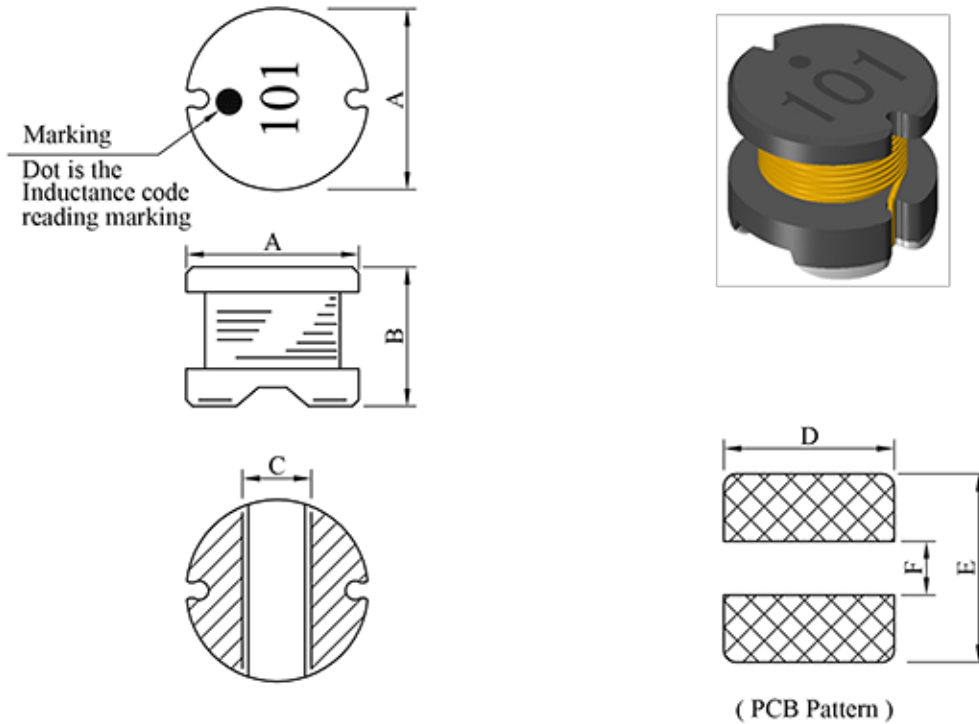


ABC TAIWAN ELECTRONICS CORP

SMD Power Inductor SR0604-L-□□□ Series

I . Configuration and dimensions :



(PCB Pattern)

Unit : m/m

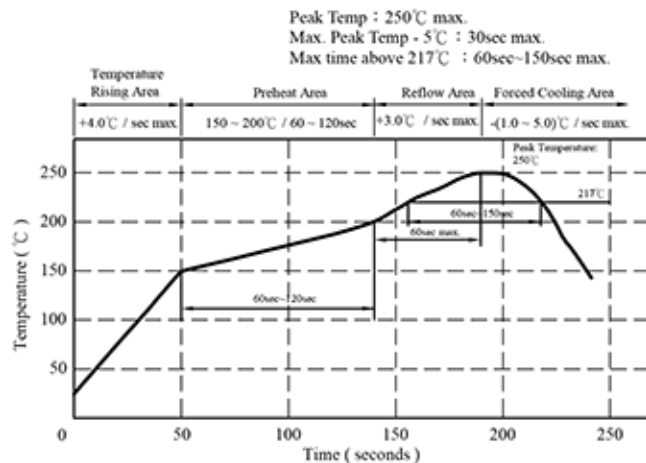
A	B	C	D	E	F
5.60±0.2	4.50±0.3	2.30 ref.	5.80 ref.	6.00 ref.	1.70 ref.

II . Description :

- a . Ferrite drum core construction.
- b . Enamelled copper wire : H class
- c . Product weight : 0.360g (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.



IV . Electrical characteristics :

DWG No.	Inductance (μ H)	Q ref.	Test Freq. (Hz)		SRF (MHz) nom.	RDC (Ω) max.	IDC (A) max.
			L	Q			
SR06041R2ML-□□□	1.2 \pm 20%	35	1K	7.960M	155.0	0.020	4.20
SR06041R5ML-□□□	1.5 \pm 20%	32	1K	7.960M	108.0	0.024	3.60
SR06042R2ML-□□□	2.2 \pm 20%	33	1K	7.960M	79.0	0.031	2.80
SR06042R7ML-□□□	2.7 \pm 20%	22	1K	7.960M	65.0	0.055	2.30
SR06043R3ML-□□□	3.3 \pm 20%	22	1K	7.960M	60.0	0.060	2.00
SR06043R9ML-□□□	3.9 \pm 20%	22	1K	7.960M	40.0	0.065	1.90
SR06044R7ML-□□□	4.7 \pm 20%	20	1K	7.960M	34.0	0.070	1.80
SR06045R6ML-□□□	5.6 \pm 20%	20	1K	7.960M	30.0	0.075	1.70
SR06046R8ML-□□□	6.8 \pm 20%	20	1K	7.960M	28.0	0.080	1.60
SR06048R2ML-□□□	8.2 \pm 20%	20	1K	7.960M	26.0	0.090	1.50
SR0604100ML-□□□	10.0 \pm 20%	30	1K	2.520M	23.0	0.100	1.45
SR0604120ML-□□□	12.0 \pm 20%	30	1K	2.520M	22.0	0.120	1.40
SR0604150YL-□□□	15.0 \pm 15%	30	1K	2.520M	20.0	0.140	1.30
SR0604180YL-□□□	18.0 \pm 15%	30	1K	2.520M	18.0	0.150	1.25
SR0604220YL-□□□	22.0 \pm 15%	30	1K	2.520M	16.0	0.190	1.10
SR0604270YL-□□□	27.0 \pm 15%	28	1K	2.520M	14.0	0.220	1.00
SR0604330KL-□□□	33.0 \pm 10%	24	1K	2.520M	13.0	0.250	0.88
SR0604390KL-□□□	39.0 \pm 10%	24	1K	2.520M	13.0	0.320	0.80
SR0604470KL-□□□	47.0 \pm 10%	22	1K	2.520M	12.0	0.370	0.72
SR0604560KL-□□□	56.0 \pm 10%	22	1K	2.520M	11.0	0.420	0.68
SR0604680KL-□□□	68.0 \pm 10%	22	1K	2.520M	10.0	0.520	0.62
SR0604820KL-□□□	82.0 \pm 10%	20	1K	2.520M	9.0	0.600	0.58
SR0604101KL-□□□	100.0 \pm 10%	20	1K	796K	8.5	0.700	0.52
SR0604121KL-□□□	120.0 \pm 10%	22	1K	796K	6.6	0.930	0.48
SR0604151KL-□□□	150.0 \pm 10%	22	1K	796K	6.2	1.100	0.40
SR0604181KL-□□□	180.0 \pm 10%	20	1K	796K	6.0	1.380	0.38
SR0604221KL-□□□	220.0 \pm 10%	20	1K	796K	5.6	1.570	0.35
SR0604271KL-□□□	270.0 \pm 10%	26	1K	796K	3.9	1.880	0.32
SR0604331KL-□□□	330.0 \pm 10%	25	1K	796K	3.3	2.250	0.27
SR0604391KL-□□□	390.0 \pm 10%	25	1K	796K	3.1	2.480	0.25
SR0604471KL-□□□	470.0 \pm 10%	25	1K	796K	2.9	3.300	0.21
SR0604561KL-□□□	560.0 \pm 10%	24	1K	796K	2.5	4.000	0.18
SR0604681KL-□□□	680.0 \pm 10%	26	1K	796K	2.3	4.650	0.16
SR0604821KL-□□□	820.0 \pm 10%	25	1K	796K	2.0	5.200	0.14

1). □: Packaging information : □ Code

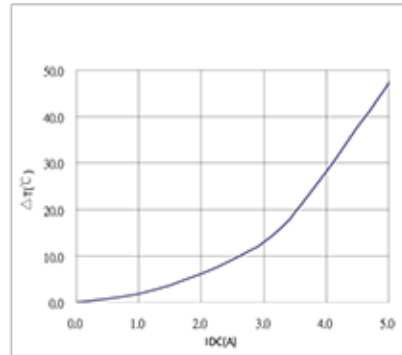
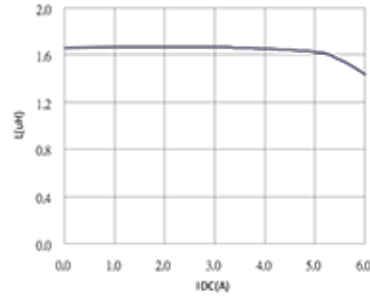
2). "-□□□" : Reference code

3). Electrical specifications at 25°C

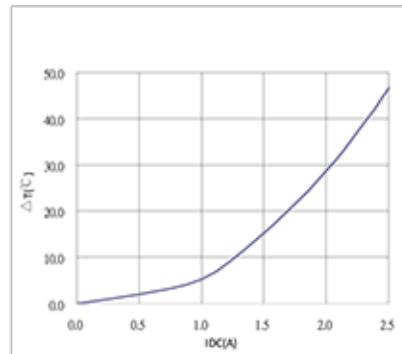
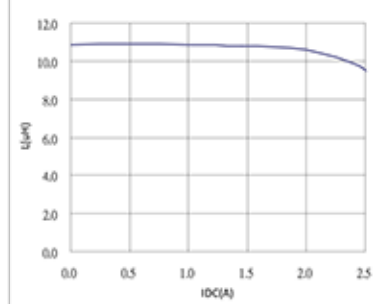
4). IDC base on $\Delta L/L0A=10\%$ max.
& Temp. rise 40°C max.

V . Curve :

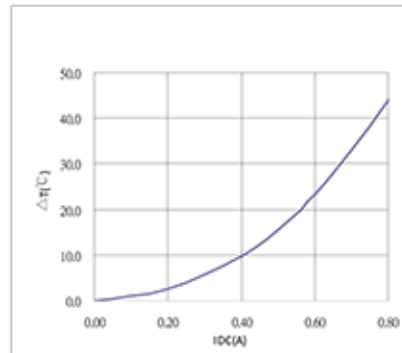
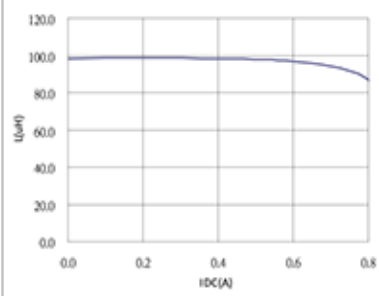
SR06041R5ML□



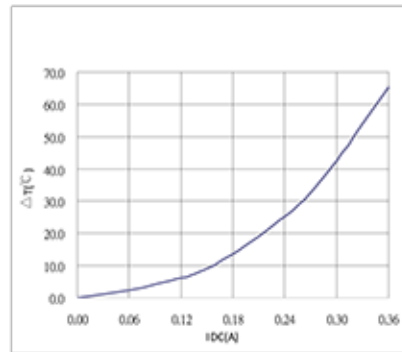
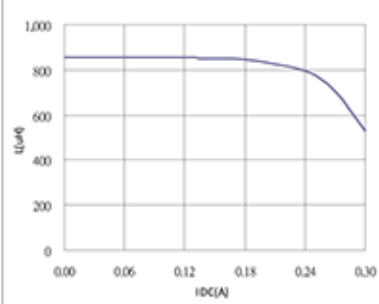
SR0604100ML□



SR0604101KL□

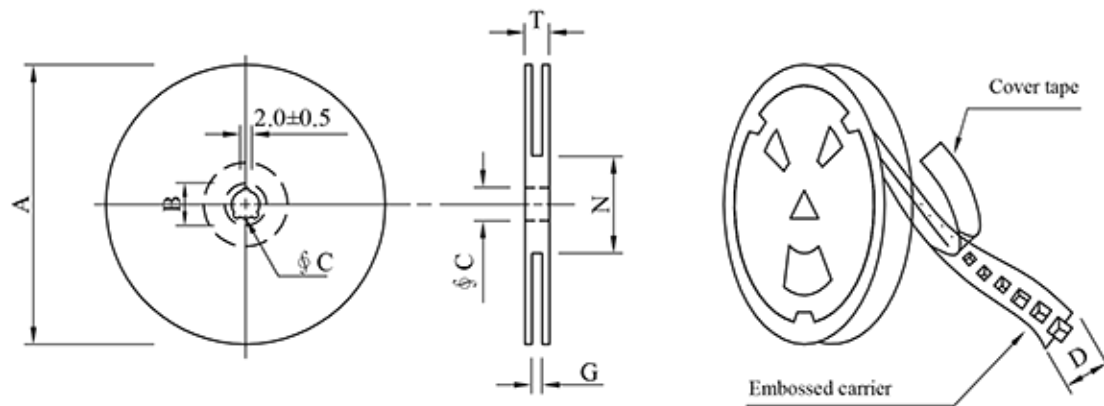


SR0604821KL□

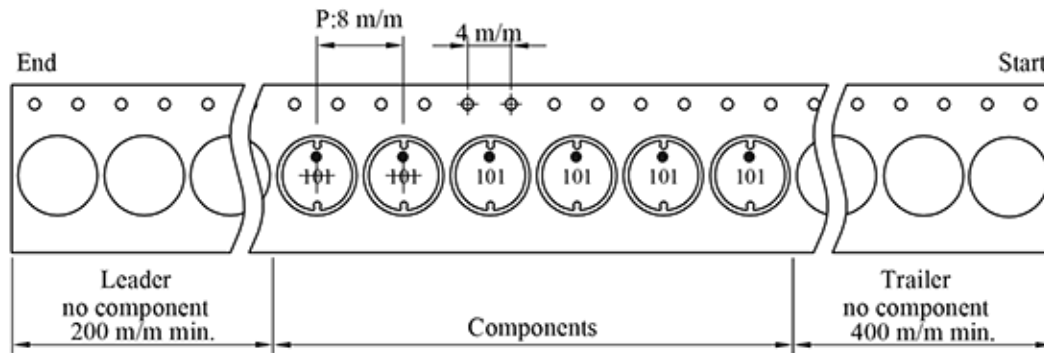


VI . Packaging information :

(1) Configuration



※Carrier tape width : D



→ User direction of feed

(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	400	300	07 - 12	16,000	10.0	42 x 41 x 24
C	1,500	1180	13 - 12	12,000	11.5	38 x 37 x 22

VII . Reliability test :

Item	Reference documents	Test Condition	Test Specification
1.High Temperature Exposure	MIL-STD-202 Method 108	1.Temperature: 125°C 2.Time:96 hours.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
2.Temperature Cycling	JESD22 Method JA-104	1.Temperature:-40°C ~ 125°C 2.Number of cycle:96 cycle 3.Dwell time:30 minutes	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
3.Biased Humidity Test	MIL-STD-202 Method 103	1.Temperature:85±5 °C 2.Time:96 Hours 3.Humidity: 85±5% RH.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
4.Operational Life	MIL-PRF-27	1.Temperature: 125°C 2.Time:96 hours. 3.Apply rated current.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
5.External Visual	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 Method JB-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 and electrical damage. 2.Inductance shall not change more than ±10%.
9.Resistance To Soldering Heat Test	MIL-STD-202 Method 210	1.Highest temperature : 250±5°C 2.Time (temp.≥ 217°C) : 60~150 Second. 3.IR reflow times : 3 times.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
10.Rated current	MIL-STD-202 Method 330	Apply rated current for 5 second.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
11.Temperature rise	MIL-PRF-27	Apply rated current for 10 minutes.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
12.Over load	MIL-PRF-27	Apply double as rated current for 5 minutes. (It's not application to some special design)	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
13.Solderability Test	J-STD-002	1.Baking in pre-testing : 155±5°C / 16Hours±30 min. 2.Peak temperature : 240±5°C 3.Time (temp.≥ 217°C) : 60~150 second. 4.IR reflow times : 1 times.	The terminal shall be at least 95% covered with fresh solder.
14.Electrical Characteriazation	User Spec.	1.Operating temperature : -40°C~125°C 2.Room temperature : 25°C.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
15.Withstanding Voltage Test	MIL-STD-202 Method 201	1.DC:500V 2.Time:1minutes	1.During the test no breakdown. 2.The characteristic is normal after test.
16.Drop	JESD22-B111	Packaged & Drop down from 1m.In 1 angle lridges & 2 surfaces orientation.	1.No case deformation or change in appearance. 2.Inductance shall not change more than ±10%.
17.Terminal Strength Test	JIS-C-6429	1.Apply push force to samples mounted on PCB. 2.Forec of 1.8 kg for 60±1 seconds.	After test, inductors shall be no mechanical damage.