

# SPECIFICATION FOR APPROVAL

## 承 認 書

**CUSTOMER**

客戶名稱：

**NUMBER**

编号: Y-18080201

**DESCRIPTION**

品 名：SMD POWER INDUCTORS

**QUANTITY**

數量：20PCS

**PART NO.**

型 號：CDH105RMN - 471M

**DATE**

日期：2025.03.11

**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:

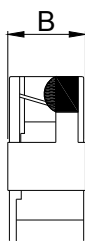
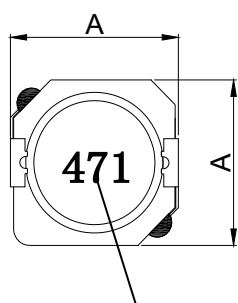
**CDH105RMN-471M**

### 1. Scope

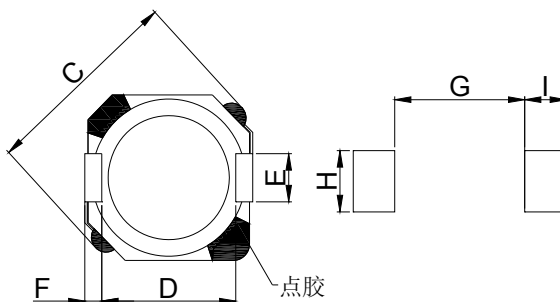
This specification apply for CDH105R of power inductors

### 2. Appearance

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



#### 2-2.Recommended Land



A	11.0mm(Max)
B	5.1mm(Max)
C	13.5mm(Max)
D	7.7 mm
E	3.0 mm
F	1.2 mm
G	7.3 mm
H	3.2 mm
I	1.6 mm

Font size: Width 3.8\*High2.2 Song ti

\* 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	70.5 Ts
Wire	0.17 mm G1 P180

\* Winding Turns are approx.

**LEAD-FREE**

**RoHS**  
Compliance

Note :

印字白色

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### 3-3. Electronical characteristics

Item	Specifications	Measuring Conditions	Measuring Instrument
Inductance	470 $\mu$ H $\pm$ 20% Within	1KHz/0.25V	CH1062/ HIOKI 3532
D.C.R	1.03 $\Omega$ $\pm$ 30%	At 25 $^{\circ}$ C	HIOKI 3540
Isat ※1	0.47A	1KHz/0.25V	Microtest 6377& 6220
Irms ※2	0.47A	At 25 $^{\circ}$ C	Microtest 6377& 6220

※ 1.This indicates the value of current when the inductance is 35% lower than its initial value at D.C superposition

※ 2.D.C current when temperature rise  $\Delta T=40^{\circ}$ C

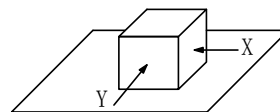
## 4. General Characteristics

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

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

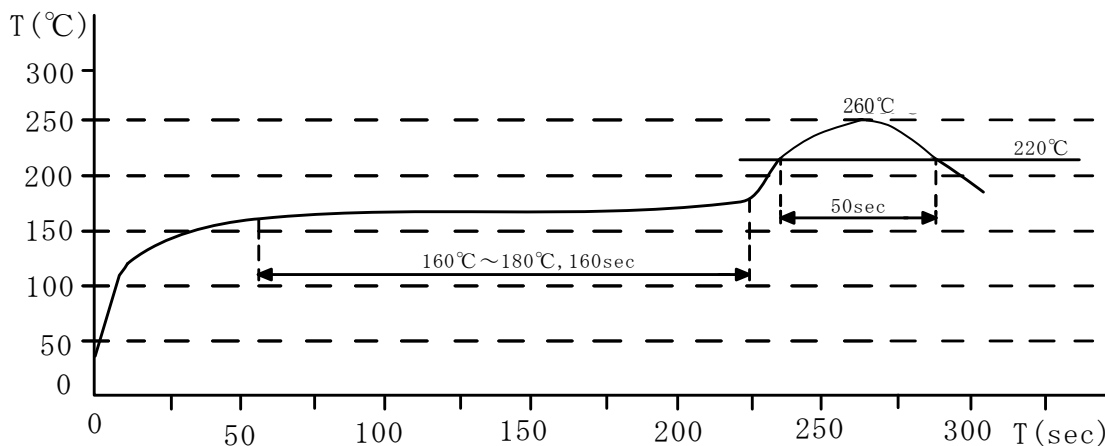
4-3.External appearance : No external defects can be found in the visual inspection.

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 5.0N 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 $\sim$ 10Hz and the amplitude of 1 minute cycle is 1.5mm PP.

4-6.Recommended reflow condition :



Note :

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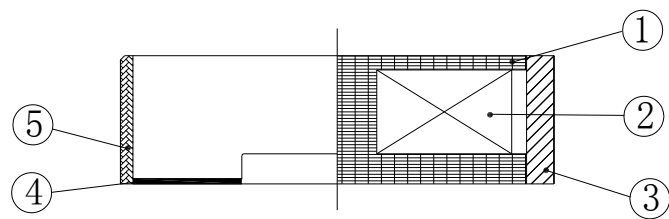
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4-7.Humidity test : Inductance deviation is within  $\pm 5.0\%$  after  $96\pm 4$  hours test under the condition of relative humidity of  $90\sim 95\%$  and temperature of  $60\pm 2^{\circ}\text{C}$ , and 1 hour storage under room ambient conditions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

5. Construction and materials



No.	Part name	Material	供应商
①	Drum Core	Mn-Zn Ferrite Core 锰锌磁芯 T2 DR9.6*4.7 D3 B4.5	TY
②	Wire	Polyurethane enameled copper wire	YLSL
③	Ring Core	Ni-Zn Ferrite Core	TY
④	Adhesive	Epoxy Resin	
⑤	Electrode	Cu + Sn plating	LC

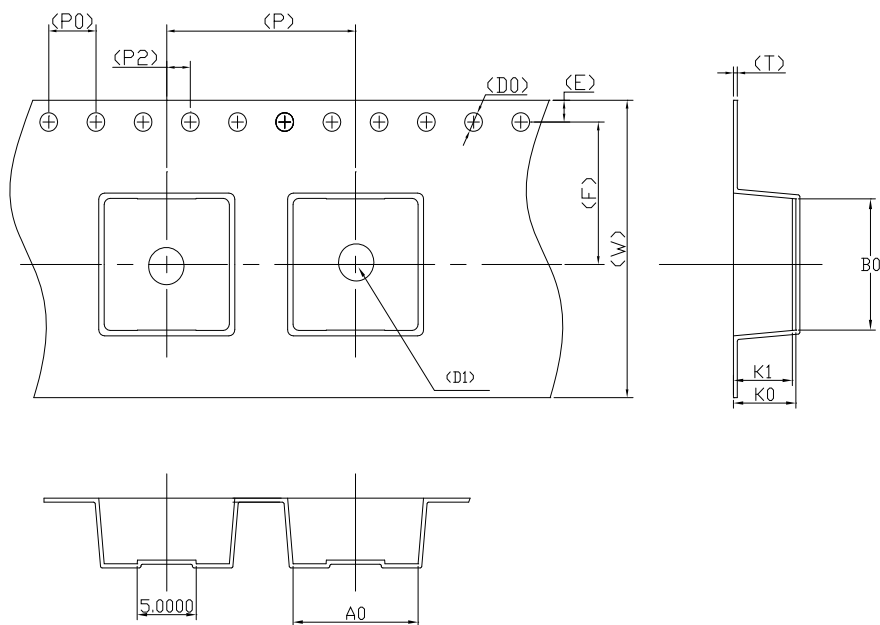
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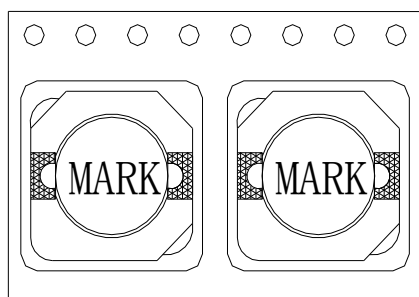
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### 6. TAPE DIMENSIONS:



W	24.00±0.30	P	16.00±0.10	A0	10.40±0.10	B0	10.70±0.10
P0	4.00±0.10	P2	2.00±0.10	E	1.75±0.10	F	11.50±0.10
D0	$\phi 1.50^{+0.10}_{-0}$	D1	$\phi 1.50\text{MIN}$	K0	5.20±0.10	T	0.40±0.05



Note :

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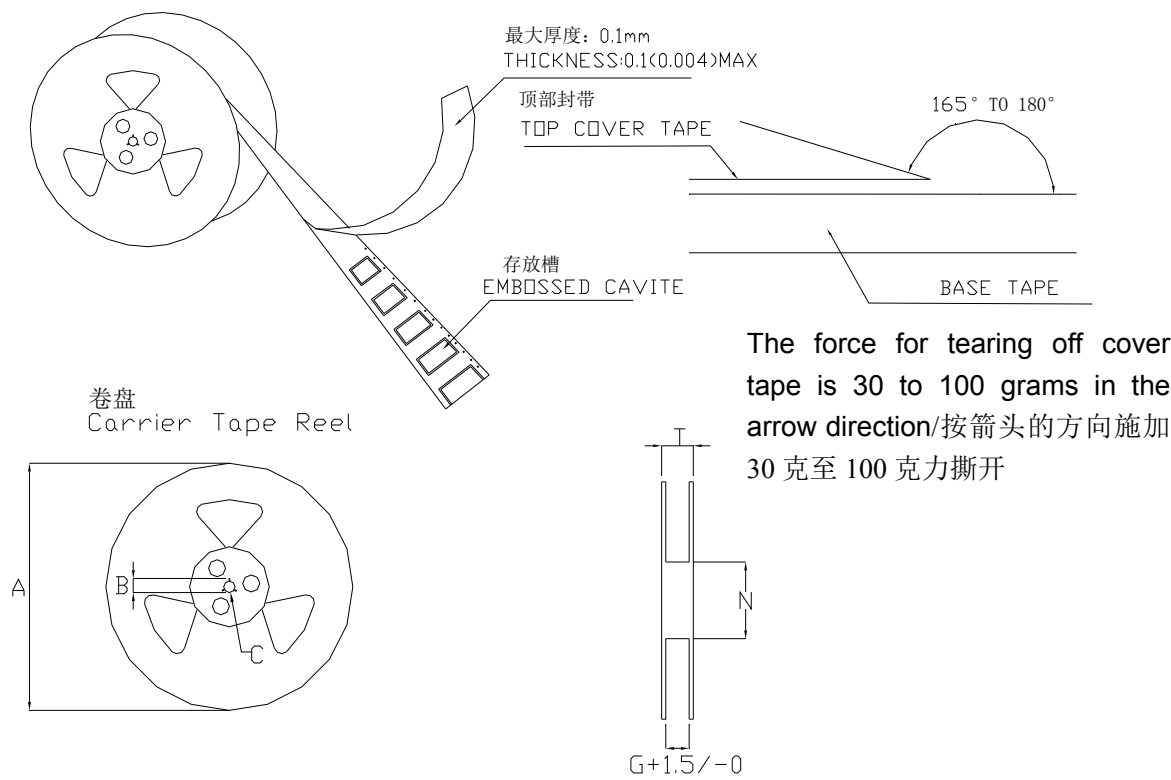
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TYPE:

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7. TAPE REEL DIMENSIONS:



单位：毫米

Type	A	B	C	G	N	T
24mm	330	21±0.8	13±0.2	24.4	100	28.4

PACKAGING QUANTITY :  
800 PCS /REEL

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