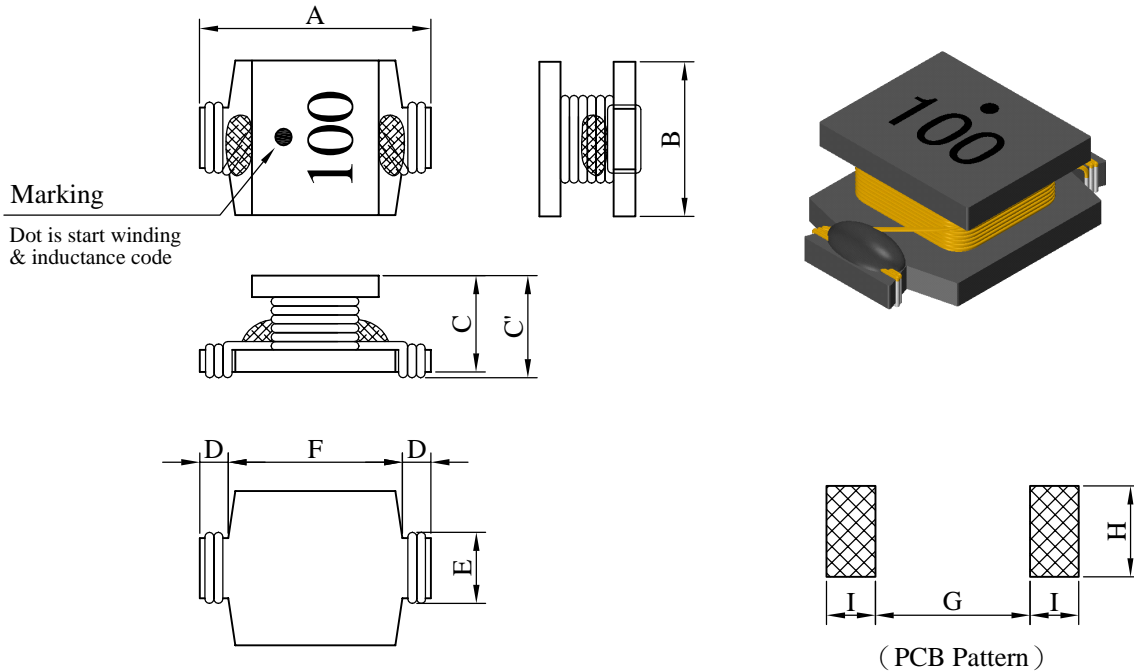


SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SQ0703□□□□L□-□□□		
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I . Configuration and dimensions :



Unit : m/m

A	B	C	C'	D	E	F	G	H	I
6.50 ±0.3	4.50 ±0.2	2.50 ±0.2	2.70 ±0.3	0.80 ref.	2.40 ref.	4.90 ref.	4.00 ref.	3.20 ref.	1.50 ref.

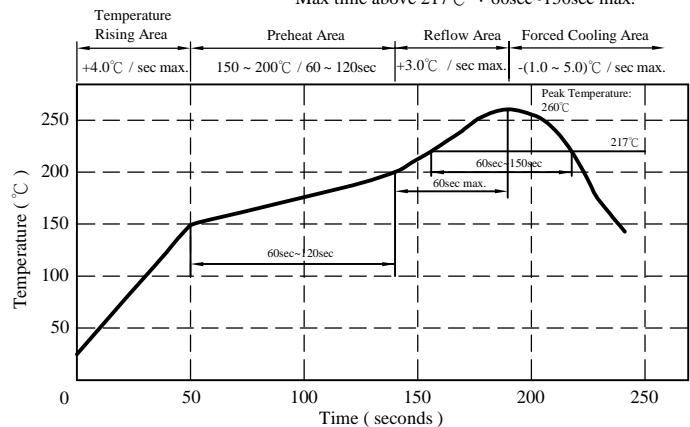
II . Description :

- a . Ferrite drum core construction.
- b . Enamelled copper wire : F class
- c . Product weight : 0.20 g (ref.)
- d . Moisture sensitivity Level 1
- e . Products comply with RoHS' requirements
- f . Halogen free available

Peak Temp : 260°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.	SQ0703□□□□L□-□□□		
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IV . Electrical characteristics :

DWG No.	Inductance (μH)	Q ref.	Test Freq. (MHz)		SRF (MHz) nom.	RDC (Ω) max.	Irms 1 (mA) max.	Irms 2 (mA) max.
			L	Q				
SQ07031R0ML□-□□□	1.00±20%	25	100k/0.1V	7.96	160.0	0.042	2200	3200
SQ07031R2ML□-□□□	1.20±20%	25	100k/0.1V	7.96	145.0	0.047	2000	3000
SQ07031R8ML□-□□□	1.80±20%	25	100k/0.1V	7.96	105.0	0.052	1900	2700
SQ07032R2ML□-□□□	2.20±20%	24	100k/0.1V	7.96	95.0	0.060	1800	2600
SQ07032R7ML□-□□□	2.70±20%	23	100k/0.1V	7.96	80.0	0.065	1700	2500
SQ07033R3ML□-□□□	3.30±20%	23	100k/0.1V	7.96	65.0	0.075	1650	2350
SQ07033R9ML□-□□□	3.90±20%	22	100k/0.1V	7.96	70.0	0.080	1580	2250
SQ07034R7ML□-□□□	4.70±20%	20	100k/0.1V	7.96	60.0	0.100	1500	2100
SQ07035R6ML□-□□□	5.60±20%	20	100k/0.1V	7.96	56.0	0.105	1400	2000
SQ07036R8ML□-□□□	6.80±20%	20	100k/0.1V	7.96	45.0	0.115	1300	1900
SQ07038R2ML□-□□□	8.20±20%	20	100k/0.1V	7.96	40.0	0.150	1100	1500
SQ0703100KL□-□□□	10.00±10%	23	100k/0.1V	2.52	36.0	0.170	1000	1400
SQ0703120KL□-□□□	12.00±10%	20	100k/0.1V	2.52	36.0	0.180	900	1300
SQ0703150KL□-□□□	15.00±10%	23	100k/0.1V	2.52	30.0	0.240	750	1120
SQ0703180KL□-□□□	18.00±10%	20	100k/0.1V	2.52	30.0	0.280	700	1050
SQ0703220KL□-□□□	22.00±10%	20	100k/0.1V	2.52	26.0	0.300	650	950
SQ0703270KL□-□□□	27.00±10%	20	100k/0.1V	2.52	20.0	0.400	600	880
SQ0703330KL□-□□□	33.00±10%	17	100k/0.1V	2.52	20.0	0.450	560	820
SQ0703390KL□-□□□	39.00±10%	18	100k/0.1V	2.52	18.0	0.550	500	730
SQ0703470KL□-□□□	47.00±10%	20	100k/0.1V	2.52	15.0	0.720	400	640
SQ0703560KL□-□□□	56.00±10%	20	100k/0.1V	2.52	13.0	0.800	390	600
SQ0703680KL□-□□□	68.00±10%	18	100k/0.1V	2.52	13.0	0.900	380	560
SQ0703820KL□-□□□	82.00±10%	18	100k/0.1V	2.52	12.0	1.180	330	470
SQ0703101KL□-□□□	100.00±10%	33	100k/0.1V	0.796	11.0	1.560	270	400
SQ0703121KL□-□□□	120.00±10%	32	100k/0.1V	0.796	10.0	1.750	260	365
SQ0703151KL□-□□□	150.00±10%	30	100k/0.1V	0.796	9.0	2.000	250	340
SQ0703181KL□-□□□	180.00±10%	33	100k/0.1V	0.796	7.0	2.700	190	300
SQ0703221KL□-□□□	220.00±10%	31	100k/0.1V	0.796	7.0	3.000	180	280
SQ0703271KL□-□□□	270.00±10%	30	100k/0.1V	0.796	7.0	3.600	170	250
SQ0703331KL□-□□□	330.00±10%	33	100k/0.1V	0.796	6.0	4.800	160	220
SQ0703391KL□-□□□	390.00±10%	36	100k/0.1V	0.796	5.5	6.200	140	190
SQ0703471KL□-□□□	470.00±10%	33	100k/0.1V	0.796	5.0	7.000	130	180
SQ0703561KL□-□□□	560.00±10%	36	100k/0.1V	0.796	4.2	9.200	110	155
SQ0703681KL□-□□□	680.00±10%	32	100k/0.1V	0.796	4.0	10.500	100	145
SQ0703821KL□-□□□	820.00±10%	32	100k/0.1V	0.796	3.6	12.000	90	135
SQ0703102KL□-□□□	1000.00±10%	30	100k/0.1V	0.252	3.2	14.200	80	125

- | | |
|---------------------------------------|--|
| 1). □: Packaging information : □ Code | 4). Irms 1 base on Temp. rise 20°C max. |
| 2). "-□□□" : Reference code | Irms 2 base on Temp. rise 40°C max. |
| 3). Electrical specifications at 25°C | 5). Inductance drop 10% max. at rated Irms |

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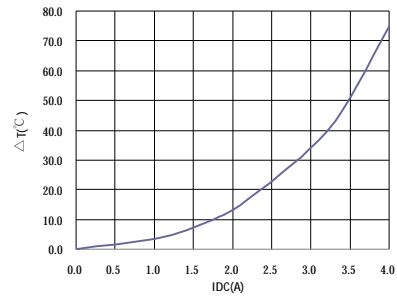
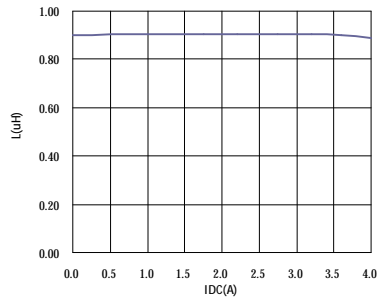
SPECIFICATION FOR APPROVAL

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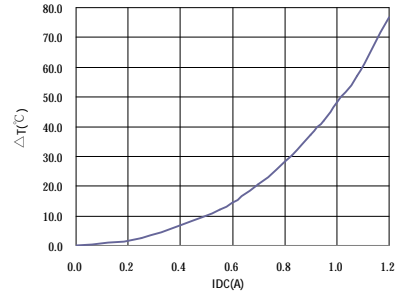
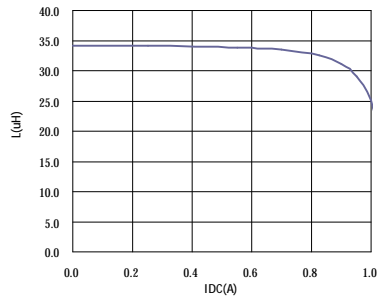
PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SQ0703□□□□L□-□□□		
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V . Curve :

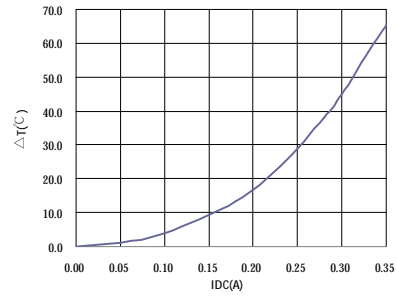
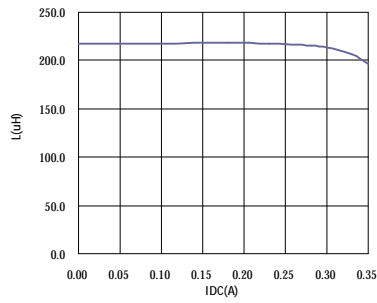
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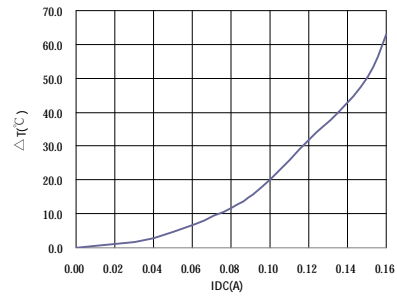
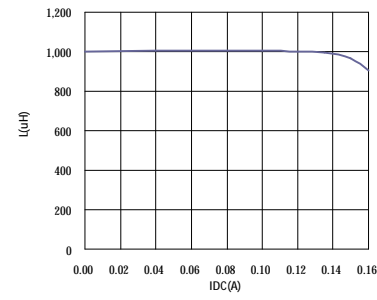
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SQ0703221KL□



SQ0703102KL□



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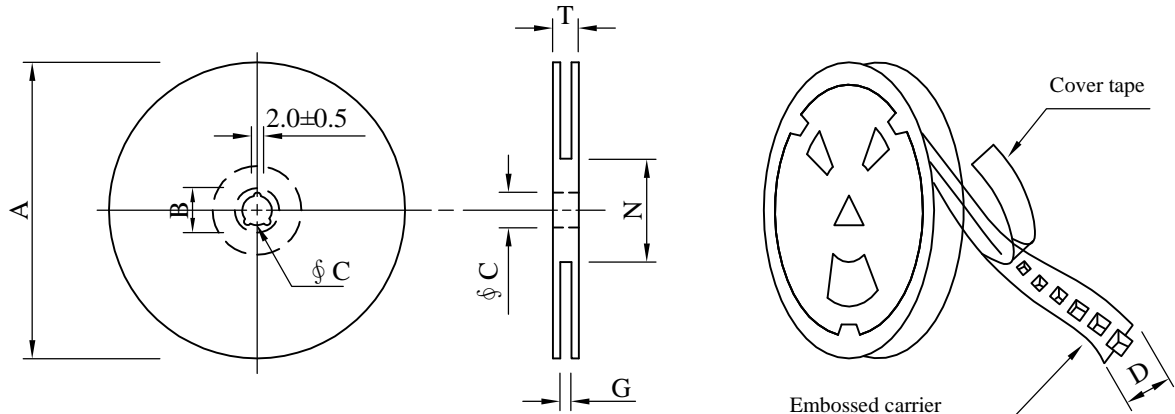
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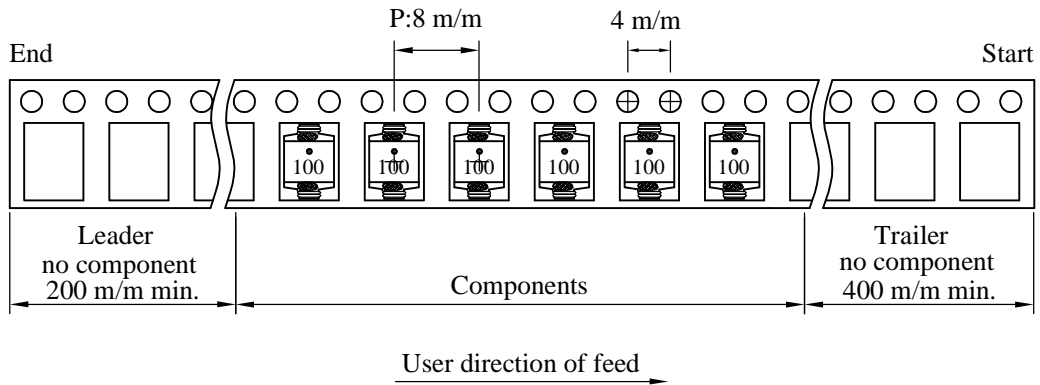
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VI . Packaging information :

(1) Configuration



※Carrier tape width : D



(2) Dimensions

Unit:m/m

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

(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、D、E	500	200	07 - 12	20,000	9.5	42 x 41 x 24
C	2,000	750	13 - 12	16,000	7.3	38 x 37 x 22

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SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SQ0703□□□□L□-□□□		
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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 ±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 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 ±10%.
9.Resistance To Soldering Heat Test	MIL-STD-202 Method 210 & J-STD020D.1	1.Highest temperature : 260±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 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 ±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.

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