# SPECIFICATION FOR APPROVAL

客戶料號:

承認

注解:

**CUSTOMER NUMBER** 客户名稱: 编号: Y-17050801 DESCRIPTION **QUANTITY** 品 名: SMD POWER INDUCTORS 數量:30PCS PART NO. DATE 型 號: CR4018A - 7R5M 日期: 2024-07-23 NOTE **CUSTOMER PART NO.** 

> APPROVAL SIGNATURE 客戶承認簽章

Approved By	Checked By	Drawn By
核 准	审查	制 作
李庆辉	苏惠峰	劳水羌

# 深圳市柯爱亚电子有限公司

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CUSTOMER:	SPECIFICATIONS	ТҮРЕ
	(Revisions)	CR4018A - 7R5M

# History of change

Rev.	Effective Date	<b>Changed Contents</b>	Change reasons	Approved By
A0	2017-05-08	New release	/	

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### **SPECIFICATIONS**

TYPE:

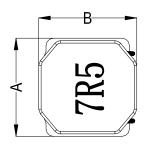
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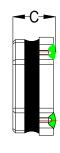
# 1. Scope

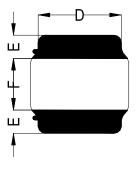
This specification apply for CR4018A of power inductors

# 2. Appearance

# 2-1.Dimensions(mm)







A	4.0 ±0.2mm
В	4.0 ±0.2mm
С	1.8±0.2mm
D	3.3±0.3mm
Е	1.0±0.2mm
F	2.0±0.3mm

# 3. Coils Specification

## 3-1. Connection (Bottom View)



"S" is winding start

### 3-2. Turns and Wire

Terminal	S-F
Turns	14.5Ts
Wire	0.14mm 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	
Item	Specifications	Conditions	Instrument	
Inductance	7.5μH ±20%	100KHz/0.25V	CH1062	
D.C.R	146mΩ±20%	25℃	HIOKI 3540	
Isat¾1	<b>1.4A</b> (△L/L0≤30%)	100KHz/0.25V	CH1062&Chroma1320	
Irms※2	0.98A (ΔT=40°C)	25℃	CH1062&Chroma1320	

#### 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±2 seconds after soldering between copper plate and the electrodes.

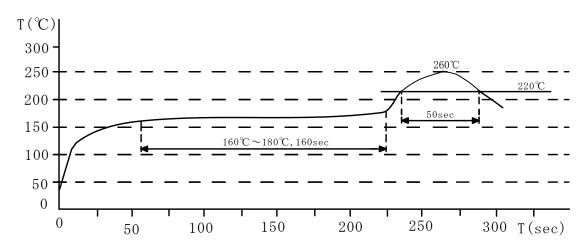
(Refer to figure at right)

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

1 minute cycle is 1.5mm PP.

#### 4-6.Recommended reflow condition



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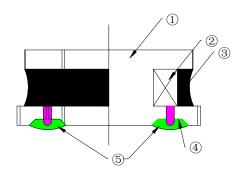
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4-7. Humidity test : Inductance deviation is within  $\pm 5.0\%$  after 96 $\pm 4$  hours test under the

condition of relative humidity of 90  $\sim$  95% and temperature of 60±2°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	TZD/YN/MT
2	Wire	Polyurethane enameled copper wire	YLSL
3	Adhesive	Epoxy Resin Magnetic Powder	CH/DZ
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%	

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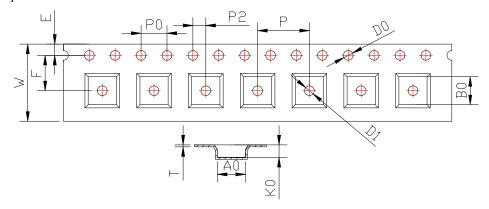


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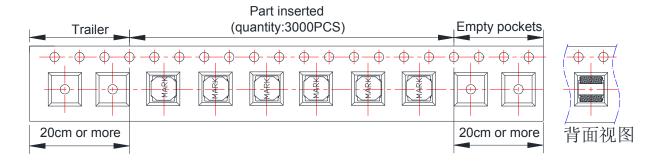
# 6.Packaging and Marking:

## 6-1. Carrier Tape Dimensions:

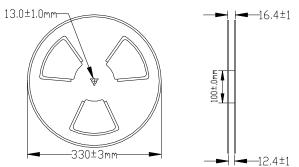


ITEM	W	A0	В0	K0	Р	F	E	D0	D1	P0	P2	Т
DIM	12.00	4.35	4.35	1.95	8.00	5.50	1.75	1.50	1.50	4.00	2.00	0.30
TOLE	+0.30 -0.10	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	+0.1	+0.1	±0.1	±0.1	±0.05

### 6-2. Taping Dimensions:



#### 6-3. Reel Dimensions:



### 6-4. Quantity:

3000PCS/盘(13 寸盘)

2 4 4 4 5 5 mm(-2 3 mm)	
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