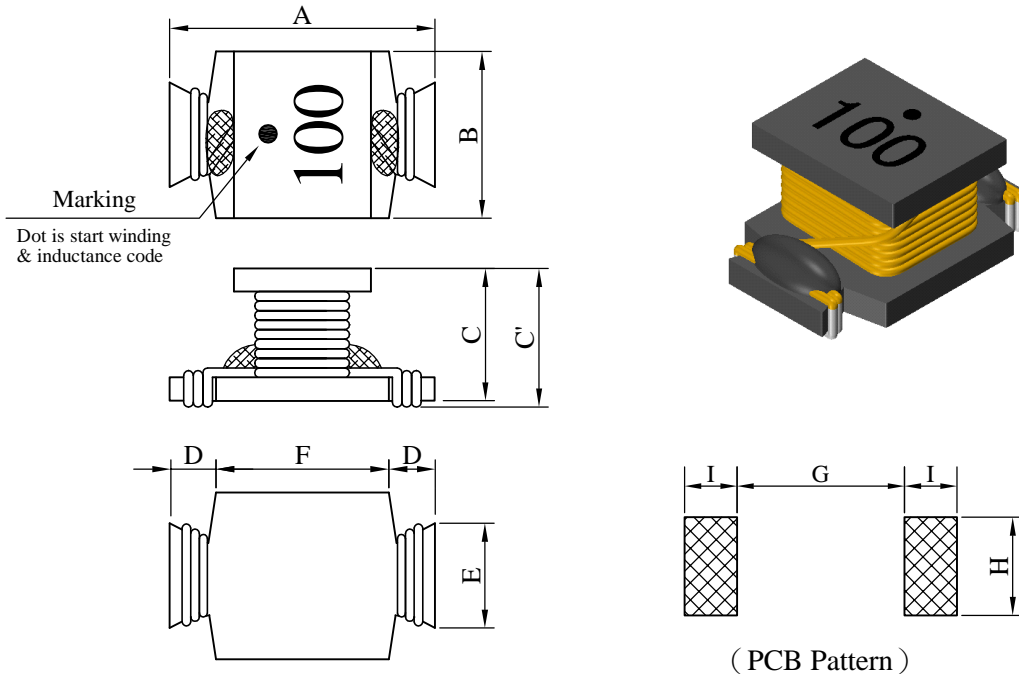


# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SQ0805□□□□L□-□□□		
		REV.	20160104-C	PAGE	1

## I . Configuration and dimensions :



Unit : m/m

A	B	C	C'	D	E	F	G	H	I
8.80 ±0.3	6.00 ±0.3	4.50 ±0.3	5.00 ±0.7	1.40 ref.	3.40 ref.	6.00 ref.	5.00 ref.	4.00 ref.	2.00 ref.

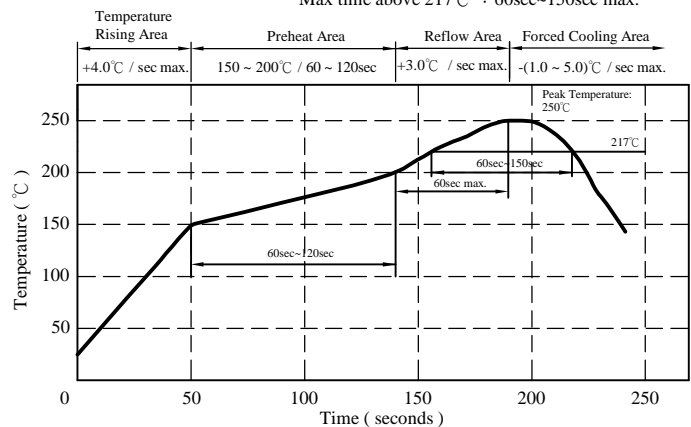
## II . Description :

- a . Ferrite drum core construction.
- b . Enamelled copper wire : F class
- c . Product weight : 0.69 g ( ref. )
- d . Moisture sensitivity Level 1
- e . Products comply with RoHS' requirements
- f . 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 : 250°C .10 secs.

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



AR-001C

# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SQ0805□□□□L□-□□□		
		REV.	20160104-C	PAGE	2

IV . Electrical characteristics :

DWG No.	Inductance ( $\mu$ H)	SRF ( MHz ) nom.	RDC ( m $\Omega$ ) max.	I <sub>rms</sub> ( A )	I <sub>sat</sub> ( A )
SQ0805R56ML□-□□□	0.56 ±20%	200.0	4.50	9.00	12.00
SQ08051R2ML□-□□□	1.20 ±20%	100.0	8.20	6.00	8.80
SQ08052R2ML□-□□□	2.20 ±20%	75.0	16.00	4.50	6.50
SQ08054R7ML□-□□□	4.70 ±20%	35.0	35.00	3.00	4.20
SQ0805100ML□-□□□	10.00 ±20%	26.0	60.00	2.40	3.00
SQ0805150ML□-□□□	15.00 ±20%	19.0	90.00	2.00	2.40
SQ0805220ML□-□□□	22.00 ±20%	15.0	160.00	1.60	2.00
SQ0805330ML□-□□□	33.00 ±20%	10.0	185.00	1.20	1.60
SQ0805470ML□-□□□	47.00 ±20%	8.0	260.00	1.00	1.30

- 1). □ : Packaging information : □ Code
- 2). "-□□□" : Reference code
- 3). Electrical specifications at 25°C
- 4). I<sub>sat</sub> base on  $\Delta L/L0A=30\%$  typ.
- 5). I<sub>rms</sub> base on Temp. rise 40°C max.
- 6). Inductance Test Freq. at 100kHz / 0.25V.

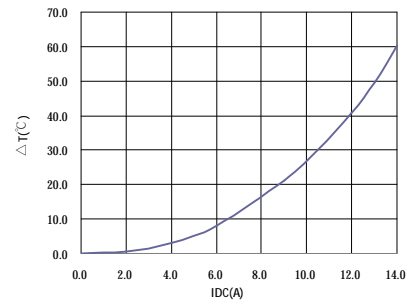
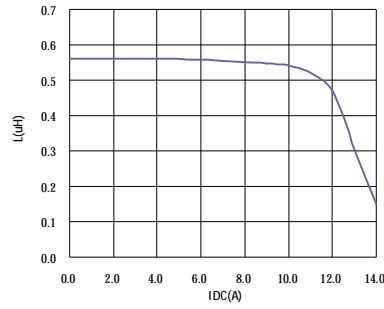
# SPECIFICATION FOR APPROVAL

REF. :

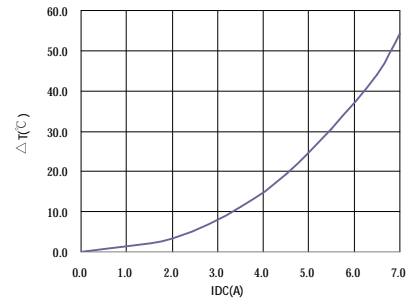
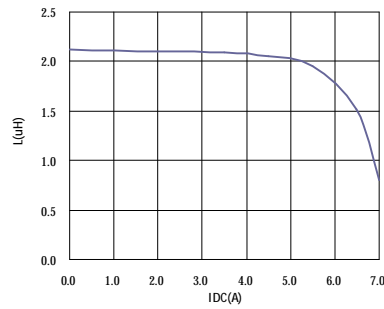
PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SQ0805□□□□L□-□□□		
		REV.	20160104-C	PAGE	3

V . Curve :

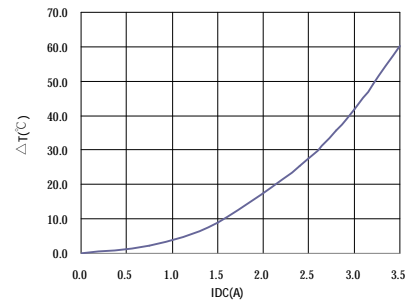
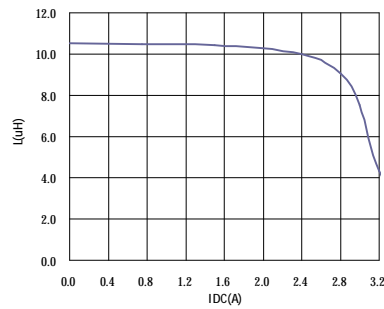
SQ0805R56ML□



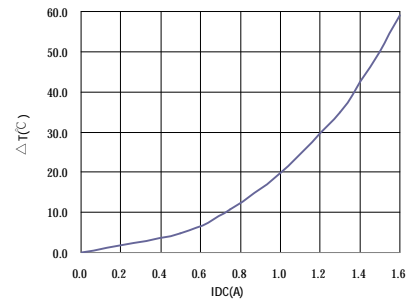
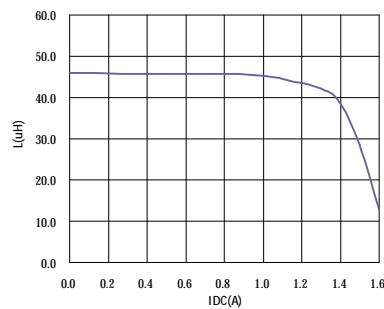
SQ08052R2ML□



SQ0805100ML□



SQ0805470ML□



AR-001C

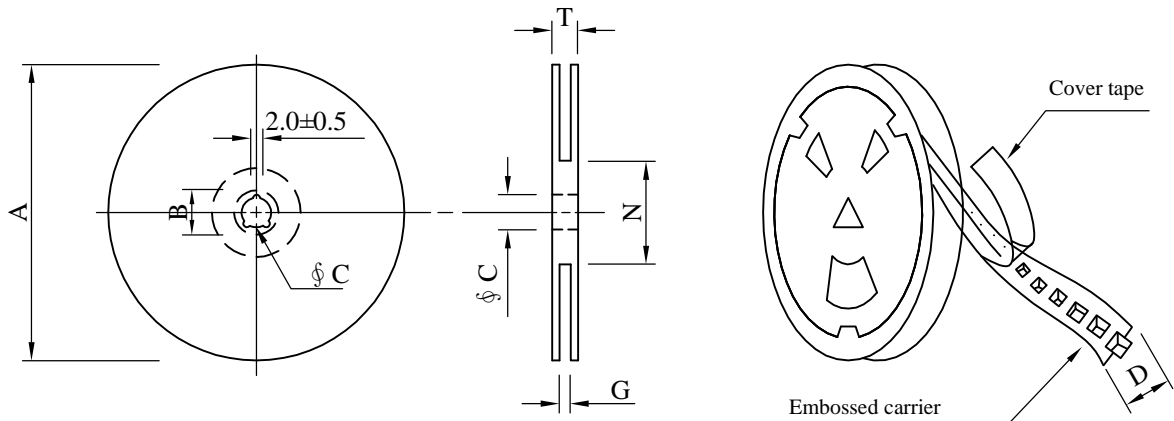
# SPECIFICATION FOR APPROVAL

REF. :

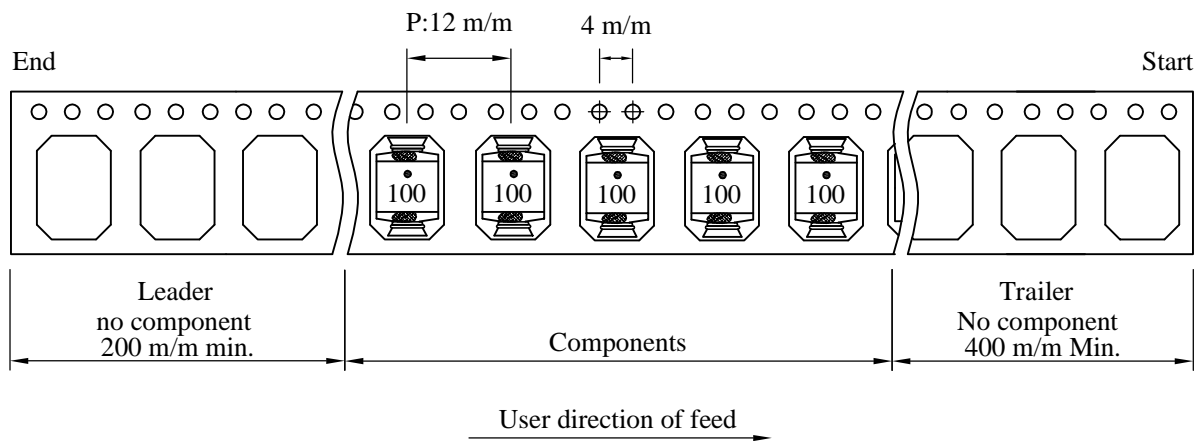
PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SQ0805□□□□L□-□□□		
		REV.	20160104-C	PAGE	4

## VI . Packaging information :

### ( 1 ) Configuration



※Carrier tape width : D



### ( 2 ) Dimensions

Unit:m/m

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

### ( 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	1080	13 - 16	6,000	7.7	38 x 37 x 22

AR-001C

# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SQ0805□□□□L□-□□□		
		REV.	20160104-C	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 ±10%.
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 ±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 Second. 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 second. 2.Saturation current	Inductance shall not drop more than 30% 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 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 ±10%.
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