

SPECIFICATION FOR APPROVAL

承認書

CUSTOMER

客户名称：

NUMBER

编号: Y-19032102

DESCRIPTION

品名: CR6045 - R82N

QUANTITY

数量: 30PCS

PART NO.

型号: SMD POWER INDUCTORS

DATE

日期: 2023-07-18

CUSTOMER PART NO.

客户料号:

NOTE

注解:

APPROVAL SIGNATURE

客户承認簽章

Approved By 核 准	Checked By 审 查	Drawn By 制 作
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CUSTOMER:	SPECIFICATIONS (R e v i s i o n s)	TYPE CR6045-R82N
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History of change

Rev.	Effective Date	Changed Contents	Change reasons	Approved By
A0	2023-07-18	New release	/	

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SPECIFICATIONS

TYPE:

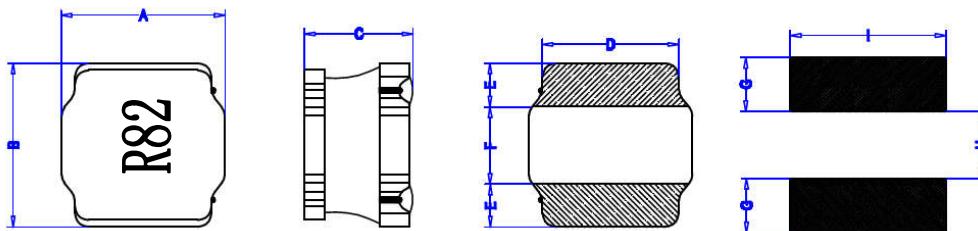
CR6045 - R82N

1. Scope

This specification apply for CR6045 of power inductors

2. Appearance

2-1. Dimensions(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	4.5 Ts
Wire	0.38mm G1 P180

* Winding Turns are approx.



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3-3. Electronical characteristics

Item	Specifications	Measuring Conditions	Measuring Instrument
Inductance	$0.82\mu\text{H} \pm 30\%$ Within	1MHz/0.25V	CH1062/HIOKI3532-50
D.C.R	$10\text{m}\Omega \pm 30\%$	25°C	HIOKI 3540
Isat $\ddagger 1$	10A Max	1MHz/0.25V	Microtest 6377&6220
Irise $\ddagger 2$	5.3A Max	25°C	Microtest 6377&6220

$\ddagger 1$ This indicates the value of current when the inductance is 30% lower than its initial value at D.C superposition

$\ddagger 2$ D.C current when temperature rise $\Delta T=40^\circ\text{C}$ ($T_a=20^\circ\text{C}$)

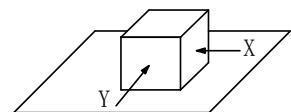
4. General Characteristics

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

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

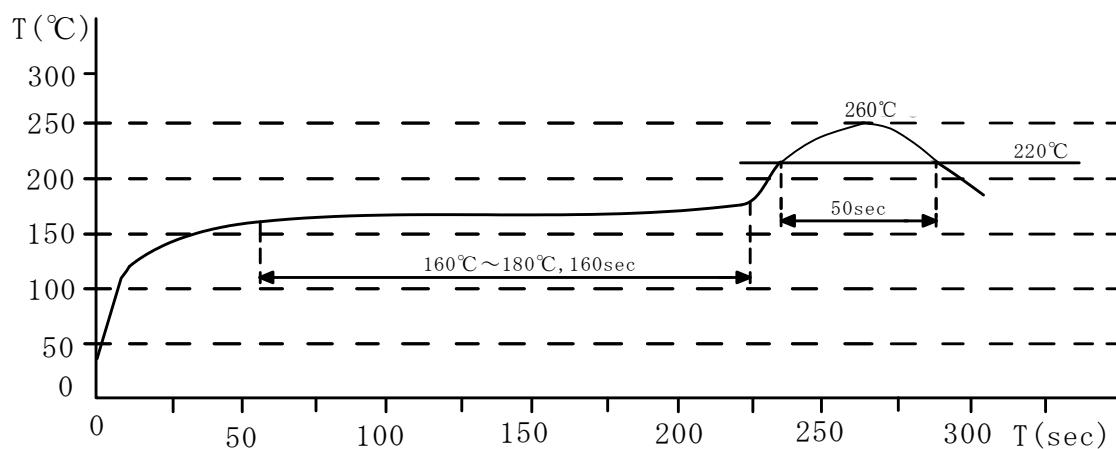
4-3. External appearance : No external defects can be found in the visual inspection.

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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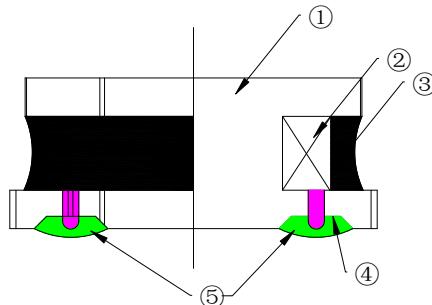
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4-7.Humidity test : Inductance deviation is within $\pm 5.0\%$ after 96 ± 4 hours test under the condition of relative humidity of $90 \sim 95\%$ and temperature of $40 \pm 2^\circ\text{C}$, and 1 hour storage under room ambient conditions after the device is wiped with dry cloth.

5. Construction and materials



No.	Part name	Material	Ceaiya P/N
①	Drum Core	Ni-Zn Ferrite Core	CY
②	Wire	Polyurethane enameled copper wire	YLSL
③	Adhesive	Epoxy Resin Magnetic Powder	
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%	YX

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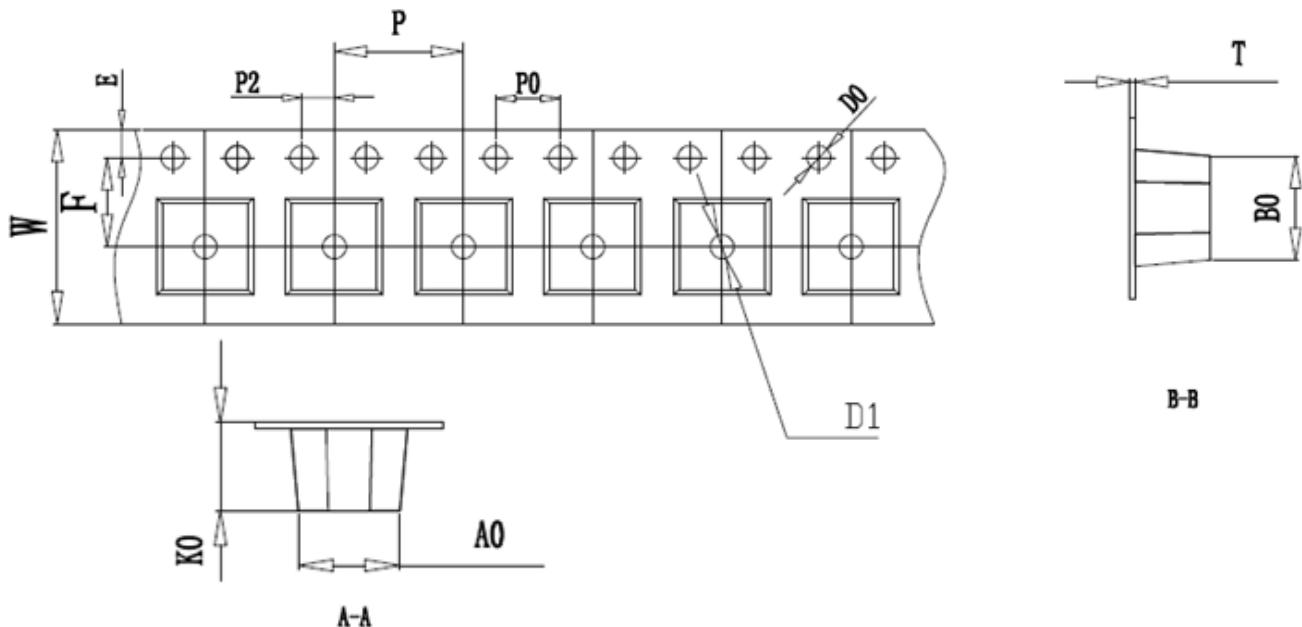
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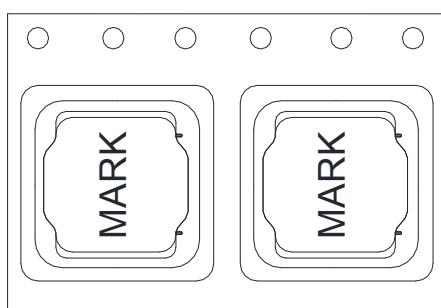
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6. TAPE DIMENSIONS:



ITEM	W	A0	B0	K0	P1	F	E	D0	P0	P2	T
DIM	12.00	6.3	6.3	4.7	8.00	5.50	1.75	1.50	4.00	2.00	0.40
TOLE	± 0.3	± 0.1	$+0.1$	± 0.1	± 0.1	± 0.05					



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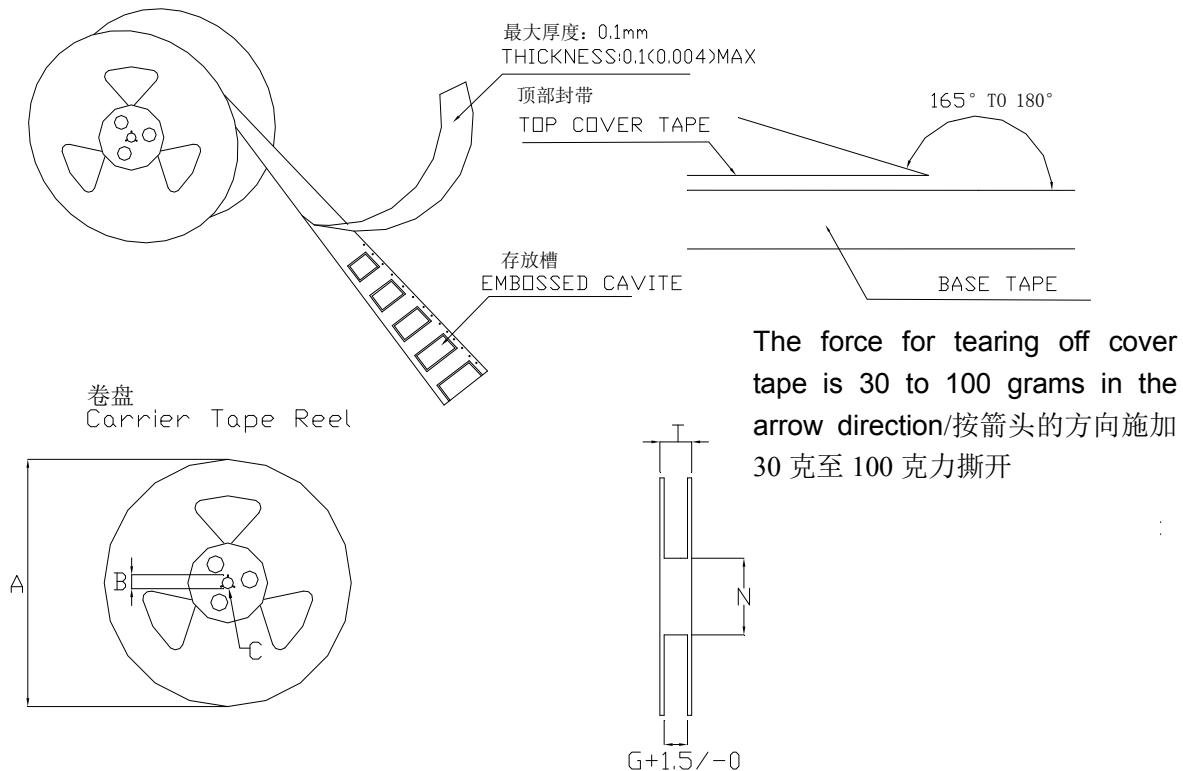
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7. TAPE REEL DIMENSIONS:



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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