# **SPECIFICATION FOR APPROVAL**

承 認 書

**CUSTOMER NUMBER** 客户名稱: 编号: Y-16011104 DESCRIPTION **QUANTITY** 品 名: SMD POWER INDUCTORS 數量:100PCS PART NO. DATE 型 號: CR6045A - 220M 日期:2017-08-08 **CUSTOMER PART NO. NOTE** 客戶料號: 注解:

APPROVAL SIGNATURE
客戶承認簽章

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

# 深圳市柯爱亚电子有限公司

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CUSTOMER:	SPECIFICATIONS	TYPE
	(Revisions)	CR6045A-220M

# History of change

Rev.	Effective Date	<b>Changed Contents</b>	Change reasons	Approved By
A0	2016-04-27	New release	/	

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#### **SPECIFICATIONS**

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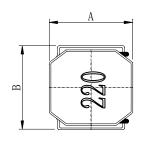
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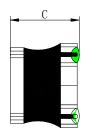
## 1. Scope

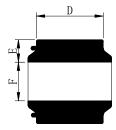
This specification apply for CR6045A of power inductors

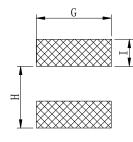
## 2. Appearance

## 2-1.Dimensions(mm)









A	$6.0 \pm 0.3 \text{ mm}$
В	$6.0 \pm 0.3 \text{ mm}$
С	$4.0 \pm 0.5 \text{ mm}$
D	4.9±0.3 mm
Е	1.65±0.3 mm
F	2.7±0.3 mm
G	1.7 mm
Н	2.8 mm
I	5.7 mm
•	

## 3. Coils Specification

### 3-1. Connection (Bottom View)



"S" is winding start

#### 3-2. Turns and Wire

Terminal	S-F
Turns	23.5 Ts
Wire	0.25mm G1 P180

<sup>\*</sup> Winding Turns are approx.





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<sup>\*</sup> Dimension without tolerance is approx.

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#### 3-3. Electronical characteristics

Item	Specifications	Measuring	Measuring
	2,500	Conditions	Instrument
Inductance	$22\mu H \pm 20\%$ Within	100KHz/0.25V	СН1062
D.C.R	115m $\Omega$ Typ. 149.5m $\Omega$ Max	25℃	HIOKI354
I sat ※1	1.9A	100KHz/0.25V	CH1062&Chroma1320
I rms ※2	1.5A	25℃	CH1062&Chroma1320
S.R.F	8.0MHz Min.	25℃	HP4395A

<sup>\* 1.</sup>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  $\Delta T=40^{\circ}C$  (Ta=20°C)

#### 4. General Characteristics

4-1. Storage Temperature range :  $-40^{\circ}$ C  $\sim +105^{\circ}$ 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)

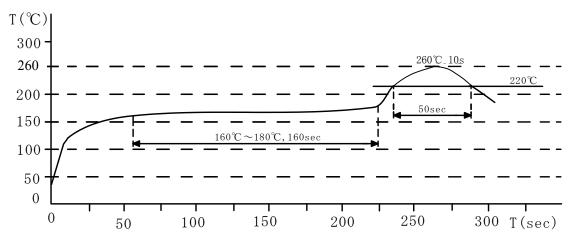
4-5. Vibration test : Inductance deviation is within  $\pm 10\%$  after 1 hour sweeping vibration

in each three directions, namely, forward and backward, up and down, right and left. The frequency is  $10 \sim 55 \sim 10$ Hz and the amplitude of

ight and left. The frequency is 10 - 35 - 10112 and the t

1 minute cycle is 1.5mm PP.

#### 4-6.Recommended reflow condition



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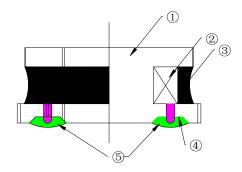
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4-7. Humidity test : Inductance deviation is within  $\pm 5.0\%$  after 96 $\pm 4$  hours test under the

condition of relative humidity of 90 $\sim$ 95% and temperature of 60 $\pm$ 2 $^{\circ}$ 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/DY
2	Wire	Polyurethane enameled copper wire	YLSL
3	Adhesive	Epoxy Resin Magnetic Powder	
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

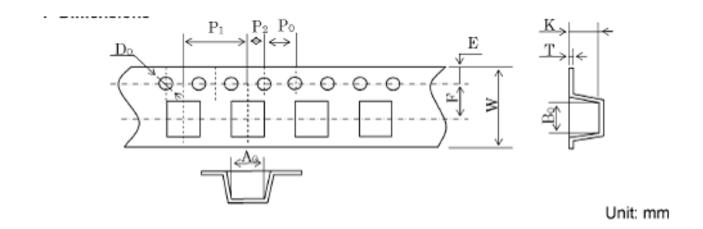
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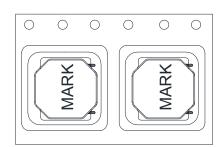
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## **6. TAPE DIMENSIONS:**



ITEM	W	A0	В0	К0	P1	F	E	D0	P0	P2	Т
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



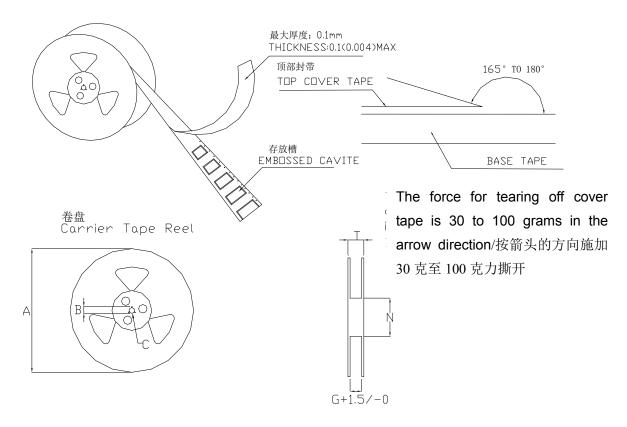
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#### 7. TAPE REEL DIMENSIONS:



单位:毫米

Type	A	В	C	G	N	T
12mm	330	21±0.8	13±0.4	12.0	100	16.4

PACKAGING QUANTITY: 1500 PCS / REEL

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