

SPECIFICATION FOR APPROVAL

承認書

CUSTOMER

客戶名稱：

NUMBER

編號：Y-17011801

DESCRIPTION

型號：CR8040 - 102M

QUANTITY

數量：30PCS

PART NO.

品名：SMD POWER INDUCTORS

DATE

日期：2022.06.22

CUSTOMER PART NO.

客戶料號：

NOTE

注解：

APPROVAL SIGNATURE

客戶承認簽章

Approved By 核准	Checked By 審查	Drawn By 制作
李庆辉	刻志坚	劳水花

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CUSTOMER:	SPECIFICATIONS (R e v i s i o n s)	TYPE CR8040-102M
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History of change

Rev.	Effective Date	Changed Contents	Change reasons	Approved By
A0	2017-1-18	New release	/	

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TYPE:

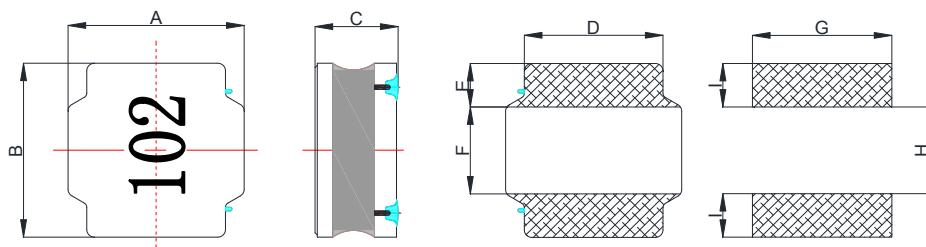
CR8040 - 102M

1. Scope

This specification apply for CR8040 of power inductors

2. Appearance

2-1.Dimensions(mm)



A	8.0mm ± 0.3
B	8.0mm ± 0.3
C	4.2mmMax
D	6.3±0.3mm
E	2.0±0.3mm
F	4.0±0.3mm
G	7.5mm
H	3.8mm
I	2.2mm

* Dimension without tolerance is approx.

3. Coils Specification

3-1. Connection (Bottom View)



“S” is winding start

3-2. Turns and Wire

Terminal	S-F
Turns	127.5 Ts
Wire	0.13mm G1 P180

* Winding Turns are approx.



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3-3. Electronical characteristics

Item	Specifications	Measuring Conditions	Measuring Instrument
Inductance	1.0mH \pm 20% Within	100KHz/0.25V	CH1062
D.C.R	2.9 Ω \pm 30%	25°C	CH502BC
Isat \ddagger 1	0.40A	100KHz/0.25V	CH1062&Chroma1320
Irise \ddagger 2	0.35A	25°C	6377&6220

\ddagger This indicates the value of current when the inductance is 30% lower than its initial value at D.C superposition or D.C current when temperature rise $\Delta T=40^\circ\text{C}$ whichever is lower. (Ta=20°C)

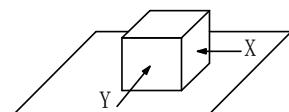
4. General Characteristics

4-1. Storage Temperature range : $-40^\circ\text{C} \sim +105^\circ\text{C}$

4-2. Operating temperature range: $-40^\circ\text{C} \sim +125^\circ\text{C}$ (Including coil's self temperature rise)

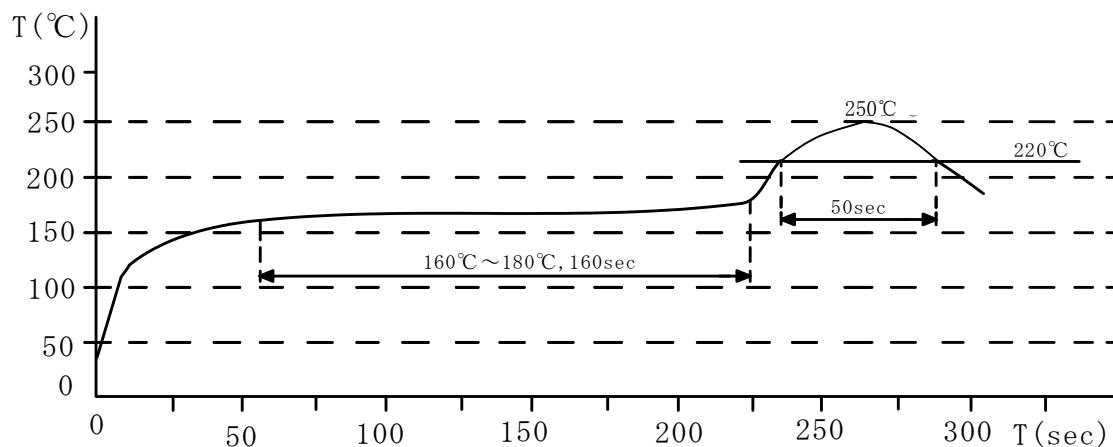
4-3. External appearance : No external defects can be found in the visual inspection.

4-4. Electrode strength : No electrode detachment should be found when the device is pushed in two directions of X and Y with the force of 10.0N for 10 ± 2 seconds after soldering between copper plate and the electrodes. (Refer to figure at right)



4-5. Vibration test : Inductance deviation is within $\pm 10\%$ after 1 hour sweeping vibration in each three directions, namely, forward and backward, up and down, right and left. The frequency is $10 \sim 55 \sim 10\text{Hz}$ and the amplitude of 1 minute cycle is 1.5mm PP.

4-6. Recommended reflow condition :



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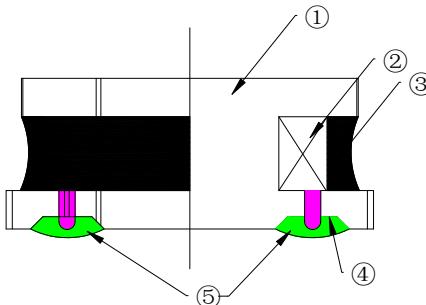
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4-7.Humidity test : Inductance deviation is within $\pm 5.0\%$ after 96 ± 4 hours test under the condition of relative humidity of $90 \sim 95\%$ and temperature of $60 \pm 2^\circ\text{C}$, and 1 hour storage under room ambient conditions after the device is wiped with dry cloth.

5. Construction and materials



No.	Part name	Material	Manufacturer
①	Drum Core	Ni-Zn Ferrite Core	CY/FY
②	Wire	Polyurethane enameled copper wire	YLSL
③	Adhesive	Epoxy Resin Magnetic Powder	DZ/JH
④	Plating Electrodes	Plating: Ag 10-20 μm Ni 1-3 μm Sn 3-7 μm	
⑤	Outer Electrodes	Top surface solder coating Sn99%、 Ag0.3%、 Cu0.7%	YX

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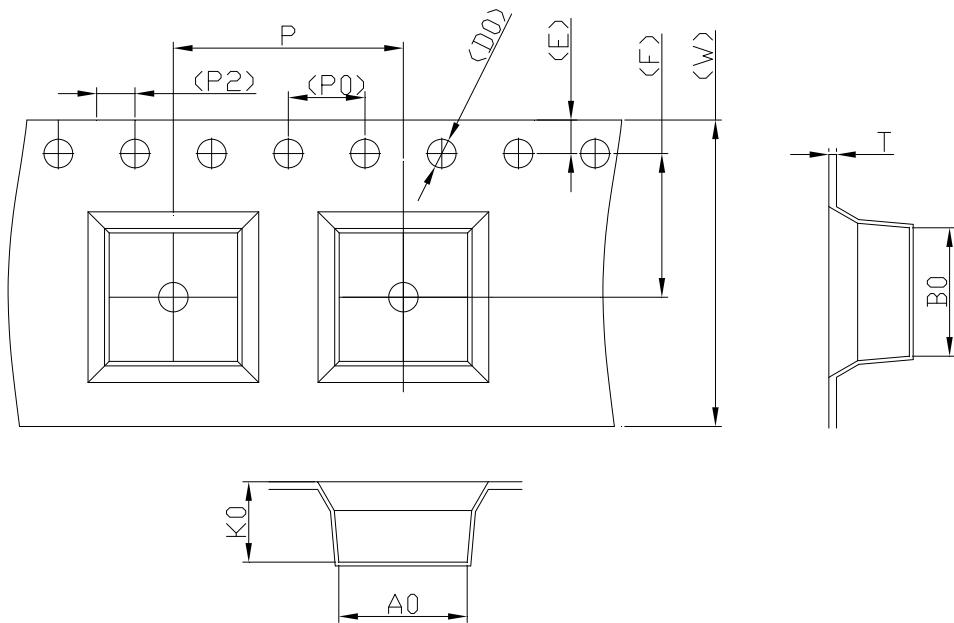
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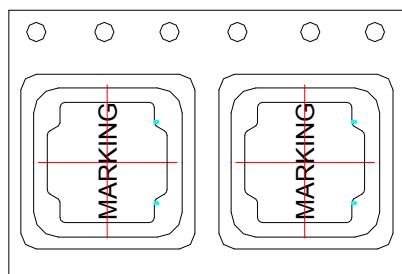
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6. TAPE DIMENSIONS:



ITEM	W	A0	B0	K0	P	F	E	D0	D1	P0	P2	T
DIM	16.00	8.40	8.40	4.2	12.00	7.50	1.75	1.50	1.50	4.00	2.00	0.35
TOLE	± 0.3	± 0.1	$+0.1$	$+0.1$	± 0.1	± 0.1	± 0.05					



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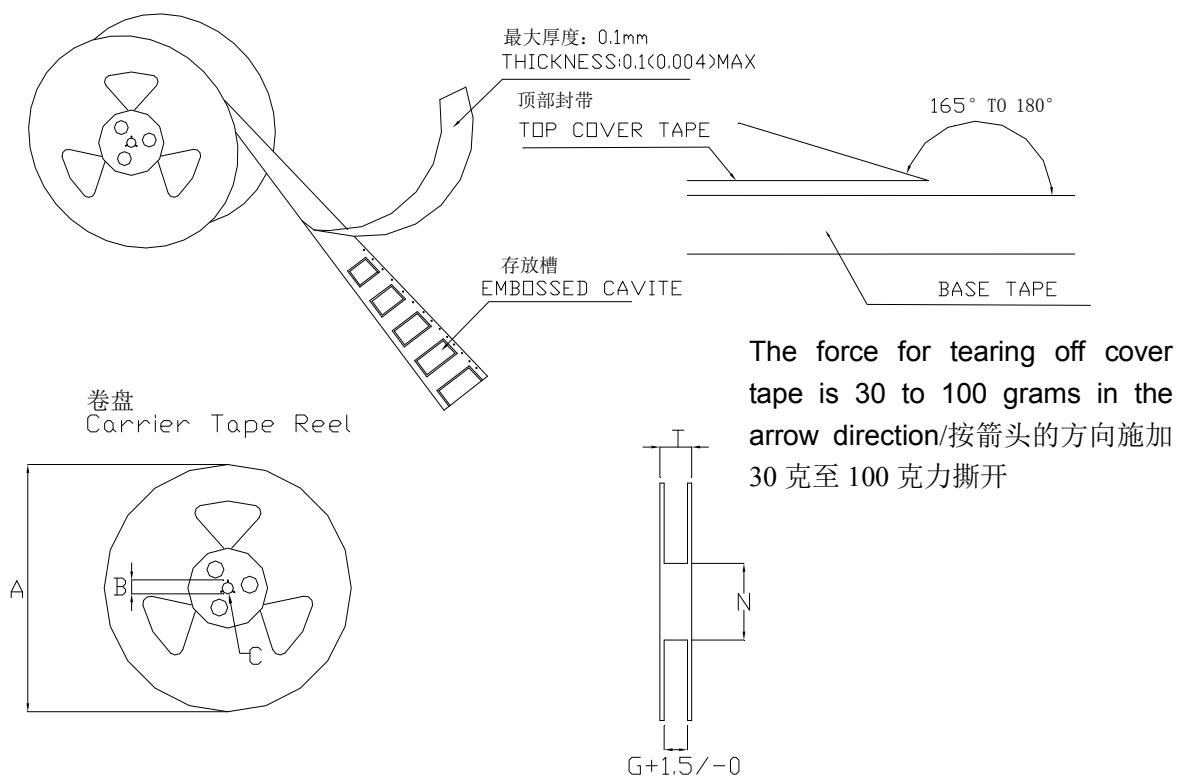
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7. TAPE REEL DIMENSIONS:



单位: 毫米

Type	A	B	C	G	N	T
16mm	330	21±0.8	13±0.4	16.4	100	20.4

8. PACKAGE SPECIFICATION :

1000PCS/Reel 3000PCS/Inner Box 9000PCS/Outer Box

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