

SPECIFICATION FOR APPROVAL

承 認 書

CUSTOMER

客戶名稱：

NUMBER

編號： L002-1

DESCRIPTION

品 名： CR6020 - 101M

QUANTITY

數量： 20PCS

PART NO.

型 號： SMD POWER INDUCTORS

DATE

日期： 2022-10-11

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
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SPECIFICATIONS

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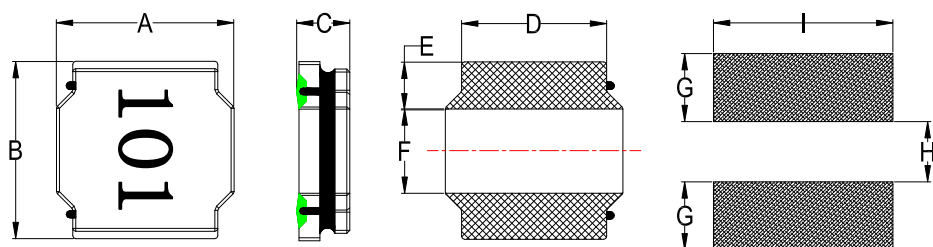
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1. Scope

This specification apply for CR6020of power inductors

2. Appearance

2-1.Dimensions(mm)



A	6.0 ± 0.3mm
B	6.0 ± 0.3mm
C	2.0mm MAX
D	4.9±0.3mm
E	1.55±0.3mm
F	2.9±0.3mm
G	1.7mm(Ref)
H	2.8mm(Ref)
I	5.7mm(Ref)

* 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	35.5 Ts
Wire	φ0.10mm G1 P180

* Winding Turns are approx.

LEAD-FREE



Note :

线包涂胶。

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3-3. Electronical characteristics

Item	Specifications	Measuring Conditions	Measuring Instrument
Inductance	100 μ H \pm 20% Within	100KHz/0.25V	CH1062/HIOKI3532-50
D.C.R	1.15 Ω \pm 30%	25 $^{\circ}$ C	CH502BC/HIOKI3540
I sat ※	0.55A	100KHz/0.25V	Microtest 6377&6220
I rms ※	0.5A	25 $^{\circ}$ C	Microtest 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 $\Delta T=40^{\circ}\text{C}$ whichever is lower .($T_a=20^{\circ}\text{C}$)

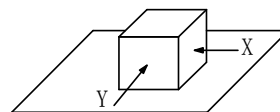
4. General Characteristics

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)

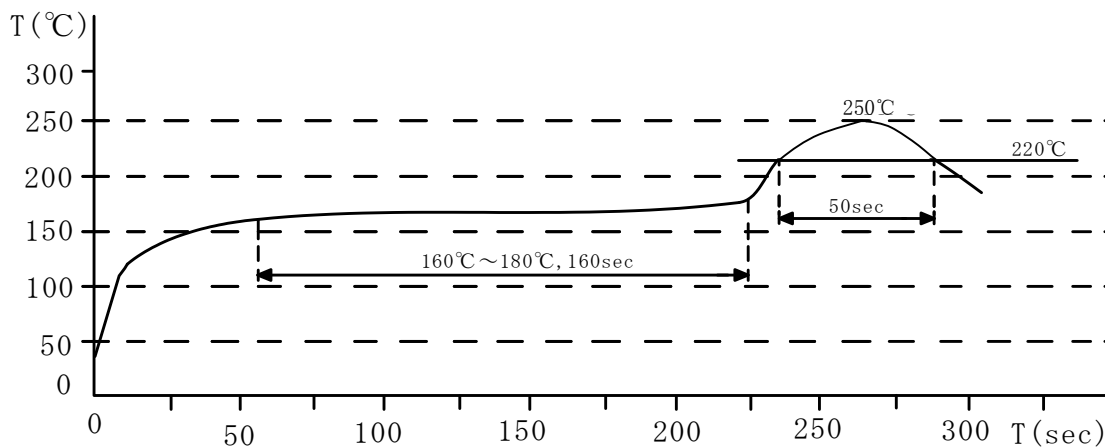
4-3. External appearance : No external defects can be found in the visual inspection.

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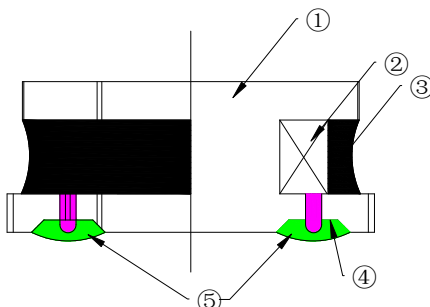
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4-7.Humidity test : Inductance deviation is within $\pm 5.0\%$ after 96 ± 4 hours test under the condition of relative humidity of $90 \sim 95\%$ and temperature of $60 \pm 2^\circ\text{C}$, and 1 hour storage under room ambient conditions after the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

5. Construction and materials



No.	Part name	Material	Ceaiya P/N
①	Drum Core	Ni-Zn Ferrite Core	TW、CY
②	Wire	Polyurethane enameled copper wire	3210200
③	Adhesive	Epoxy Resin Magnetic Powder	7001007
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%	

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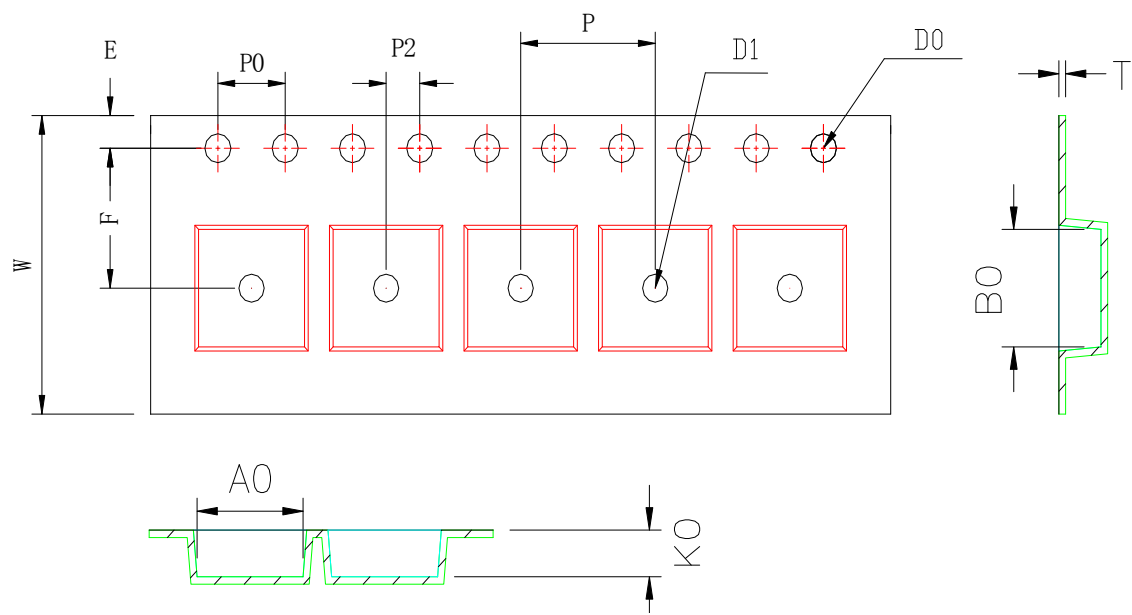
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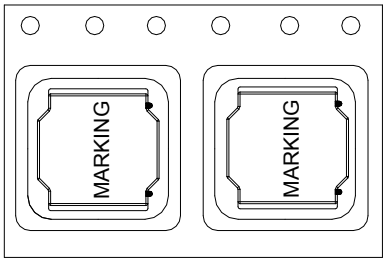
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6.Package Specification



ITEM	W	A0	B1	K0	P	F	E	D0	D1	P0	P2	T
DIM	12.00	6.3	6.3	2.5	8.00	7.50	1.75	1.50	1.50	4.00	2.00	0.40
TOLE	±0.3	±0.1	±0.1	±0.1	±0.1	±0.15	±0.1	+0.1	+0.1	±0.1	±0.1	±0.05



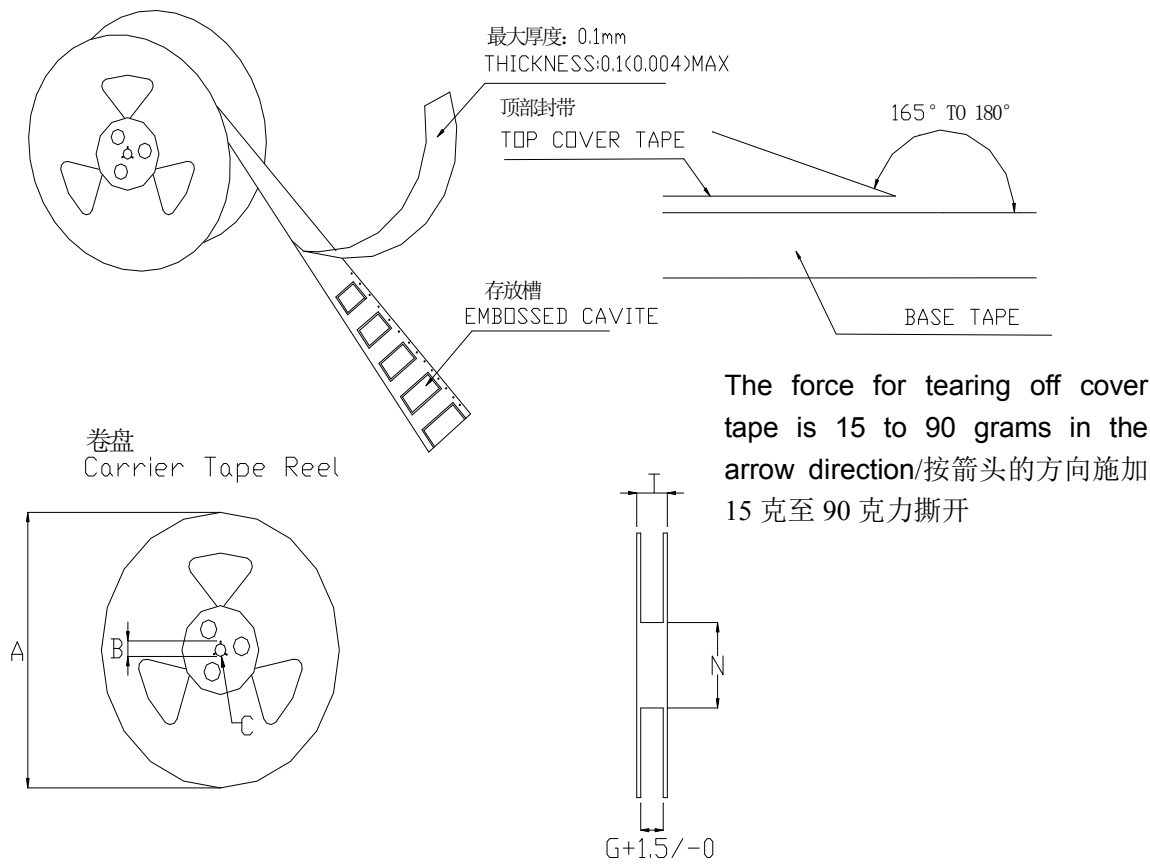
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7. CARRIER REEL DIMENSIONS:



Unit: mm

Type	A	B	C	G	N	T
12mm	330	21±0.8	13±0.4	12.4	100	20.4

8. PACKAGE SPECIFICATION:

3000PCS/Reel

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