

SPECIFICATION FOR APPROVAL

承 認 書

CUSTOMER

客戶名稱：

NUMBER

編號： L053 - 480

DESCRIPTION

品 名： CD53 – 470M

QUANTITY

數量： 20PCS

PART NO.

型 號： SMD POWER INDUCTORS

DATE

日期： 2025-02-11

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	苏高峰	劳水花

深圳市柯爱亚电子有限公司

Shenzhen Ceaiya Electronics Co., Ltd.

地址 1: 深圳市龙华区高新技术开发区捷顺科技中心 B706

地址 2: 东莞清溪镇青滨东路 105 号力合紫荆智能制造中心 10 栋

Http : //www.szceaiya.com Tel: 0769-89333213



SPECIFICATIONS

TYPE:

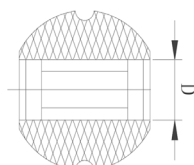
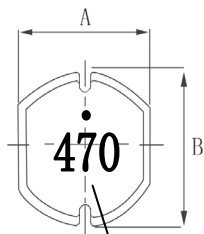
CD53 – 470M

1. Scope

This specification apply for CD53 of power inductors

2. Appearance

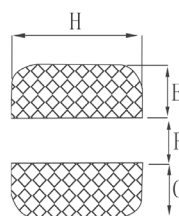
2-1.Dimensions(mm)



Font size: Width 2.9*High1.6 Song ti

* Dimension without tolerance is approx.

2-2.Recommended Land



A	5.2 ± 0.3 mm
B	5.8 ± 0.3 mm
C	3.8mm(Max)
D	1.8 mm
E	2.7 mm
F	1.2 mm
G	2.7 mm
H	5.8 mm

3. Coils Specification

3-1. Connection (Bottom View)



“S” is winding start

3-2. Turns and Wire

Terminal	S-F
Turns	37.5 Ts
Wire	0.17mm G1 P180

* Winding Turns are approx.

LEAD-FREE



Note :

注意印字方向，在起线端打点，如上图。

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3-3. Electronical characteristics

Item	Specifications	Measuring Conditions	Measuring Instrument
Inductance	47uH \pm 20% Within	1KHz/0.25V	CH1062
D.C.R	435.5m Ω MAX	25°C	CH502BC
Rated Current※	820mA	25°C	CH1062&Chroma1320

※ 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 $\Delta T=40^{\circ}\text{C}$ whichever is lower .($T_a=20^{\circ}\text{C}$)

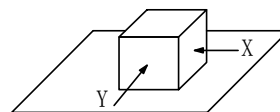
4. General Characteristics

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

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

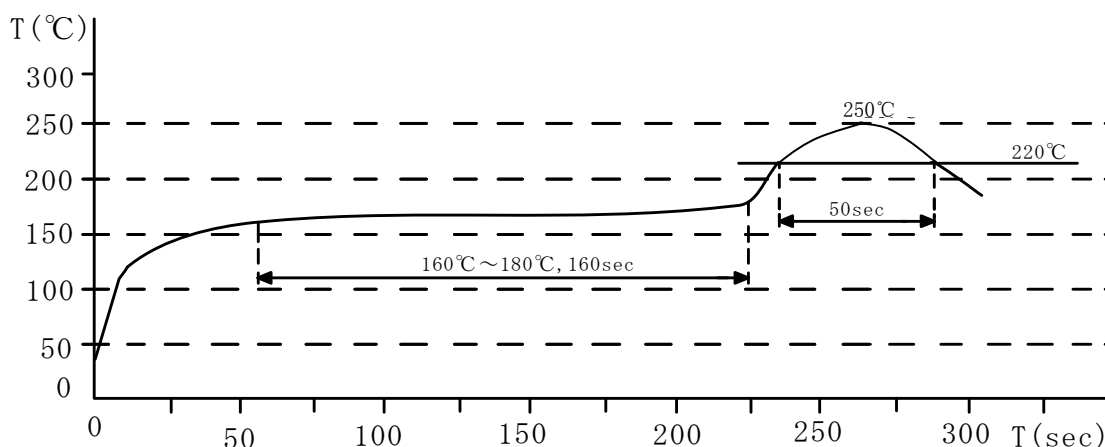
4-3. External appearance : No external defects can be found in the visual inspection.

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 ± 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 $10 \sim 55 \sim 10\text{Hz}$ and the amplitude of 1 minute cycle is 1.5mm PP.

4-6. Recommended reflow condition :



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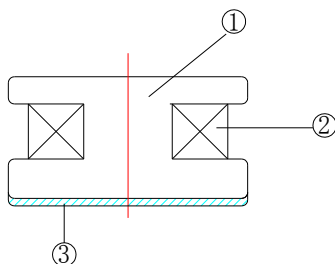
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4-7.Humidity test : Inductance deviation is within $\pm 5.0\%$ after 96 ± 4 hours test under the condition of relative humidity of $90 \sim 95\%$ and temperature of $60 \pm 2^\circ\text{C}$, and 1 hour storage under room ambient conditions after the device is wiped with dry cloth.

5. Construction and materials



No.	Part name	Material	Ceaiya P/N
①	Drum Core	Ni-Zn Ferrite Core	TAK/YC/BL
②	Wire	Polyurethane enameled copper wire G1 P180	YLSL
③	Electrode	Cu + Sn plating	

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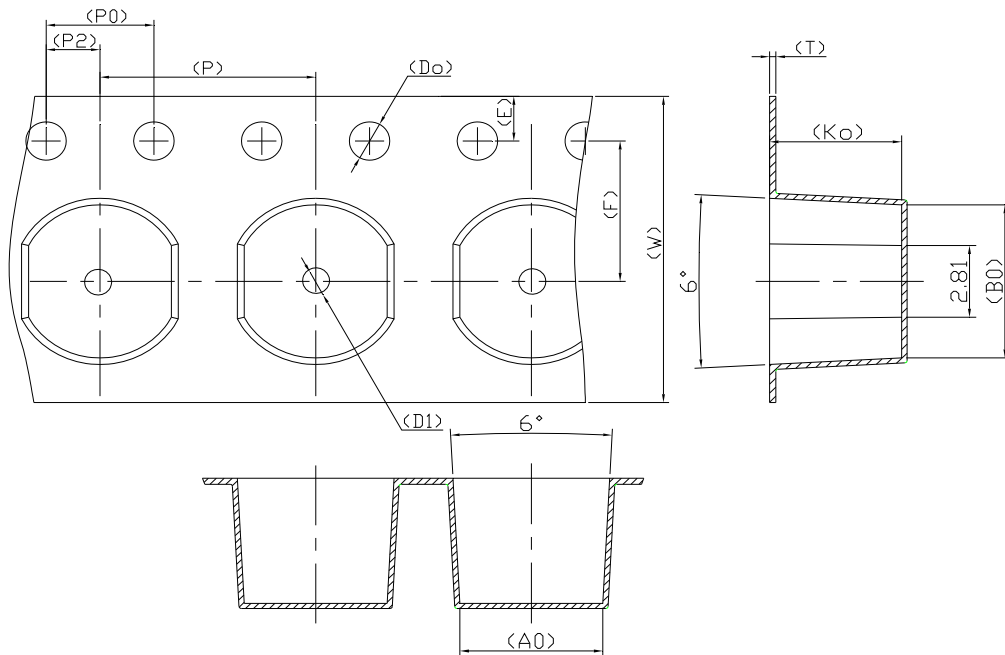
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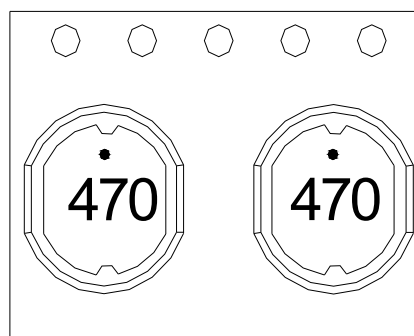
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6. TAPE DIMENSIONS:



W	12.00 ± 0.30	P	8.00 ± 0.10	A0	5.40 ± 0.10	B0	$\phi 6.00 \pm 0.10$
P0	4.00 ± 0.10	P2	2.00 ± 0.10	E	1.75 ± 0.10	F	5.50 ± 0.10
D0	$\phi 1.50 \pm 0.10$	D1	$\phi 1.50 \text{ MIN}$	K0	3.90 ± 0.10	T	0.40 ± 0.05



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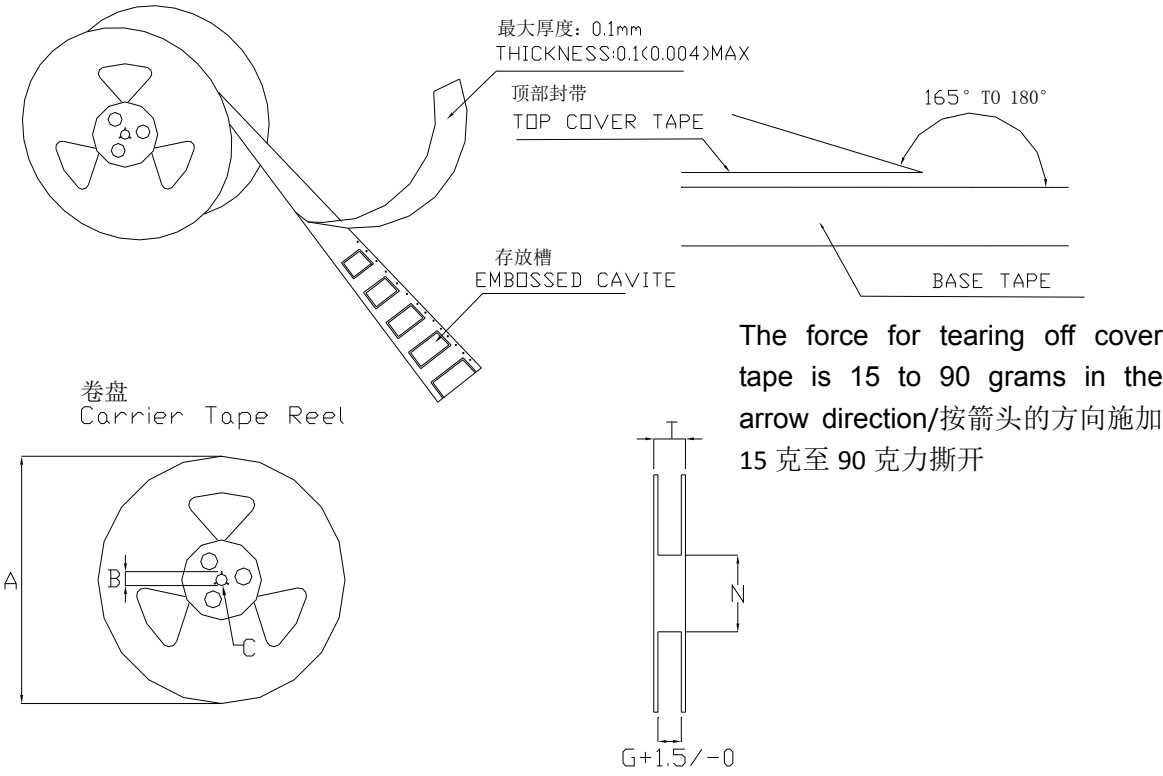
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7. TAPE REEL DIMENSIONS:



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

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