0±10%	20	1k	2.520M	13.0	0.550	0.52
<u>SR0603560KL□-□□□</u>	56.0±10%	17	1k	2.520M	12.0	0.615	0.48
<u>SR0603680KL□-□□□</u>	68.0±10%	17	1k	2.520M	12.0	0.720	0.44
<u>SR0603820KL□-□□□</u>	82.0±10%	15	1k	2.520M	11.0	0.840	0.40
<u>SR0603101KL□-□□□</u>	100.0±10%	28	1k	796k	9.6	0.950	0.38
<u>SR0603121KL□-□□□</u>	120.0±10%	27	1k	796k	8.1	1.100	0.36
<u>SR0603151KL□-□□□</u>	150.0±10%	28	1k	796k	7.5	1.430	0.32
<u>SR0603181KL□-□□□</u>	180.0±10%	26	1k	796k	6.9	1.600	0.30
<u>SR0603221KL□-□□□</u>	220.0±10%	26	1k	796k	5.5	2.000	0.26
<u>SR0603271KL□-□□□</u>	270.0±10%	26	1k	796k	4.9	2.400	0.24
<u>SR0603331KL□-□□□</u>	330.0±10%	28	1k	796k	4.7	3.200	0.20
<u>SR0603391KL□-□□□</u>	390.0±10%	28	1k	796k	4.1	3.400	0.18
<u>SR0603471KL□-□□□</u>	470.0±10%	29	1k	796k	3.5	4.550	0.15

- 1). Electrical specifications at 25°C
- 2). IDC base on Temp. rise 40°C max. &  $\Delta L/L0A=10\%$  max.

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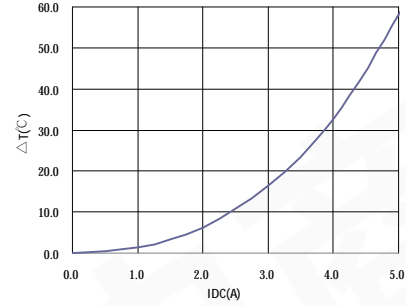
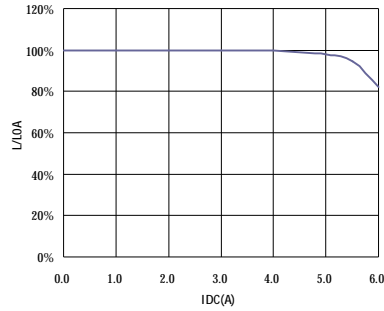
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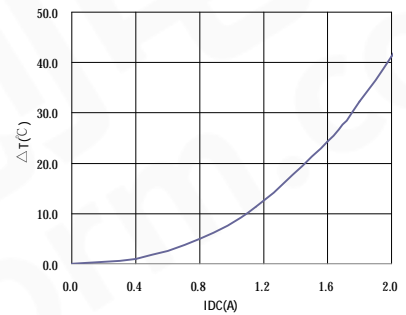
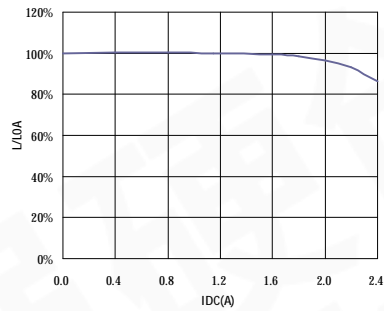
PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	<u>SR0603□□□□L□-□□□</u>		
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V . Curve :

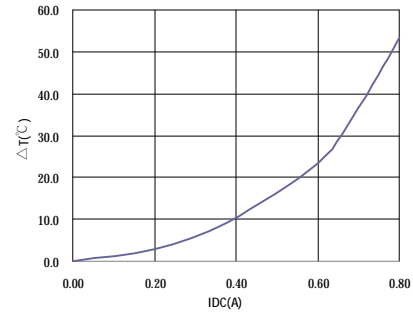
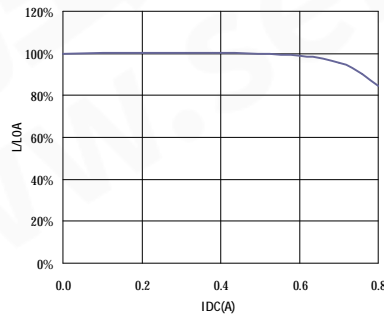
SR06031R5ML□



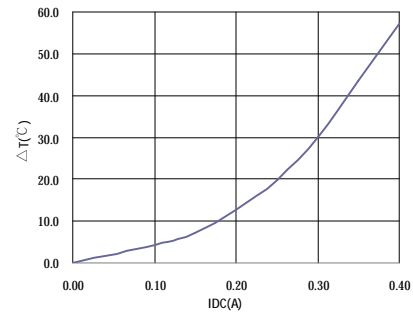
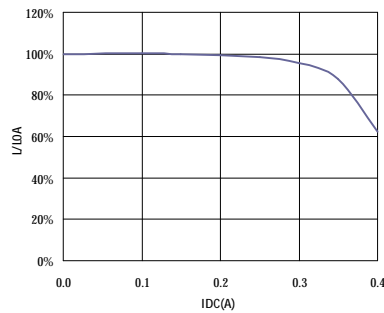
SR0603100ML□



SR0603101KL□



SR0603471KL□



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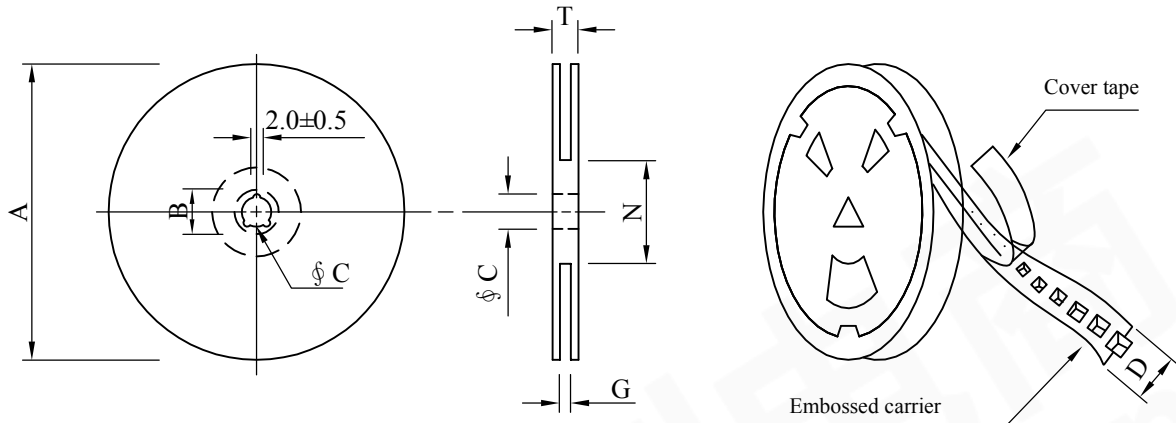
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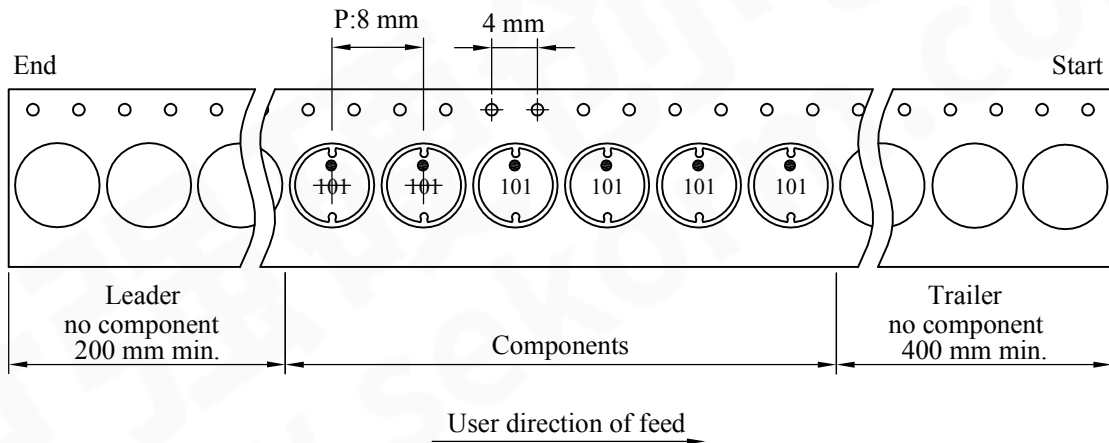
PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SR0603□□□□L□-□□□		
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**VI . Packaging information :**

(1) Configuration



※Carrier tape width : D



(2) Dimensions

Unit:mm

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

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

Code	Inner : Reel			Outer : Carton		
	Q'TY (pcs)	G.W. (g)	Style	Q'TY (pcs)	G.W. (kg)	Size (cm)
B	400	240	07 - 12	16,000	11.0	42 x 41 x 24
C	1,500	880	13 - 12	12,000	8.3	38 x 37 x 22

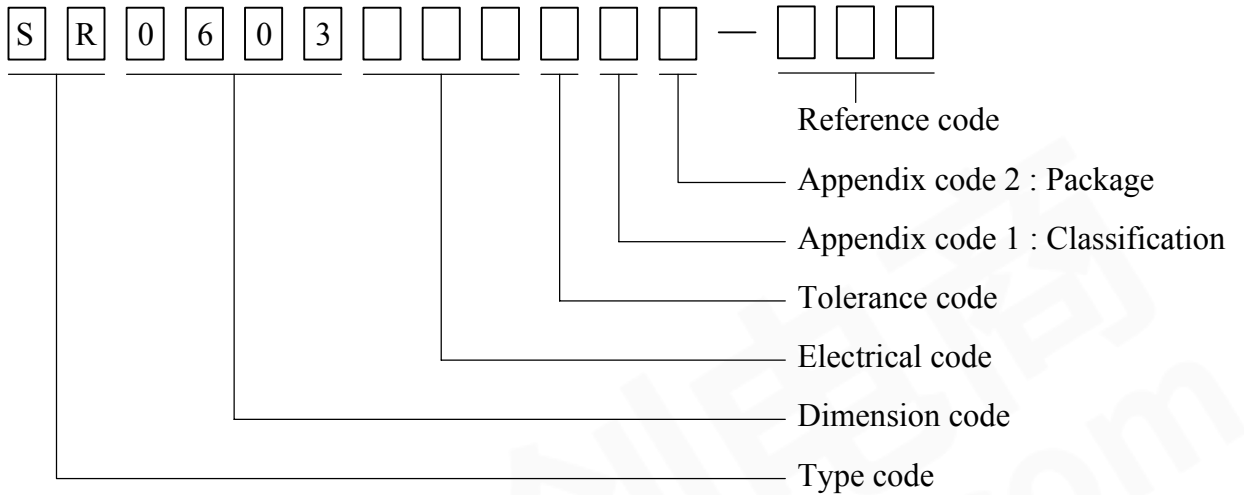
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# SPECIFICATION FOR APPROVAL

REF. :

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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	400 pcs	
C	T /R (Reel package)	UCT	Antistatic	Antistatic	1,500 pcs	

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# SPECIFICATION FOR APPROVAL

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PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SR0603□□□□L□-□□□		
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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 appearance. 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% 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 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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