

SPECIFICATION FOR APPROVAL

承 認 書

CUSTOMER

客戶名稱：

NUMBER

編號：Y-18020603

DESCRIPTION

型 號： CR8040 - 821M

QUANTITY

數量：20PCS

PART NO.

品 名： SMD POWER INDUCTORS

DATE

日期：2024.7.24

CUSTOMER PART NO.

客戶料號：

NOTE

注解：

APPROVAL SIGNATURE

客戶承認簽章

Approved By 核 准	Checked By 审 查	Drawn By 制 作
李庆辉	苏高峰	劳水花

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SPECIFICATIONS

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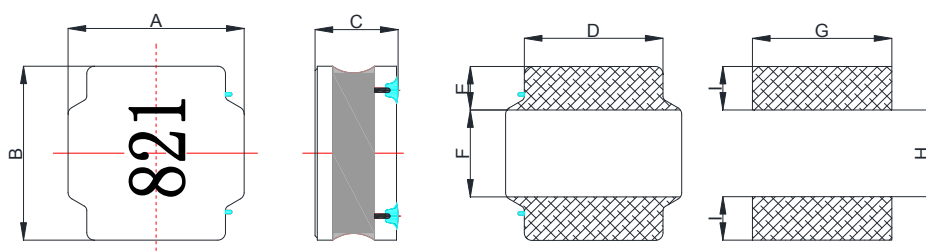
CR8040 - 821M

1. Scope

This specification apply for CR8040 of power inductors

2. Appearance

2-1. Dimensions(mm)



A	8.0mm \pm 0.3
B	8.0mm \pm 0.3
C	4.2mmMax
D	6.3 \pm 0.3mm
E	2.0 \pm 0.3mm
F	4.0 \pm 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	118.5 Ts
Wire	0.13mm G1 P180

* Winding Turns are approx.

LEAD-FREE

RoHS

Compliance

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3-3. Electronical characteristics

Item	Specifications	Measuring Conditions	Measuring Instrument
Inductance	820uH \pm 20% Within	100KHz/0.25V	CH1062
D.C.R	2.5 Ω \pm 30%	25°C	CH502BC
Isat ※1	0.5A	100KHz/0.25V	CH1062&Chroma1320
Irise ※2	0.32A	25°C	6377&6220

※ 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 $\Delta T=40^\circ\text{C}$

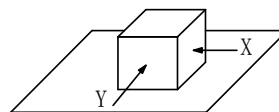
4. General Characteristics

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)

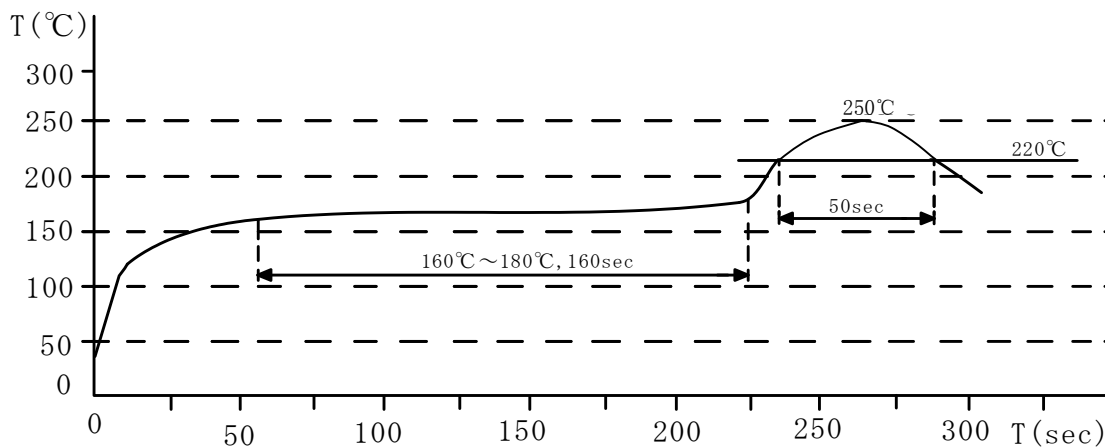
4-3. External appearance : No external defects can be found in the visual inspection.

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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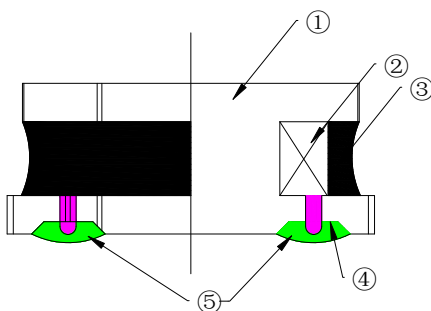
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4-7.Humidity test : Inductance deviation is within $\pm 5.0\%$ after 96 ± 4 hours test under the condition of relative humidity of $90 \sim 95\%$ and temperature of $60 \pm 2^\circ\text{C}$, and 1 hour storage under room ambient conditions after the 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 3-7 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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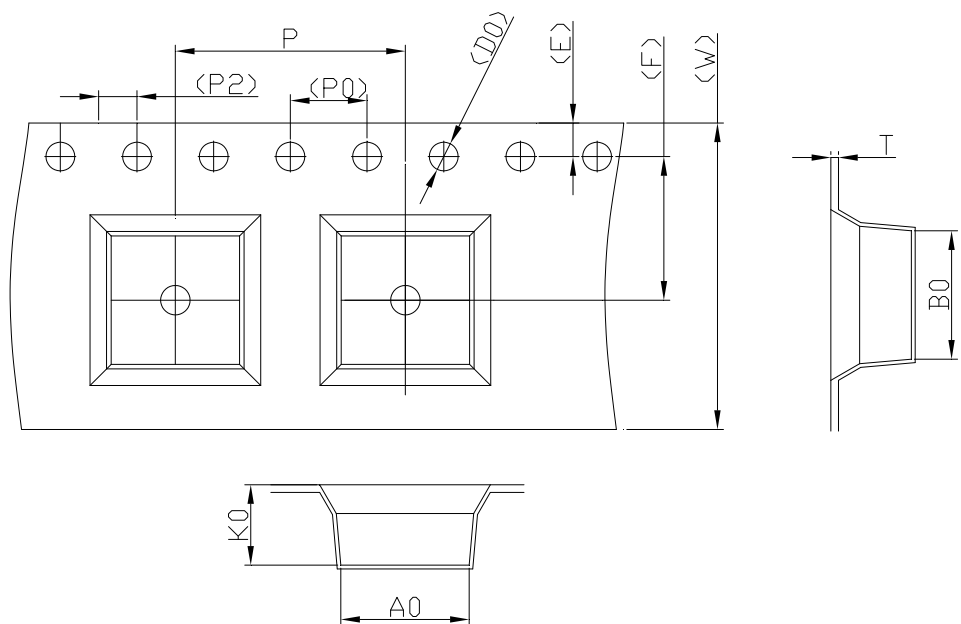
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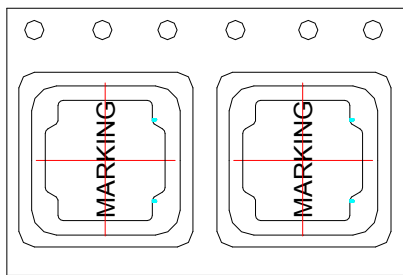
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6. TAPE DIMENSIONS:



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	±0.1	+0.1	+0.1	±0.1	±0.1	±0.05



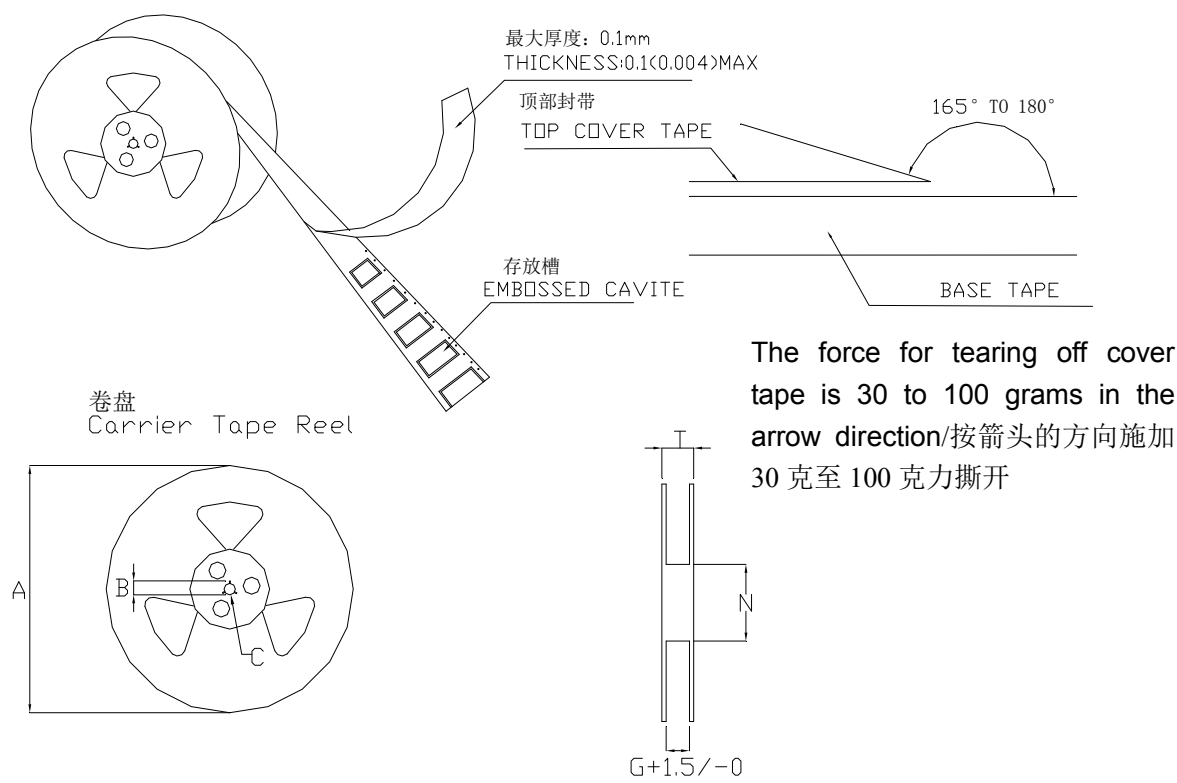
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7. TAPE REEL DIMENSIONS:



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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