

SPECIFICATION FOR APPROVAL

承 認 書

CUSTOMER

客戶名稱：

NUMBER

編號: Y-14010703

PART NO.

品 名：SMD POWER INDUCTORS

QUANTITY

數量：20PCS

DESCRIPTION

型 號：CR4030 - 102M

DATE

日期： 2024-05-08

CUSTOMER PART NO.

客戶料號：

WEIGHT

單重： 0.176g

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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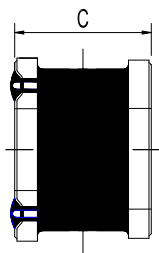
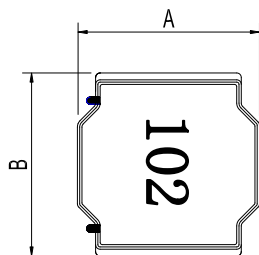
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1. Scope

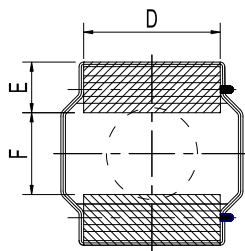
This specification apply for CR4030 of power inductors

2. Appearance

2-1.Dimensions(mm)



2-2.Recommended Land



A	4.0 ±0.3mm
B	4.0 ±0.3mm
C	3.0mm(MAX)
D	3.3mm Ref
E	1.0mm Ref
F	2.0mm 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	195.5Ts
Wire	0.06mm 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	1.0mH \pm 20%	100KHz/0.25V	CH1062/HIOKI3532-50
D.C.R	11 Ω \pm 30%	25°C	HIOKI 3540
Isat※1	0.16A ($\Delta L/L_0 \leq 30\%$)	100KHz/0.25V	Microtest 6377&6220
Irms※2	0.10A ($\Delta T=40^\circ\text{C}$)	25°C	Microtest 6377&6220

※ 1.This indicates the value of current when the inductance is 30% lower than its initial value at D.C superposition

※ 2. D.C current when temperature rise $\Delta T=40^\circ\text{C}$

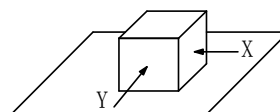
4. General Characteristics

4-1. Storage Temperature range : $-40^\circ\text{C} \sim +100^\circ\text{C}$

4-2.Operating temperature range: $-40^\circ\text{C} \sim +100^\circ\text{C}$ (Including coil's self temperature rise)

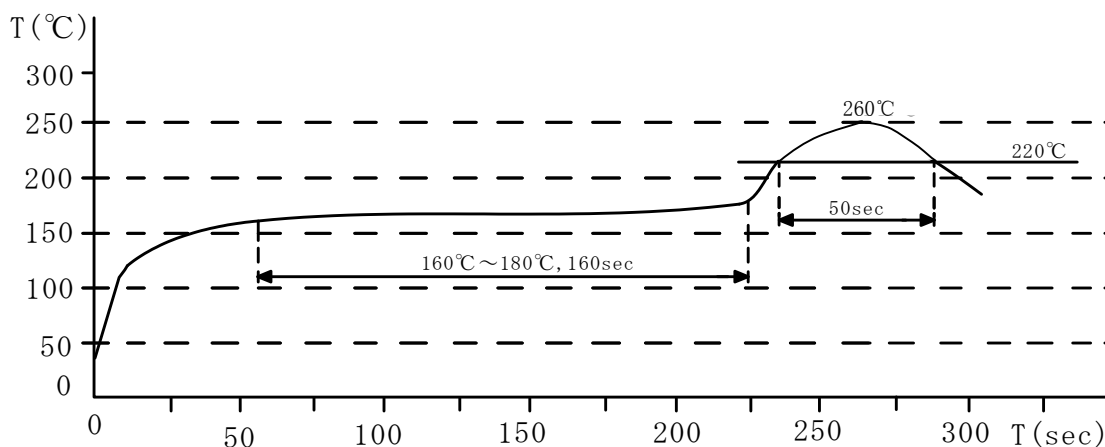
4-3.External appearance : No external defects can be found in the visual inspection.

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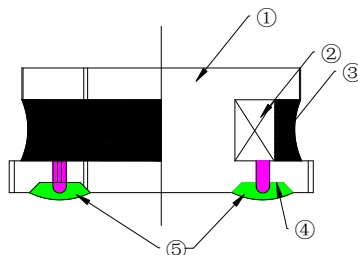
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4-7.Humidity test : Inductance deviation is within $\pm 5.0\%$ after 96 ± 4 hours test under the condition of relative humidity of $90 \sim 95\%$ and temperature of $60 \pm 2^\circ\text{C}$, and 1 hour storage under room ambient conditions after the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

5. Construction and materials



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

Note :

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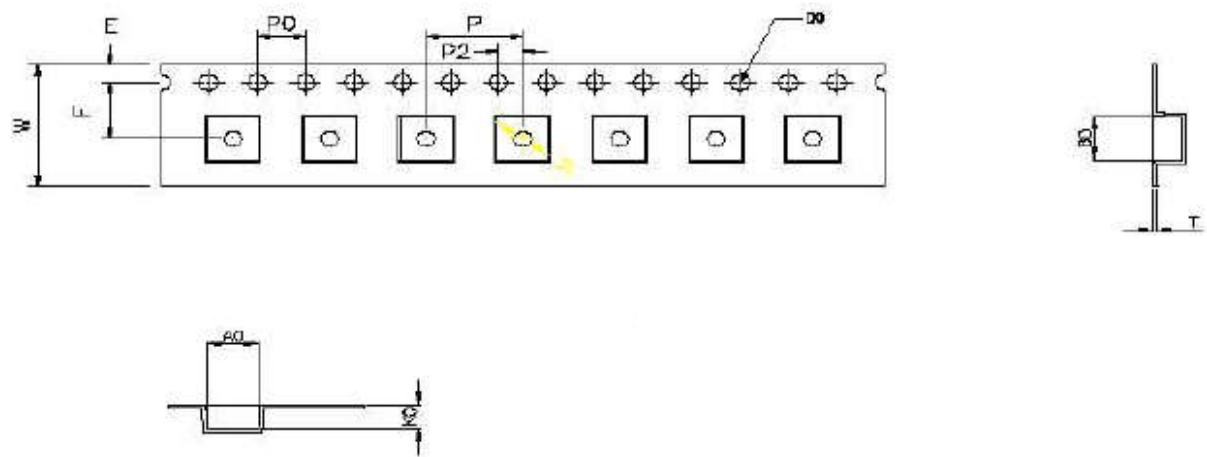
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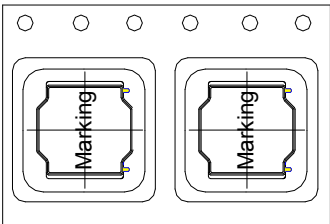
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6. TAPE DIMENSIONS:



ITEM	W	A0	B0	K0	P	F	E	D0	D1	P0	P2	T
DIM	12.00	4.5	4.5	3.2	8.00	5.50	1.75	1.50	1.50	4.00	2.00	0.30
TOLE	+0.30 -0.10	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	+0.1	+0.1	±0.1	±0.1	±0.05

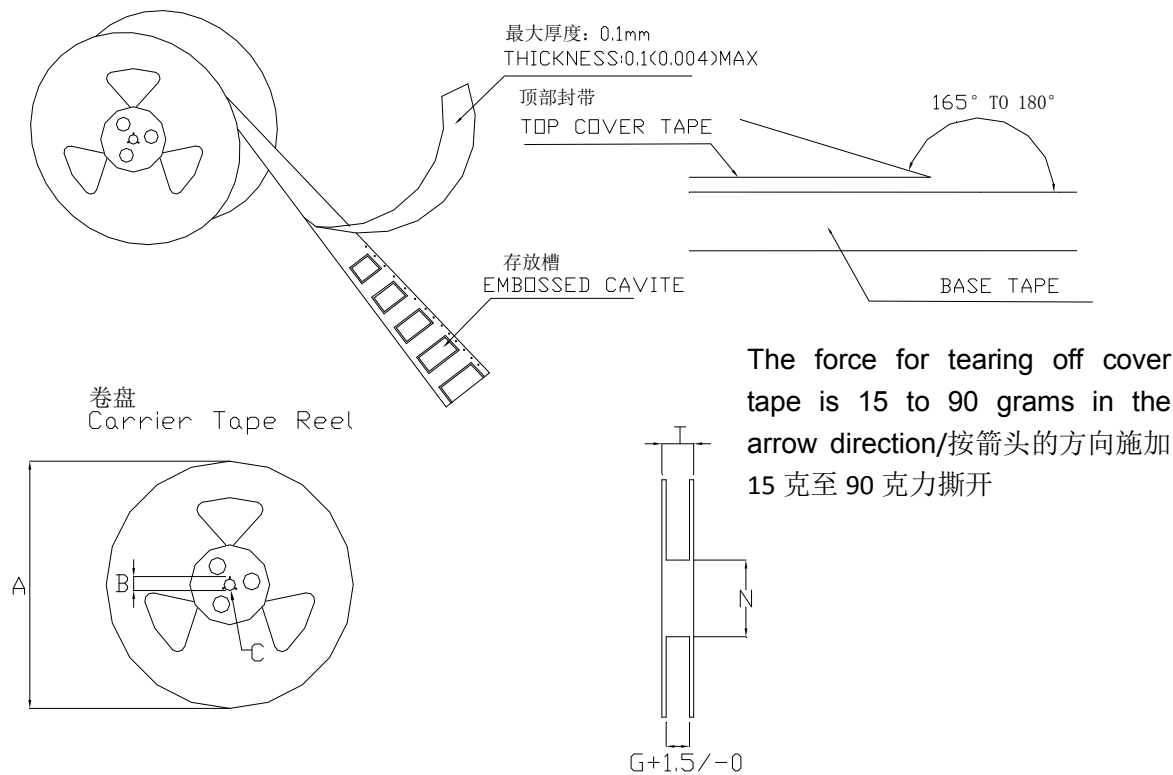


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7. TAPE REEL DIMENSIONS:



单位：毫米

Type	A	B	C	G	N	T
12mm	330	21±0.8	13±0.4	12.4	100	16.4

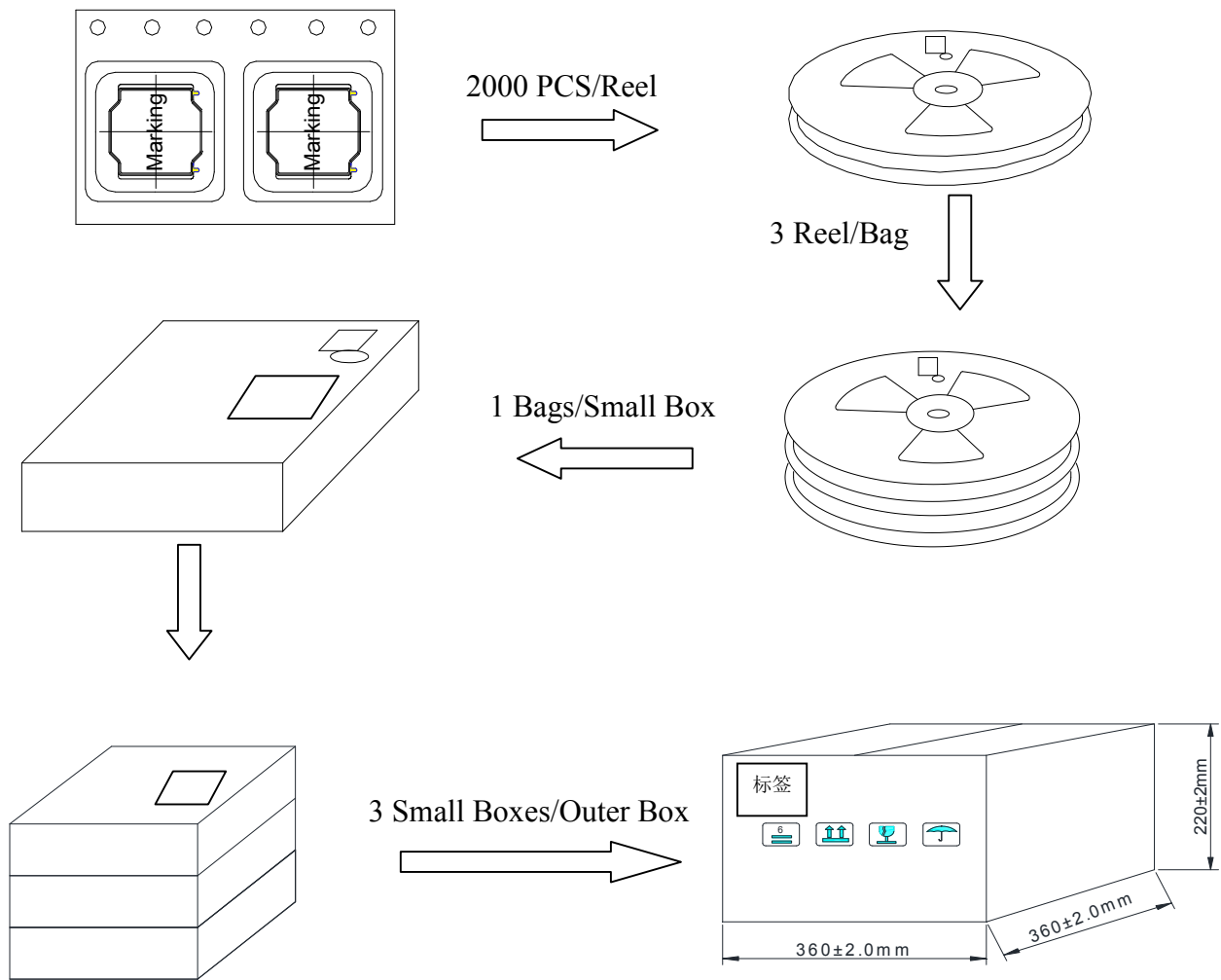
PACKAGING QUANTITY :
2KPCS/Reel 6KPCS/Inner Box 18KPCS/Outer Box

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8. PACK:



内箱规格: 350*340*60 mm

外箱规格: 360*360*220 mm

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