## SPECIFICATION FOR APPROVAL

承認書

**CUSTOMER NUMBER** 客户名稱: 编号: L043-A PART NO. **QUANTITY** 品 名: SMD POWER INDUCTORS 數量:20PCS DESCRIPTION DATE 型 號: CD43 - 100K 日期:2025.08.15 **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	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)	CD43-100K

# History of change

Rev.	Effective Date	<b>Changed Contents</b>	Change reasons	Approved By
A0	2024.09.25	New release	/	

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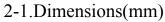
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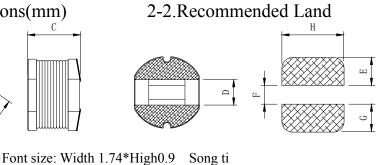
## 1. Scope

This specification apply for CD43 of power inductors

## 2. Appearance

100





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

A	$4.0 \pm 0.3 \text{ mm}$
В	$4.5 \pm 0.3 \text{ mm}$
C	3.5mm(Max)
D	1.5 mm
E	1.8 mm
F	1.2 mm
G	1.8 mm
Н	4.5 mm

## 3. Coils Specification

## 3-1. Connection (Bottom View)



"S" is winding start

#### 3-2. Turns and Wire

Terminal	S-F
Turns	21.5 Ts
Wire	Ф0.21mm G1 P180

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





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#### 3-3. Electronical characteristics

Itom	Specifications	Measuring	Measuring
Item	Specifications	Conditions	Instrument
Inductance	$10\mu H \pm 10\%$ Within	1KHz/0.25V	CH1062/HIOKI3532-50
D.C.R	150mΩ Max	25℃	HIOKI 3540
I.D.C%	1A Max	1KHz/0.25V	Microtest 6377&6220

<sup>%</sup> This indicates the value of current when the inductance is 10% lower than its initial value at D.C superposition or D.C current when temperature rise  $\Delta T=40^{\circ}C$ 

#### 4. General Characteristics

4-1. Storage Temperature range :  $-40^{\circ}$ C  $\sim +125^{\circ}$ C

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

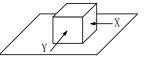
 $\hbox{$4$-3.} External \ appearance \quad : \quad No \ external \ defects \ can \ be \ found \ in \ the \ visual \ inspection.$ 

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)

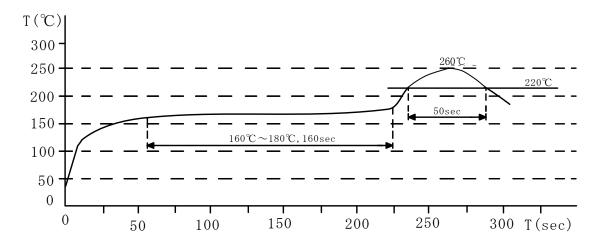


4-5. Vibration test : Inductance deviation is within  $\pm 10\%$  after 1 hour sweeping vibration

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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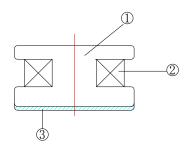
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4-7. Humidity test  $\pm 5.0\%$  after 96±4 hours test under the

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	MO/BL/MT
2	Wire	Polyurethane enameled copper wire	3210210
3	Electrode	Cu+Sn plating	

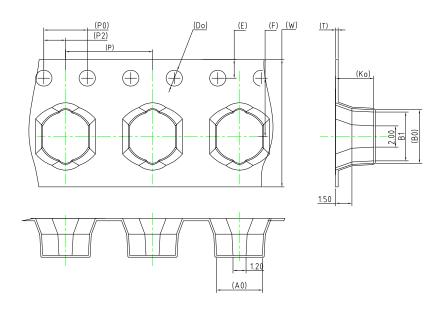
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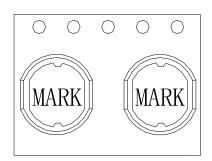
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## **6. TAPE DIMENSIONS:**



W	12.00±0.30	Р	8.00±0.10	AO	4.20±0.10	В0	5.05±0.10
P0	4.00±0.10	P2	2.00±0.10	E	1.75±0.10	B1	4.60±0.10
F	5.50±0.10	DO	Ø1.50 <sup>+0.10</sup>	K0	3.60±0.10	Т	0.40±0.05



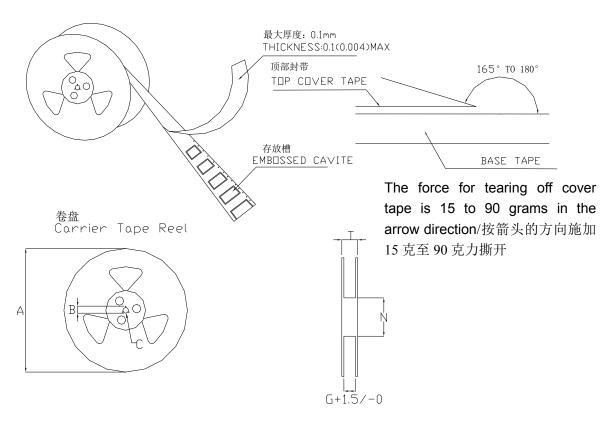
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## 7. TAPE REEL DIMENSIONS:



单位:毫米

Type	A	В	С	G	N	Т
12mm	330	21±0.8	13±0.4	12.4	100	16.4

PACKAGING QUANTITY:: 2000 PCS /REEL

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