

# SPECIFICATION FOR APPROVAL

## 承 認 書

**CUSTOMER**

客戶名稱：

**NUMBER**

編號： Y-17010401

**DESCRIPTION**

品 名：SMD POWER INDUCTORS

**QUANTITY**

數量：100PCS

**PART NO.**

型 號：CR4018A - 221M

**DATE**

日期： 2022-07-12

**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	刘志坚	劳水花

深圳市柯爱亚电子有限公司

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## SPECIFICATIONS

TYPE:

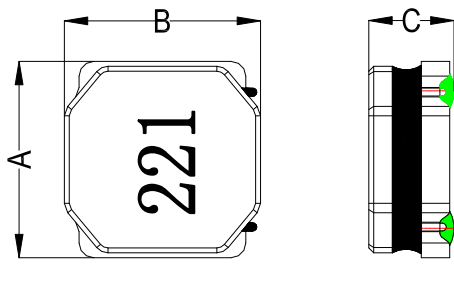
**CR4018A - 221M**

### 1. Scope

This specification apply for CR4018A of power inductors

### 2. Appearance

#### 2-1. Dimensions(mm)

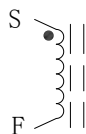


A	$4.0 \pm 0.2\text{mm}$
B	$4.0 \pm 0.2\text{mm}$
C	1.8mm(MAX)
D	$3.3 \pm 0.3\text{mm}$
E	$1.05 \pm 0.3\text{mm}$
F	$1.9 \pm 0.3\text{mm}$

\* 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	74.5Ts
Wire	0.06mm G1 P180

\* Winding Turns are approx.

**LEAD-FREE**

**RoHS**

Compliance

Note :

线包需涂磁粉胶

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### 3-3. Electronical characteristics

Item	Specifications	Measuring Conditions	Measuring Instrument
Inductance	220 $\mu$ H $\pm$ 20%	100KHz/0.25V	CH1062
D.C.R	4.6 $\Omega$ Max	25 $^{\circ}$ C	HIOKI 3540
Isat※1	0.28A ( $\Delta$ L/L0 $\leq$ 30%)	100KHz/0.25V	CH1062&Chroma1320
Irms※2	0.20A ( $\Delta$ T=40 $^{\circ}$ C)	25 $^{\circ}$ C	CH1062&Chroma1320

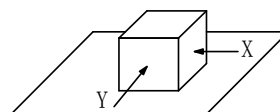
## 4. General Characteristics

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

4-2. Operating temperature range: -40 $^{\circ}$ C ~ +105 $^{\circ}$ C (Including coil's self temperature rise)

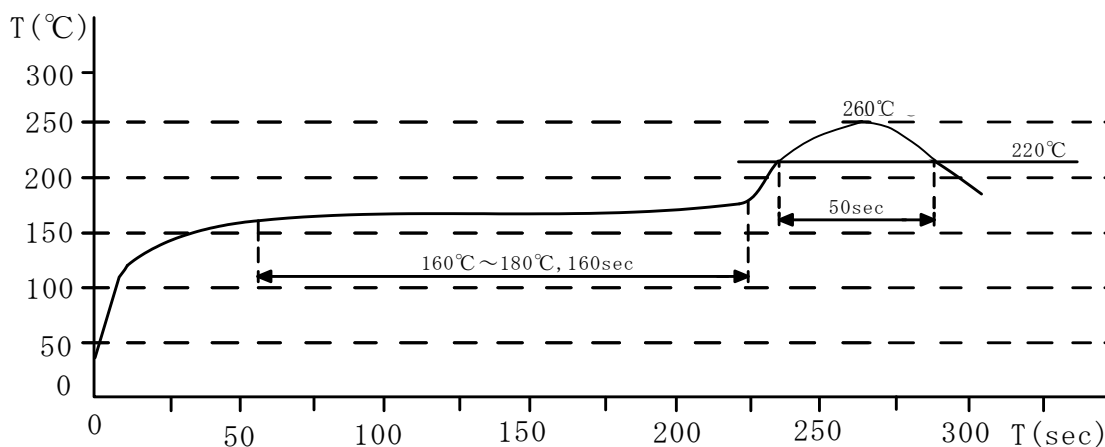
4-3. External appearance : No external defects can be found in the visual inspection.

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 10~55~10Hz and the amplitude of 1 minute cycle is 1.5mm PP.

4-6. Recommended reflow condition :



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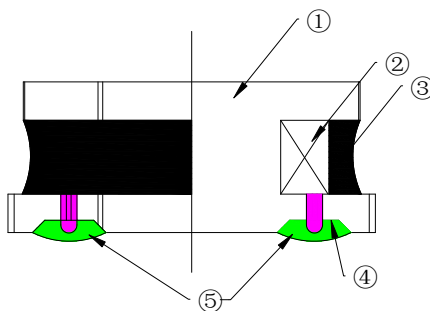
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4-7.Humidity test : Inductance deviation is within  $\pm 5.0\%$  after  $96 \pm 4$  hours test under the condition of relative humidity of  $90 \sim 95\%$  and temperature of  $60 \pm 2^\circ\text{C}$ , and 1 hour storage under room ambient conditions 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
②	Wire	Polyurethane enameled copper wire	YLSL
③	Adhesive	Epoxy Resin Magnetic Powder	CH/DZ
④	Plating Electrodes	Plating: Ag 3-7 $\mu\text{m}$ Ni 1-3 $\mu\text{m}$ Sn 3-7 $\mu\text{m}$	
⑤	Outer Electrodes	Top surface solder coating Sn99%、 Ag0.3%、Cu0.7%	

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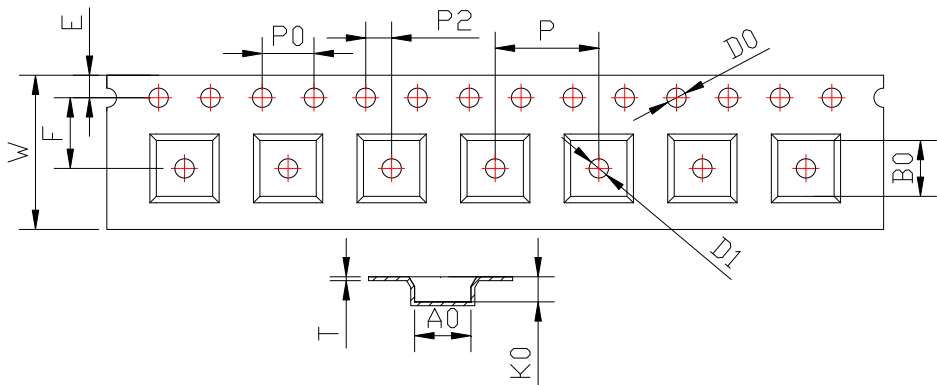
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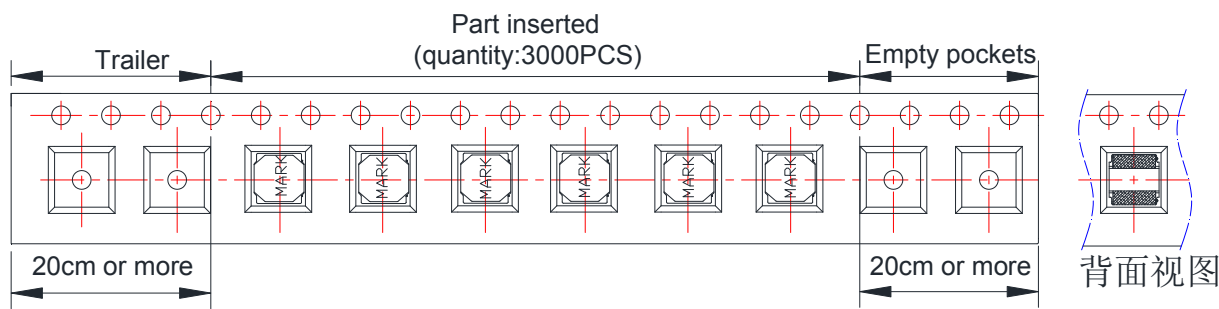
6.Packaging and Marking:

6-1.Carrier Tape Dimensions:

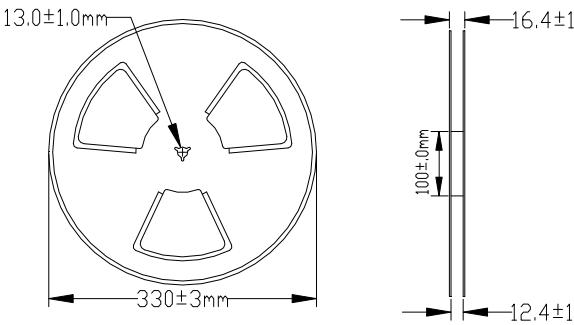


ITEM	W	A0	B0	K0	P	F	E	D0	D1	P0	P2	T
DIM	12.00	4.35	4.35	1.95	8.00	5.50	1.75	1.50	1.50	4.00	2.00	0.30
TOLE	+0.30 -0.10	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	+0.1	+0.1	±0.1	±0.1	±0.05

6-2.Taping Dimensions:



6-3.Reel Dimensions:



6-4.Quantity:  
3000PCS/盘(13 寸盘)

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