SPECIFICATION FOR APPROVAL

REF. :

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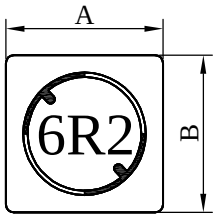
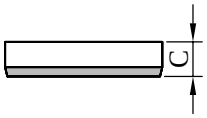
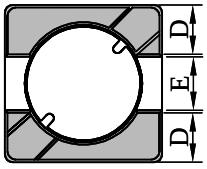
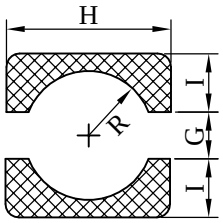
Ⅰ．Configuration and dimensions：









(PCB Pattern)

Unit：m/m

A	B	C	D	E	G	H	I	R
6.80 ±0.2	6.80 ±0.2	2.30 ±0.2	2.30 typ.	2.20 typ.	2.10 ref.	7.30 ref.	2.60 ref.	2.70 ref.

Ⅱ．Description：

a．Ferrite drum core construction.

b．Magnetically shielded.

c．Enamelled copper wire：F & H class

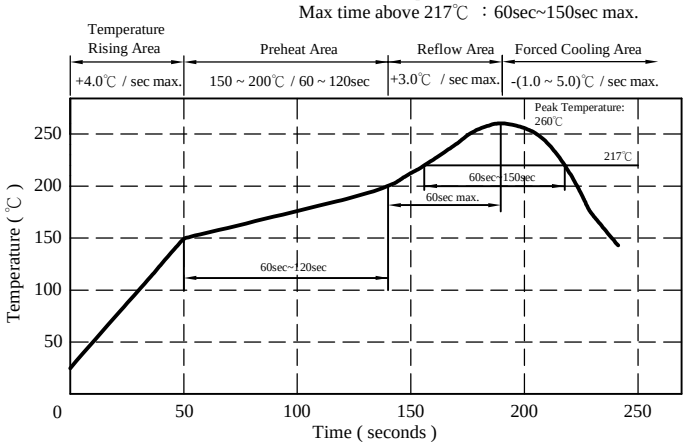
d．Product weight：0.41g（ref.）

e．Moisture sensitivity Level 1

f．Products comply with RoHS' requirements

g．Halogen free available

Peak Temp：260℃ max.
Max. Peak Temp - 5℃：30sec max.
Max time above 217℃ ：60sec~150sec max.



Ⅲ．General specification：

a．Storage temp.：-40℃ ----+125℃

b．Operating temp.：-40℃----+125℃
(Temp. rise included)

c．Resistance to solder heat：260℃.10 secs.

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Ⅳ . Electrical characteristics：

DWG No.	Inductance (μH)	SRF (MHz) typ.	RDC (mΩ) typ.	RDC (mΩ) max.	Irms (mA) max.	Isat (mA) typ.
SH6022R90YL□ -□□□	0.9 ±30%	108.0	10.0	14.0	4800	4400
SH60221R5YL□ -□□□	1.5 ±30%	79.0	13.0	18.0	4300	3500
SH60222R2YL□ -□□□	2.2 ±30%	68.0	16.0	24.0	3400	2600
SH60223R3YL□ -□□□	3.3 ±30%	52.0	19.0	32.0	2800	2200
SH60225R0YL□ -□□□	5.0 ±30%	48.0	36.0	46.0	2150	2000
SH60226R2YL□ -□□□	6.2 ±30%	45.0	41.0	54.0	1900	1700
SH60227R5YL□ -□□□	7.5 ±30%	38.0	46.0	60.0	1700	1500
SH6022100YL□ -□□□	10.0 ±30%	30.0	52.0	70.0	1600	1300
SH6022120YL□ -□□□	12.0 ±30%	32.0	62.0	80.0	1430	1150
SH6022150YL□ -□□□	15.0 ±30%	30.0	73.0	95.0	1310	1050
SH6022180YL□ -□□□	18.0 ±30%	29.0	78.0	100.0	1280	1000
SH6022220YL□ -□□□	22.0 ±30%	23.0	85.0	120.0	1220	950
SH6022270YL□ -□□□	27.0 ±30%	19.0	118.0	150.0	1040	850
SH6022330YL□ -□□□	33.0 ±30%	19.0	137.0	200.0	930	780
SH6022390YL□ -□□□	39.0 ±30%	20.0	202.0	250.0	760	700
SH6022470YL□ -□□□	47.0 ±30%	18.0	223.0	280.0	730	620
SH6022560YL□ -□□□	56.0 ±30%	15.0	257.0	320.0	680	560
SH6022680YL□ -□□□	68.0 ±30%	14.0	292.0	360.0	640	500
SH6022820YL□ -□□□	82.0 ±30%	11.0	328.0	420.0	600	450
SH6022101YL□ -□□□	100.0 ±30%	9.8	358.0	480.0	550	400
SH6022121YL□ -□□□	120.0 ±30%	9.8	455.0	600.0	480	360
SH6022151YL□ -□□□	150.0 ±30%	9.3	583.0	720.0	430	320
SH6022181YL□ -□□□	180.0 ±30%	8.6	664.0	860.0	400	280
SH6022221YL□ -□□□	220.0 ±30%	6.9	820.0	1100.0	360	250
SH6022271YL□ -□□□	270.0 ±30%	6.4	948.0	1300.0	340	220
SH6022331YL□ -□□□	330.0 ±30%	6.0	1192.0	1500.0	290	200
SH6022391YL□ -□□□	390.0 ±30%	5.5	1311.0	1800.0	275	180
SH6022471YL□ -□□□	470.0 ±30%	5.0	1713.0	2200.0	240	170
SH6022561YL□ -□□□	560.0 ±30%	4.9	1909.0	2700.0	225	160
SH6022681YL□ -□□□	680.0 ±30%	4.0	2497.0	3500.0	190	150
SH6022821YL□ -□□□	820.0 ±30%	3.4	3315.0	4000.0	172	140
SH6022102YL□ -□□□	1000.0 ±30%	3.3	3827.0	5000.0	160	130

1). □：Packaging information：□ Code

2). "-□□□"：Reference code

3). Electrical specifications at 25℃

4). Inductance test freq. : 100kHz / 0.1V

5). Irms Base on temp rise 30℃ max.

6). Isat Base on △L/L0A=35% typ.

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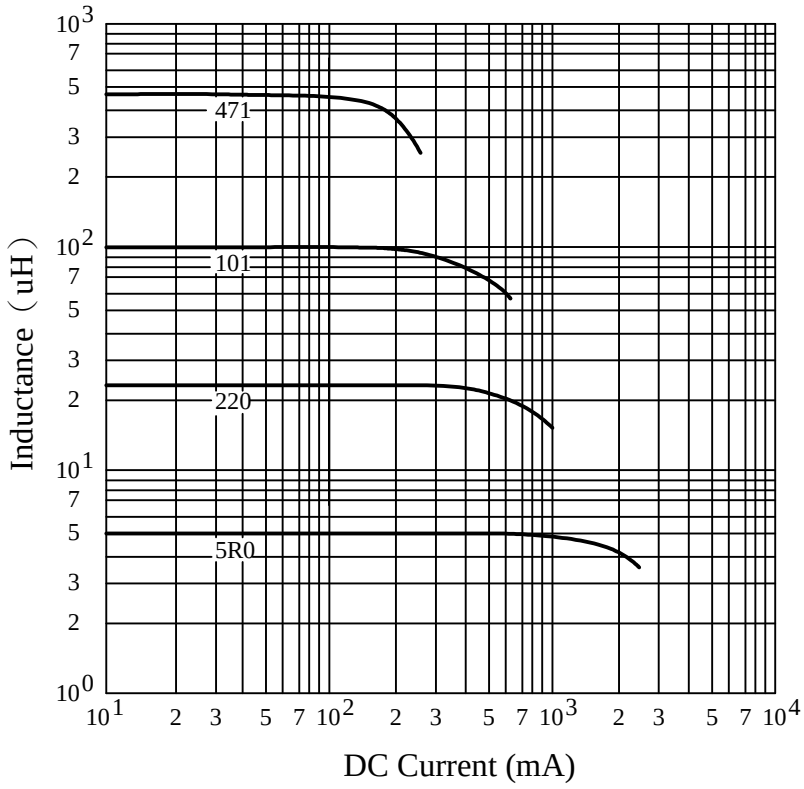
V ．Curve：



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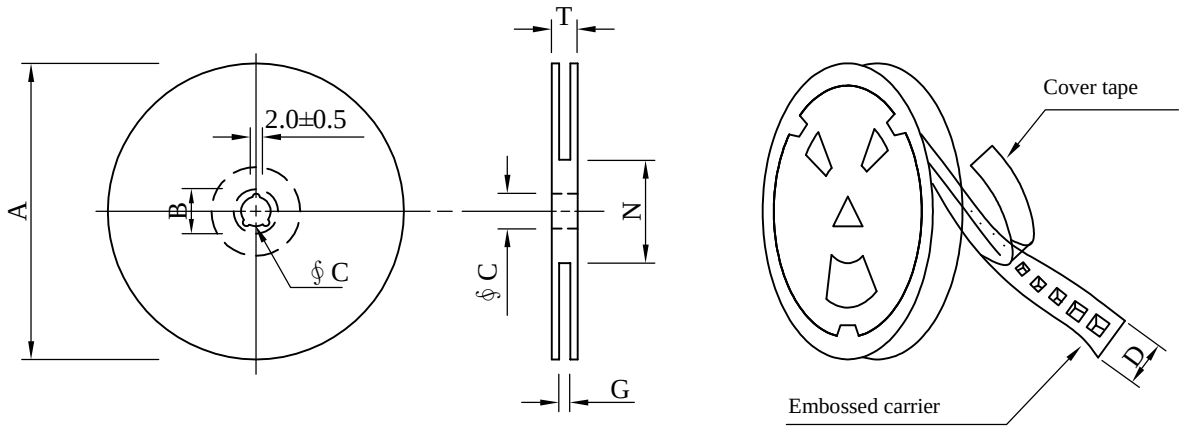
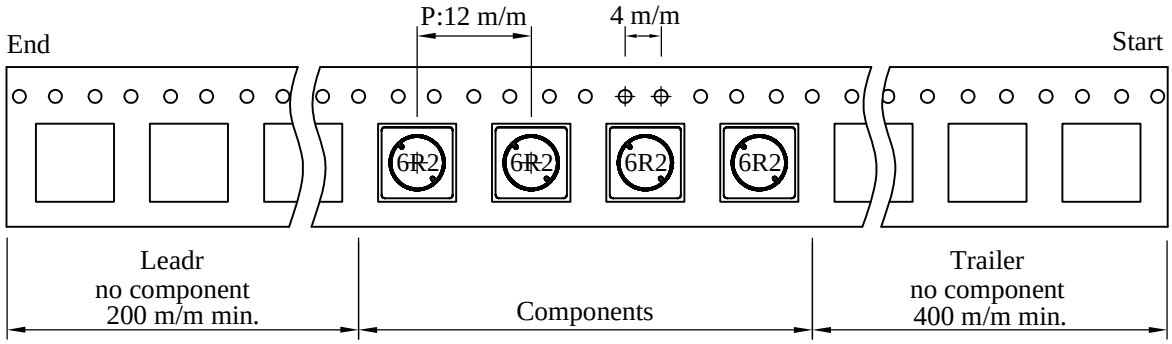
Ⅵ．Packaging information：

(1) Configuration



※Carrier tape width : D



User direction of feed

(2) Dimensions Unit:m/m

Style	A	B	C	D	G	N	T
07 - 16	178	21±0.8	13	16	18^{+0}	50^{-0}	20.5
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. (gw)	Style	Q'TY (pcs)	G.W. (Kg)	Size (cm)
B	500	340	07 - 16	15,000	11.5	42 x 41 x 24
C	1,500	1,080	13 - 16	9,000	7.8	38 x 37 x 22

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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 ±20%.
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 ±20%.
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 ±20%.
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 ±20%.
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 apperarance. 2.No marking blurred. 3.Inductance shall not change more than ±20%.
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 ±20%.
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 ±20%.
10.Saturation Current	JIS C 6436 & User SPEC.	1.Applied rated current for 5 second. 2.Saturation current	Inductance shall not drop more than 35% 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 30℃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 ±20%.
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.