

SPECIFICATION FOR APPROVAL

承 認 書

CUSTOMER

客戶名稱：

NUMBER

編號：Y-16063002

DESCRIPTION

品 名：SMD POWER INDUCTORS

QUANTITY

數量：100PCS

PART NO.

型 號：CR6045 - 471M

DATE

日期：2023-07-15

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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[Http://www.szceaiya.com](http://www.szceaiya.com). Tel: 0769-89333213

CUSTOMER:	SPECIFICATIONS (R e v i s i o n s)	TYPE CR6045-471M
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History of change

Rev.	Effective Date	Changed Contents	Change reasons	Approved By
A0	2022-10-31	New release	/	

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TYPE:

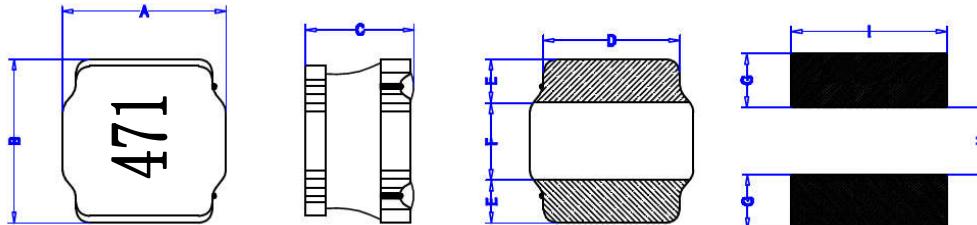
CR6045 - 471M

1. Scope

This specification apply for CR6045 of power inductors

2. Appearance

2-1. Dimensions(mm)



A	6.0 ± 0.3 mm
B	6.0 ± 0.3 mm
C	4.0 ± 0.5 mm
D	4.9 ± 0.3 mm
E	1.65 ± 0.3 mm
F	2.7 ± 0.3 mm
G	1.7 mm
H	2.8 mm
I	5.7 mm

* 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	108.5 Ts
Wire	Φ 0.125mm G1 P180

* Winding Turns are approx.



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3-3. Electronical characteristics

Part No.	Inductance (uH)	DCR(Ω)		Isat1 (A)		Irms2 (A)	
		Max.	Typ.	Max.	Typ.	Max.	Typ.
CR6045-471M	470±20%	2.34	1.90	0.50	0.56	0.42	0.48

※ L test condition: 100KHz/0.25V at 20°C ambient;

※ Rated current: Isat or Irms, whichever is smaller;

※ Isat1: direct current at which the inductance drops approximate 30% from its value without current.

Irms2: direct current when the temperature of the product rise ($\Delta T=40^{\circ}\text{C}$) from 20°C ambient.

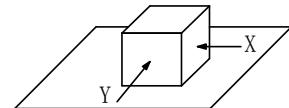
4. General Characteristics

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

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

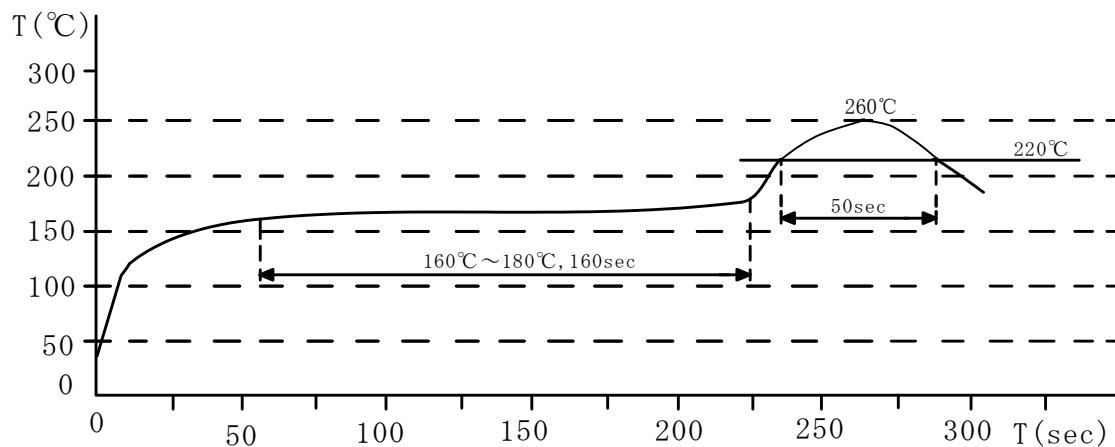
4-3. External appearance : No external defects can be found in the visual inspection.

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 $\pm 10.0\%$ 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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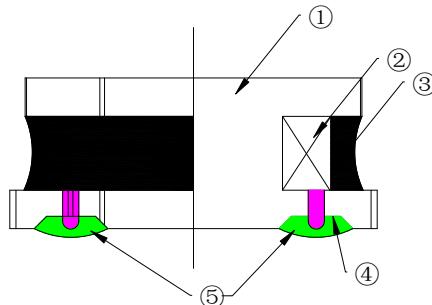
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4-7.Humidity test : Inductance deviation is within $\pm 5.0\%$ after 96 ± 4 hours test under the condition of relative humidity of $90 \sim 95\%$ and temperature of $60 \pm 2^\circ\text{C}$, and 1 hour storage under room ambient conditions after the device is wiped with dry cloth.

5. Construction and materials



No.	Part name	Material	Ceaiya P/N
①	Drum Core	Ni-Zn Ferrite Core	CY/MT
②	Wire	Polyurethane enameled copper wire	YLSL
③	Adhesive	Epoxy Resin Magnetic Powder	CH/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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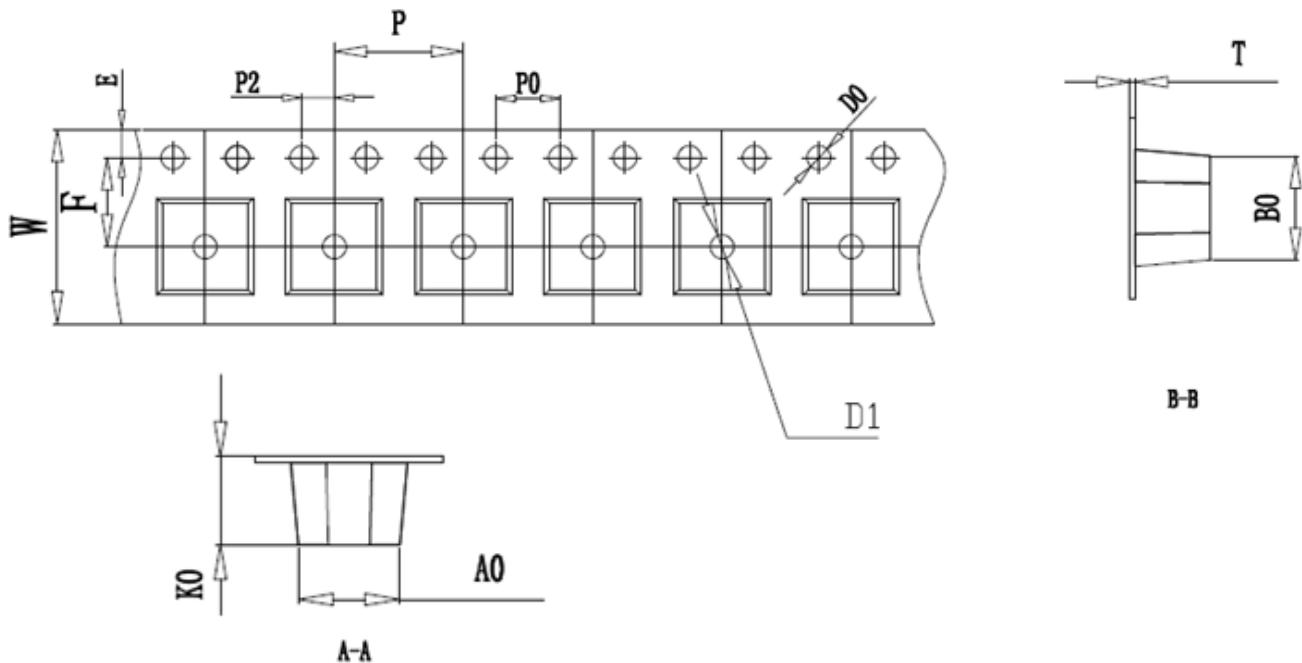
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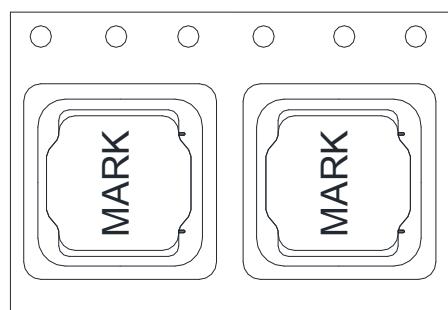
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6. TAPE DIMENSIONS:



ITEM	W	A0	B0	K0	P1	F	E	D0/D1	P0	P2	T
DIM	12.00	6.3	6.3	4.7	8.00	5.50	1.75	1.50	4.00	2.00	0.40
TOLE	± 0.3	± 0.1	$+0.1$	± 0.1	± 0.1	± 0.05					



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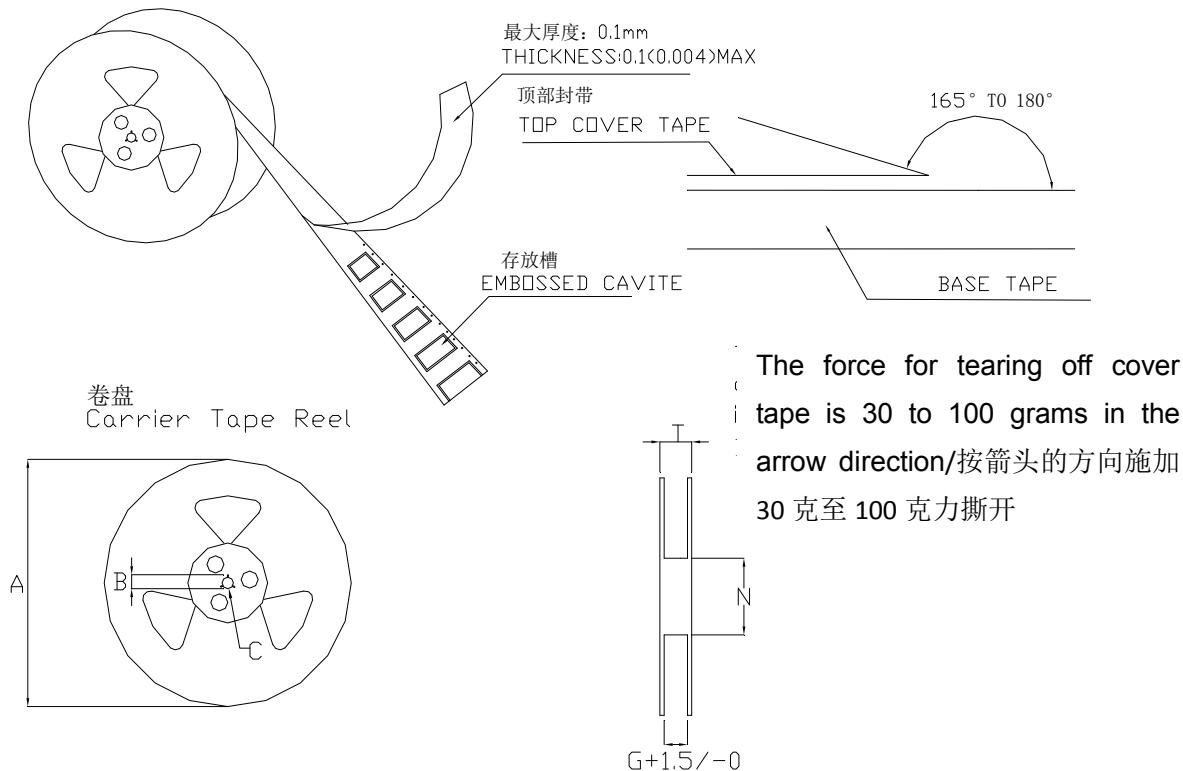
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7. TAPE REEL DIMENSIONS:



单位: 毫米

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

PACKAGING QUANTITY :

1500 PCS /REEL

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