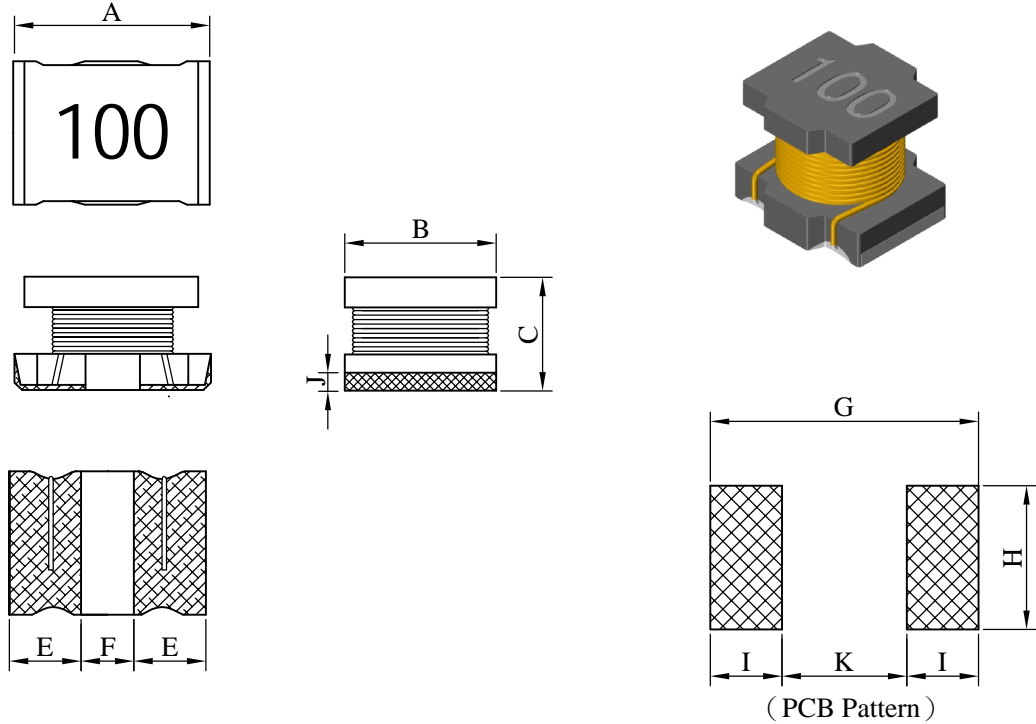


SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SQ5650□□□□L□-□□□		
		REV.	20210420-E	PAGE	1

I . Configuration and dimensions :



(PCB Pattern)

Unit : mm

A	B	C	E	F	G	H	I	J	K
5.70 ±0.3	5.00 ±0.3	4.70 ±0.5	2.00 typ.	1.70 typ.	6.40 ref.	5.40 ref.	2.30 ref.	0.65 ref.	2.20 ref.

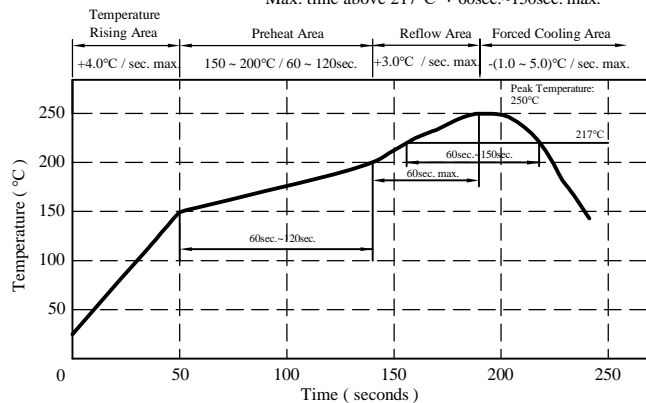
II . Description :

- a . Ferrite drum core construction.
- b . Enamelled copper wire : H class
- c . Product weight : 0.50g (ref.)
- d . Moisture sensitivity Level 1
- e . Products comply with RoHS' requirements
- f . Halogen free

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 sec.

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



SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SQ5650□□□□L□-□□□		
		REV.	20210420-E	PAGE	2

IV . Electrical characteristics :

DWG. No.	Inductance (μ H)	Test Freq. (Hz) L	RDC (Ω) max.	IDC (A) max.
SQ5650R47ML□-□□□	0.47 \pm 20%	100k	0.018	4.800
SQ56501R0ML□-□□□	1.00 \pm 20%	100k	0.027	4.000
SQ56501R5ML□-□□□	1.50 \pm 20%	100k	0.031	3.700
SQ56502R2ML□-□□□	2.20 \pm 20%	100k	0.041	3.200
SQ56503R3ML□-□□□	3.30 \pm 20%	100k	0.050	2.900
SQ56504R7ML□-□□□	4.70 \pm 20%	100k	0.057	2.700
SQ56506R8ML□-□□□	6.80 \pm 20%	100k	0.100	2.000
SQ5650100ML□-□□□	10.00 \pm 20%	1k	0.130	1.700
SQ5650120KL□-□□□	12.00 \pm 10%	1k	0.200	1.500
SQ5650150KL□-□□□	15.00 \pm 10%	1k	0.210	1.400
SQ5650220KL□-□□□	22.00 \pm 10%	1k	0.270	1.200
SQ5650240KL□-□□□	24.00 \pm 10%	1k	0.290	1.100
SQ5650270KL□-□□□	27.00 \pm 10%	1k	0.300	1.000
SQ5650330KL□-□□□	33.00 \pm 10%	1k	0.450	0.900
SQ5650470KL□-□□□	47.00 \pm 10%	1k	0.560	0.800
SQ5650680KL□-□□□	68.00 \pm 10%	1k	0.940	0.640
SQ5650900KL□-□□□	90.00 \pm 10%	1k	1.190	0.580
SQ5650101KL□-□□□	100.00 \pm 10%	1k	1.200	0.560
SQ5650121KL□-□□□	120.00 \pm 10%	1k	1.850	0.490
SQ5650151KL□-□□□	150.00 \pm 10%	1k	2.660	0.420
SQ5650221KL□-□□□	220.00 \pm 10%	1k	3.360	0.320
SQ5650331KL□-□□□	330.00 \pm 10%	1k	6.160	0.270
SQ5650471KL□-□□□	470.00 \pm 10%	1k	7.560	0.240
SQ5650681KL□-□□□	680.00 \pm 10%	1k	11.300	0.190
SQ5650102KL□-□□□	1000.00 \pm 10%	1k	14.400	0.150
SQ5650122KL□-□□□	1200.00 \pm 10%	1k	18.000	0.120
SQ5650152KL□-□□□	1500.00 \pm 10%	1k	30.100	0.100
SQ5650222KL□-□□□	2200.00 \pm 10%	1k	45.000	0.090
SQ5650242KL□-□□□	2400.00 \pm 10%	1k	47.000	0.085
SQ5650332KL□-□□□	3300.00 \pm 10%	1k	50.000	0.080
SQ5650472KL□-□□□	4700.00 \pm 10%	1k	61.000	0.070
SQ5650682KL□-□□□	6800.00 \pm 10%	1k	100.000	0.060
SQ5650822KL□-□□□	8200.00 \pm 10%	1k	125.000	0.050
SQ5650103KL□-□□□	10000.00 \pm 10%	1k	140.000	0.050

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

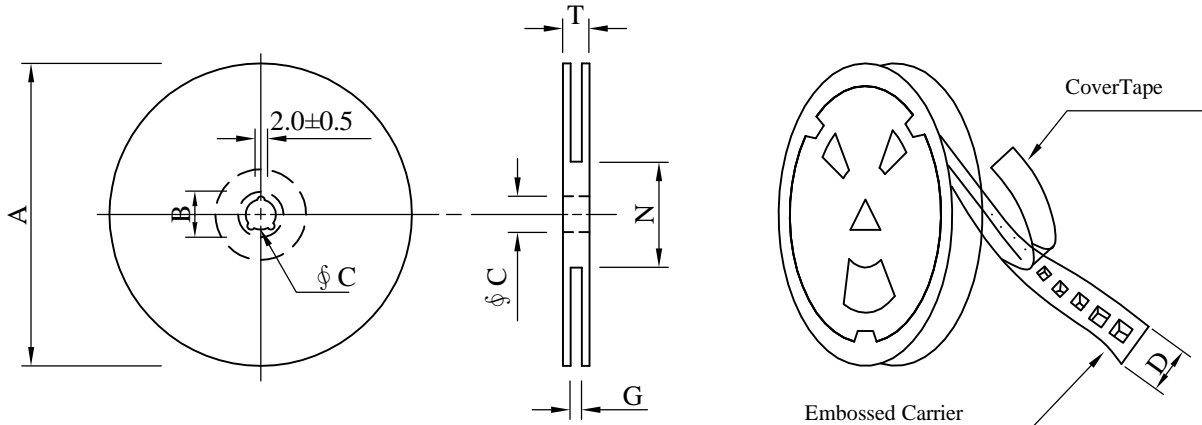
SPECIFICATION FOR APPROVAL

REF. :

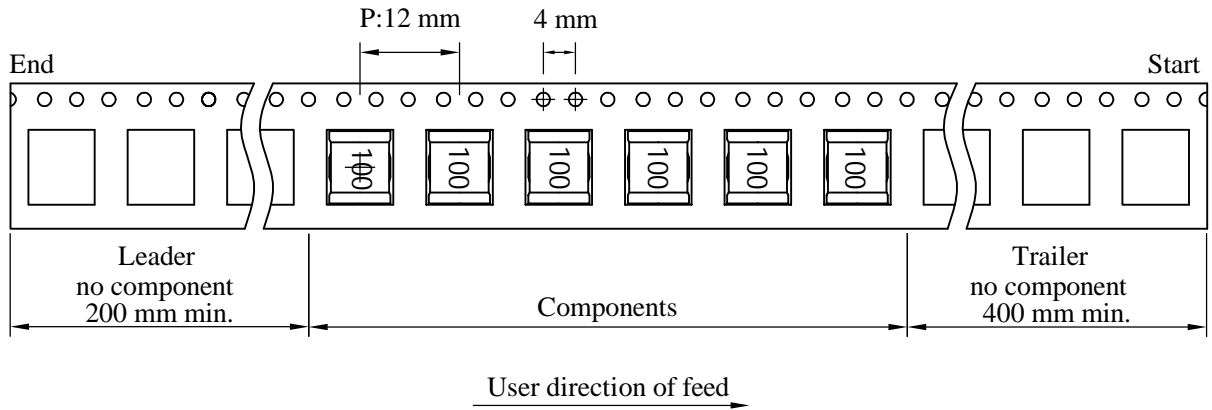
PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SQ5650□□□□L□-□□□		
		REV.	20210420-E	PAGE	3

V . Packaging information :

(1) Configuration



※Carrier Tape Width : D



(2) Dimensions

Unit:mm

Style	A	B	C	D	G	N	T
13 - 16	330	21±0.8	13±0.5	16	18 ⁺⁰	50 ⁻⁰	22.4

(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	1,000	900	13 - 16	6,000	6.7	38 x 37 x 22

AR-001C

SPECIFICATION FOR APPROVAL

REF. :

PROD.	SMD Power Inductor	ABC'S DWG NO.	SQ5650□□□□L□-□□□		
NAME		REV.	20210420-E	PAGE	5

VI . Reliability test :

Item	Reference documents	Test Condition	Test Specification
1.High Temperature Exposure	MIL-STD-202 Method 108	1.Temperature: 125±2°C 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°C ~ +125°C 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 °C 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°C(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°C. 2.Time (temp.≥ 217°C) : 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°C max.
13.Solderability Test	J-STD-002 & JESD22-B 102	1.Baking in pre-testing : 150±5°C / 16Hours±30 min. 2.Peak temperature : 240±5°C 3.Time (temp.≥217°C) : 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°C~125°C 2.Room temperature : 25°C.	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.

AR-001C