

SPECIFICATION FOR APPROVAL

承 認 書

CUSTOMER

客戶名稱：

NUMBER

编号: Y-16070101

DESCRIPTION

品 名：SMD POWER INDUCTORS

QUANTITY

數量：20PCS

PART NO.

型 號： CR6045 - 102M

DATE

日期： 2023-02-20

CUSTOMER PART NO.

客戶料號：

NOTE

注解：0.5g

APPROVAL SIGNATURE

客戶承認簽章

Approved By 核 准	Checked By 审 查	Drawn By 制 作
李庆辉	刘志坚	劳水花

深圳市柯爱亚电子有限公司

Shenzhen Ceaiya Electronics Co., Ltd.

深圳地址：深圳市龙华区高新技术开发区捷顺科技中心 B706

东莞地址：东莞清溪镇青滨东路 105 号力合紫荆智能制造中心 10 栋一单元

Http://www.szceaiya.com Tel: 0769-89135516 Fax: 0769-89135519



SPECIFICATIONS

TYPE:

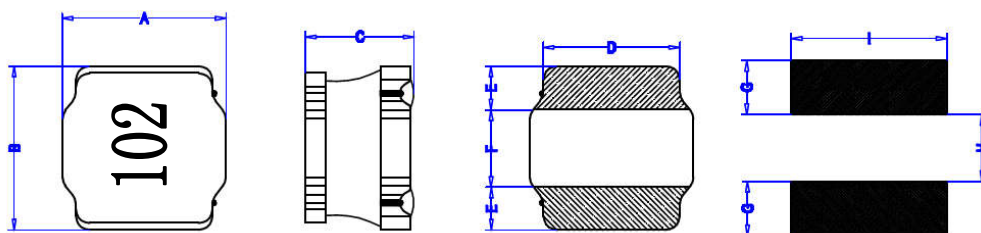
CR6045 - 102M

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	158.5 Ts
Wire	0.10mm G1 P180

* Winding Turns are approx.

LEAD-FREE

RoHS

Compliance

Note :

Spec. No.

Y-16070101

2/6

SPECIFICATIONS

TYPE:
CR6045 - 102M

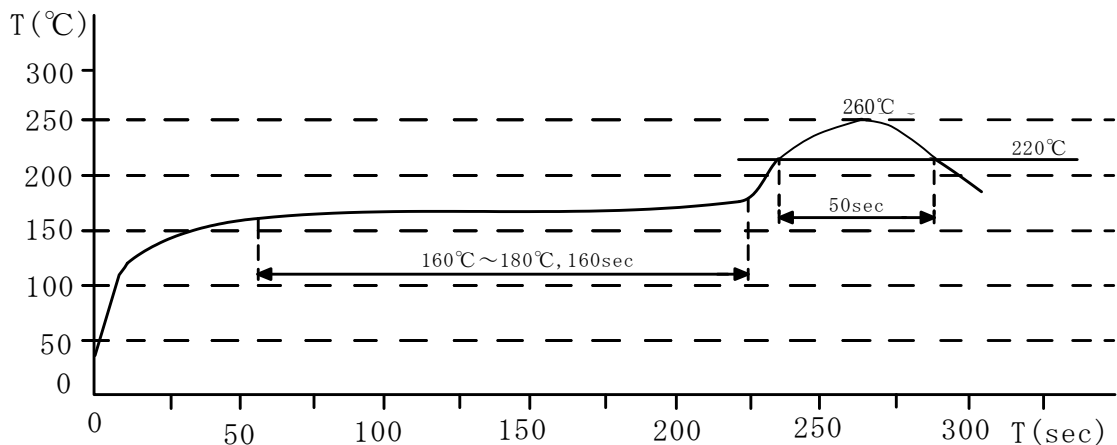
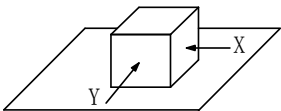
3-3. Electronical characteristics

Part No.	Inductance (mH)	DCR(Ω)		Isat1 (A)		Irms2 (A)	
		Max.	Typ.	Max.	Typ.	Max.	Typ.
CR6045-102M	1.0 \pm 20%	6.0	4.8	0.29	0.31	0.26	0.30

- ※ L test condition: 100KHz/1V at 20℃ 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℃ 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 \pm 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 10Hz and the amplitude of 1 minute cycle is 1.5mm PP.
- 4-6. Recommended reflow condition :



Note :	Spec. No. Y-16070101 3/6
--------	--------------------------------

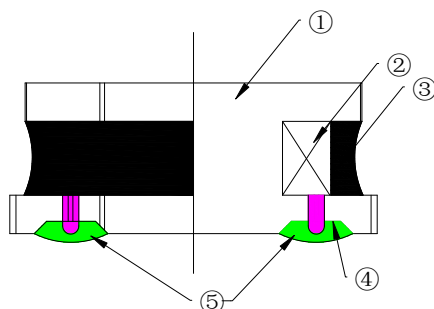
SPECIFICATIONS

TYPE:

CR6045 - 102M

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/TW
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

Note :

Spec. No.

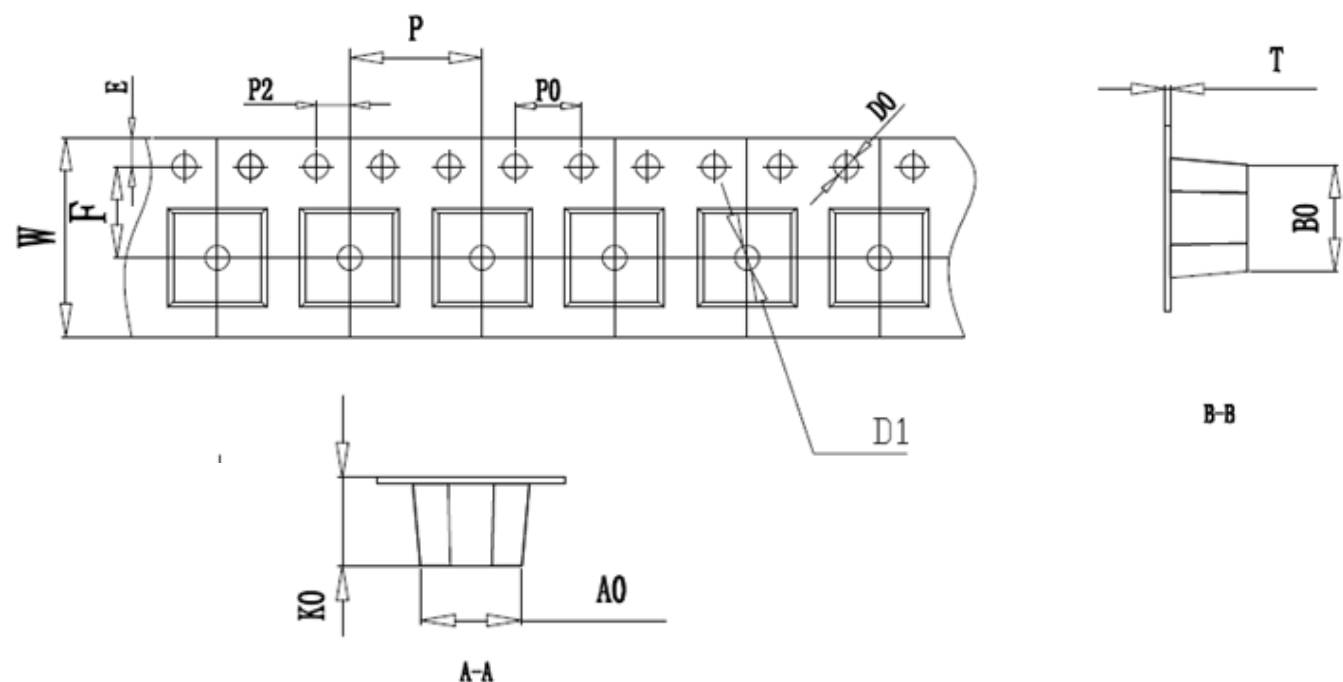
Y-16070101

4/6

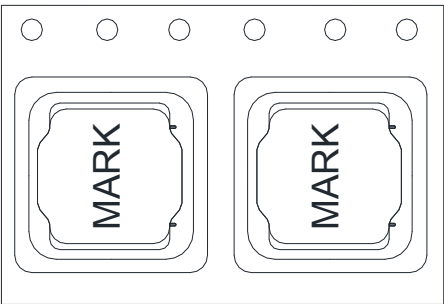
SPECIFICATIONS

TYPE:
CR6045 - 102M

6. TAPE DIMENSIONS:



ITEM	W	A0	B0	K0	P	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	±0.1	±0.1	+0.1	±0.1	±0.1	±0.05



Note :

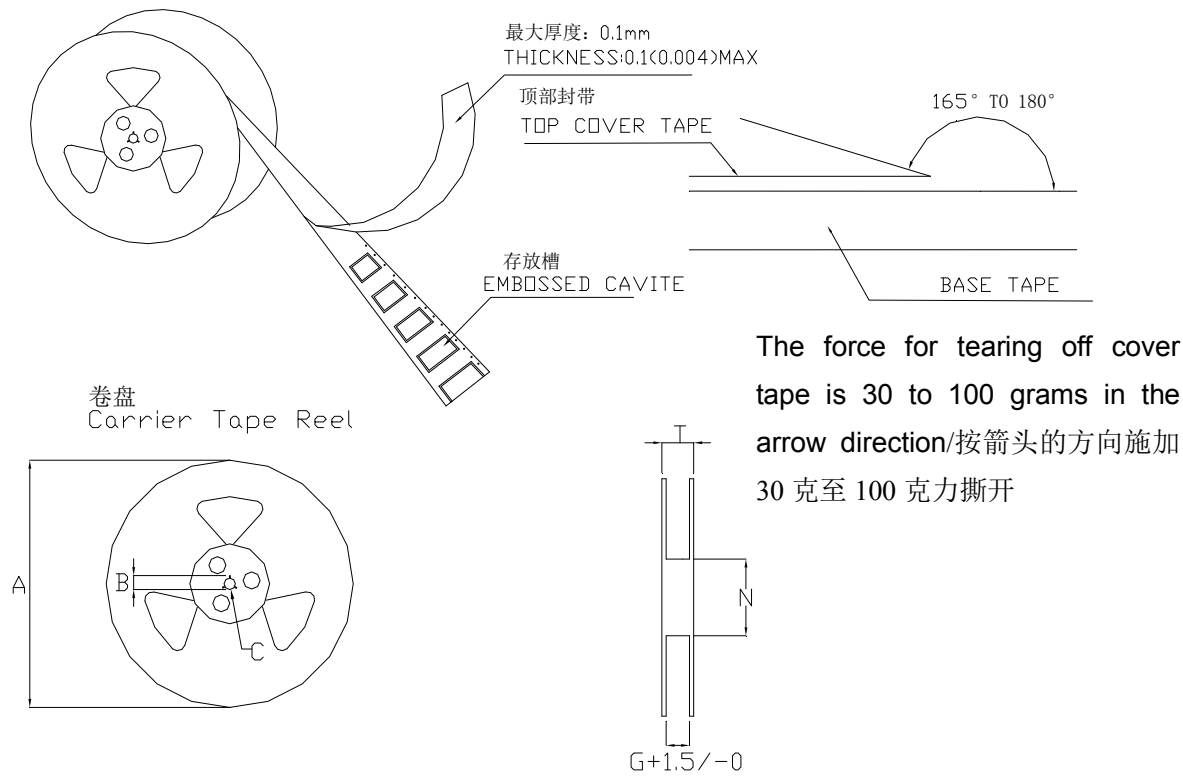
Spec. No.
Y-16070101

SPECIFICATIONS

TYPE:

CR6045 - 102M

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

Note :	Spec. No. Y-16070101 6/6
--------	--------------------------------