

# SPECIFICATION FOR APPROVAL

## 承認書

**CUSTOMER**

客戶名稱：

**NUMBER**

編號：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 審查	Drawn By 制作
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CUSTOMER:	SPECIFICATIONS (Revisions)	TYPE <b>CDH105RMN-471M</b>
<b>History of change</b>		

Rev.	Effective Date	Changed Contents	Change reasons	Approved By
A0	2018-08-02	New release	/	

Note :	Spec. No. Y-18080201
	1/6

## SPECIFICATIONS

TYPE:

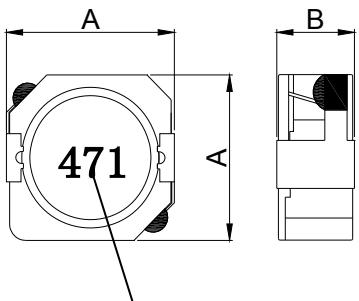
**CDH105RMN-471M**

### 1. Scope

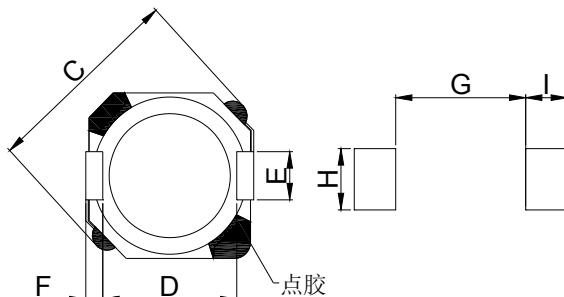
This specification apply for CDH105R of power inductors

### 2. Appearance

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



#### 2-2. Recommended Land



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

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

\* 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.



Note :

印字白色

Spec. No.

Y-18080201

2/6

## SPECIFICATIONS

TYPE:

**CDH105RMN-471M**

### 3-3. Electronical characteristics

Item	Specifications	Measuring Conditions	Measuring Instrument
Inductance	$470\mu\text{H} \pm 20\%$ Within	1KHz/0.25V	CH1062/ HIOKI 3532
D.C.R	$1.03\Omega \pm 30\%$	At 25°C	HIOKI 3540
Isat $\times 1$	0.47A	1KHz/0.25V	Microtest 6377& 6220
Irms $\times 2$	0.47A	At 25°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  $\Delta T=40^\circ\text{C}$

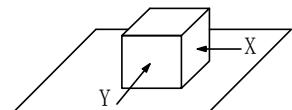
## 4. General Characteristics

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

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

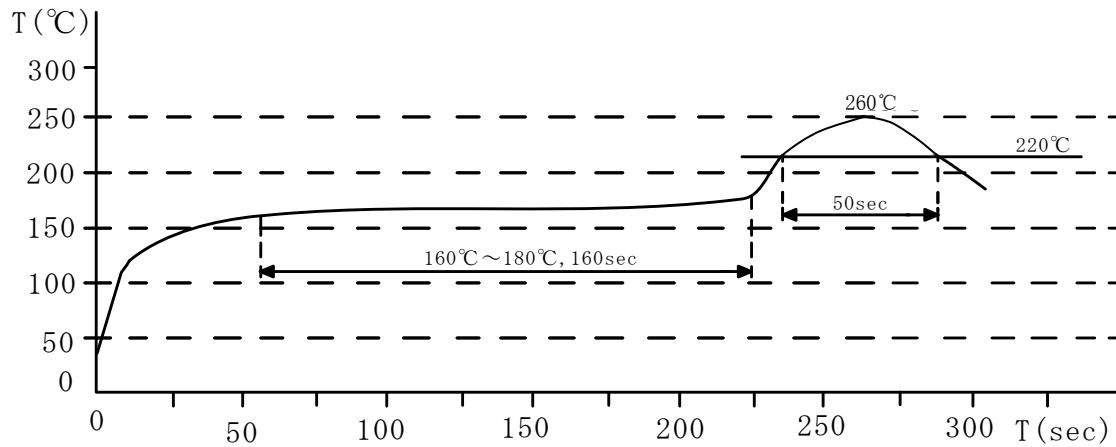
4-3. External appearance : No external defects can be found in the visual inspection.

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

4-6. Recommended reflow condition :



Note :

Spec. No.

Y-18080201

3/6

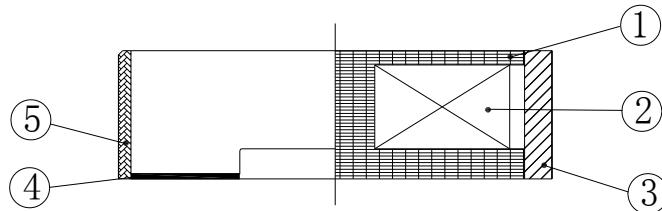
# SPECIFICATIONS

TYPE:

**CDH105RMN-471M**

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	YSL
③	Ring Core	Ni-Zn Ferrite Core	TY
④	Adhesive	Epoxy Resin	
⑤	Electrode	Cu + Sn plating	LC

Note :

Spec. No.

Y-18080201

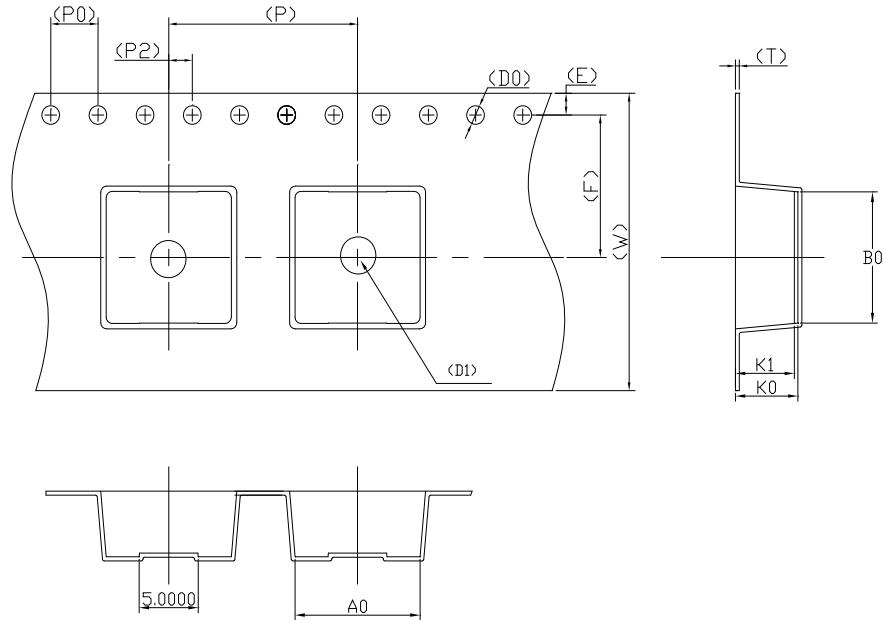
4/6

## SPECIFICATIONS

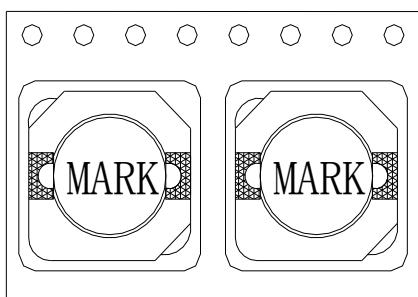
TYPE:

**CDH105RMN-471M**

### 6. TAPE DIMENSIONS:



W	$24.00 \pm 0.30$	P	$16.00 \pm 0.10$	A0	$10.40 \pm 0.10$	B0	$10.70 \pm 0.10$
P0	$4.00 \pm 0.10$	P2	$2.00 \pm 0.10$	E	$1.75 \pm 0.10$	F	$11.50 \pm 0.10$
D0	$\phi 1.50^{+0.10}_0$	D1	$\phi 1.50\text{MIN}$	K0	$5.20 \pm 0.10$	T	$0.40 \pm 0.05$



Note :

Spec. No.

Y-18080201

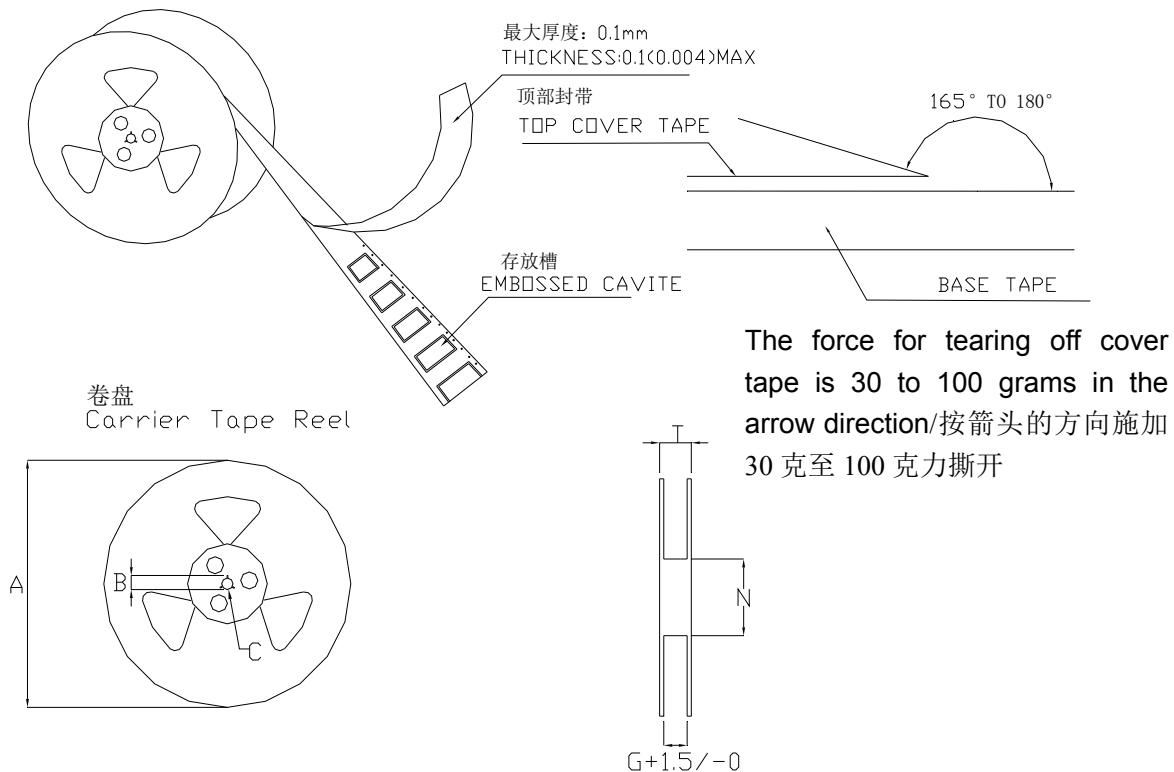
5/6

## SPECIFICATIONS

TYPE:

**CDH105RMN-471M**

### 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

Note :	Spec. No. Y-18080201
	6/6