

承 認 書

ROHS Compliant

SPECIFICATION FOR APPROVAL

CUSTOMER:	鹿 鳴
CUSTOMER P/N	
PART NO:	BCNR6045-470M
DESCRIPTION:	SMD POWER INDUCTORS
PRODUCTS NO:	
PRODUCTS REV:	01
DATE:	2018-05-04

<i>PURCHASER CONFIRMED.</i>		
<i>APPROVAL BY</i>	<i>CHECK BY</i>	<i>DRAWN BY</i>
<i>REMARK</i>		

<i>PROVIDER ENGINEER DEPT.</i>		
<i>APPROVAL BY</i>	<i>CHECK BY</i>	
Zhoujiaming	Yasir	Daixin

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TAIPEI OFFICE

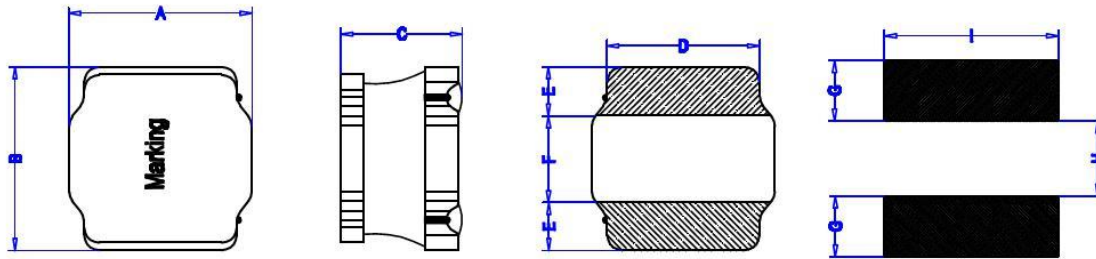


CHINA FACTORY



CHINA FACTORY

1. Shape and Dimension (Unit:mm)



A	B	C	D	E	F	G	H	I
6.0 ±0.3	6.0 ±0.3	4.5 Max	4.9±0.3	1.55±0.3	2.9±0.3	1.7 Ref	2.8 Ref	5.7 Ref

注：喷码尺寸长 3.5±0.5mm, 宽 2.8±0.5mm

2. Electronic Characteristics List

Part Number	Inductance (uH)	Tolerance (±%)	DCR(mΩ) ± 30%	Isat (A)	Irise (A)	Test Condition	MARKING
CR6045-1R0N	1.0	30	10	9.00	5.10	100KHz /0.25V	1R0
CR6045-1R5N	1.5	30	12	7.50	4.75	100KHz /0.25V	1R5
CR6045-1R8N	1.8	30	13	7.50	4.60	100KHz /0.25V	1R8
CR6045-2R2N	2.2	30	13	6.50	4.60	100KHz /0.25V	2R2
CR6045-3R3N	3.3	30	20	5.30	3.20	100KHz /0.25V	3R3
CR6045-3R9N	3.9	30	20	4.90	3.20	100KHz /0.25V	3R9
CR6045-4R7N	4.7	30	24	4.50	3.00	100KHz /0.25V	4R7
CR6045-5R6N	5.6	30	31	3.70	2.80	100KHz /0.25V	5R6
CR6045-6R8M	6.8	20	33	3.30	2.70	100KHz /0.25V	6R8
CR6045-8R2M	8.2	20	45	3.20	2.60	100KHz /0.25V	8R2
CR6045-100M	10	20	52	3.00	2.50	100KHz /0.25V	100
CR6045-120M	12	20	58	2.80	2.20	100KHz /0.25V	120
CR6045-150M	15	20	77	2.50	1.90	100KHz /0.25V	150
CR6045-220M	22	20	115	2.00	1.50	100KHz /0.25V	220
CR6045-270M	27	20	120	1.90	1.48	100KHz /0.25V	270
CR6045-330M	33	20	150	1.60	1.45	100KHz /0.25V	330
CR6045-390M	39	20	180	1.50	1.25	100KHz /0.25V	390
CR6045-470M	47	20	220	1.40	1.20	100KHz /0.25V	470
CR6045-560M	56	20	260	1.30	1.10	100KHz /0.25V	560
CR6045-680M	68	20	290	1.20	0.90	100KHz /0.25V	680
CR6045-820M	82	20	355	1.10	0.85	100KHz /0.25V	820
CR6045-101M	100	20	430	1.00	0.80	100KHz /0.25V	101
CR6045-121M	120	20	530	0.85	0.75	100KHz /0.25V	121
CR6045-151M	150	20	760	0.80	0.70	100KHz /0.25V	151
CR6045-181M	180	20	845	0.75	0.65	100KHz /0.25V	181
CR6045-221M	220	20	890	0.63	0.55	100KHz /0.25V	221

Isat:

DC Saturation Current that will cause initial inductance to drop approximately 30% max.

Irise:

DC Current that will cause an approximate ΔT of 40 °C

Measuring Instrument :

L:HIOKI3532-50

DCR:HIOKI 3540

Isat / Irise: HP4284A+42841

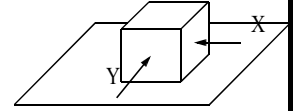
3. General Characteristics

3-1. Storage Temperature range : $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$

3-2. Operating temperature range: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ (Including coil's self temperature rise)

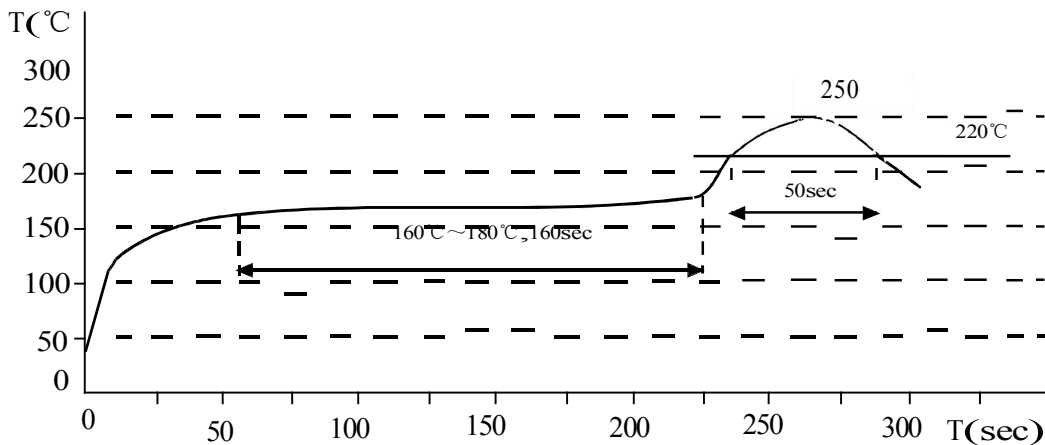
3-3. External appearance : No external defects can be found in the visual inspection.

3-4. 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)



3-5. Vibration test : Inductance deviation is within $\pm 10.0\%$ 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.

3-6. Recommended reflow condition :

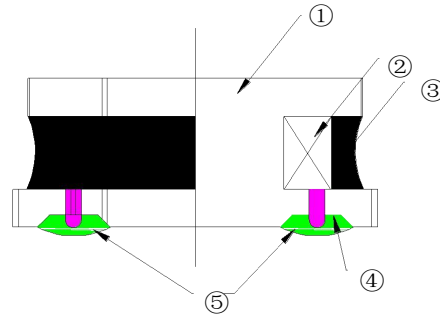


3-7. Humidity test : Inductance deviation is within $\pm 5.0\%$ after 96 ± 4 hours test under the condition of relative humidity of $90 \sim 95\%$ and temperature of $60 \pm 2^{\circ}\text{C}$, and 1 hour storage under room ambient conditions after the device is wiped with dry cloth.

LEAD-FRE

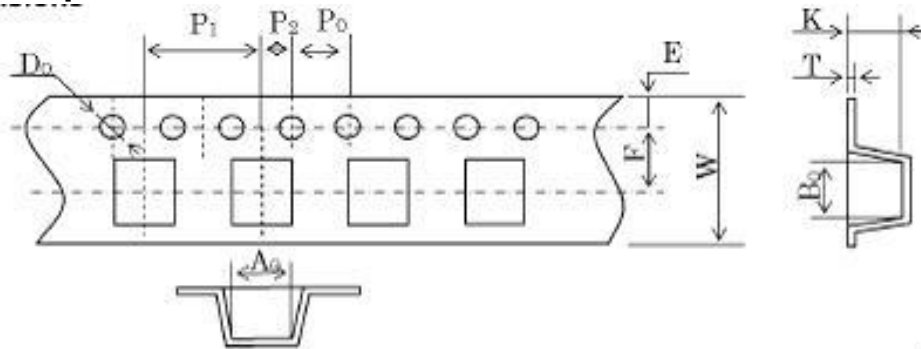
RoHS
Compliance

4. Construction and materials



No.	Part name	Material	Ceaiya P/N
①	Drum Core	Ni-Zn Ferrite Core	CY/TW
②	Wire	Polyurethane enameled copper wire	YLSL
③	Adhesive	Epoxy Resin Magnetic Powder	CH
④	Plating Electrodes	Plating: Ag 10-20 μ m Ni 1-3 μ m Sn 3-7 μ m	
⑤	Outer Electrodes	Top surface solder coating Sn99%、Ag0.3%、Cu0.7%	YX

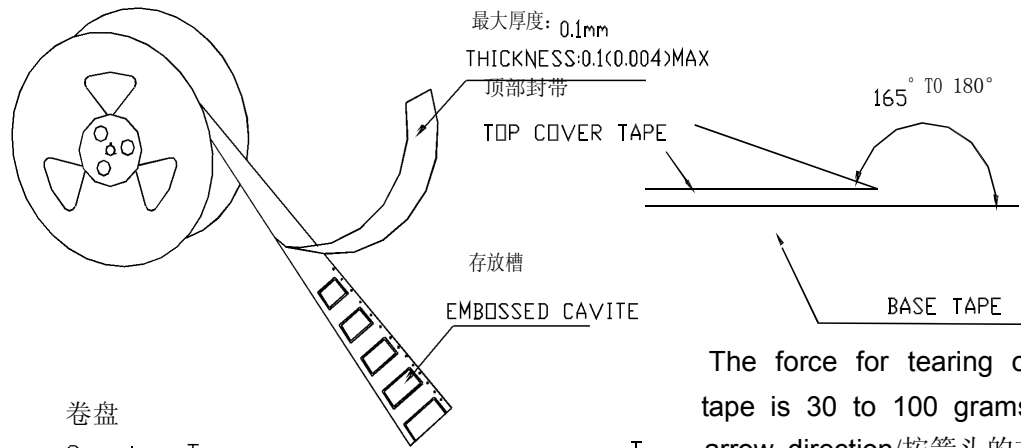
5. Package Specification



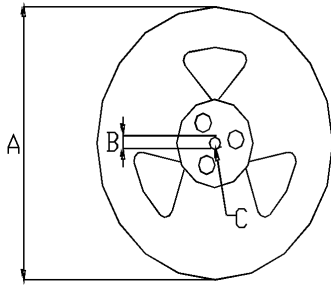
Unit: mm

ITEM	W	A0	B0	K	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	± 0.1	± 0.1	+0.1	± 0.1	± 0.1	± 0.05

6. CARRIER REEL DIMENSIONS:

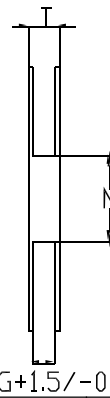


卷盘
Carrier Tape Reel



The force for tearing off cover tape is 30 to 100 grams in the arrow direction/按箭头的方向施加 30 克至 100 克力撕开
材质: 纸/塑胶

MATERIAL: PAPER/PLASTIC

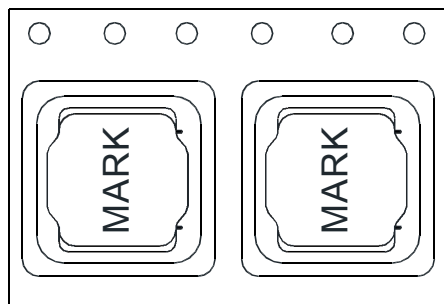


Unit: mm

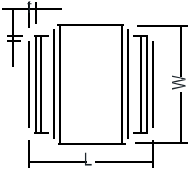
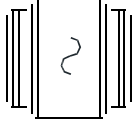
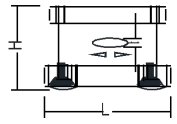
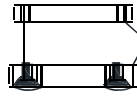
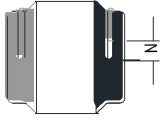
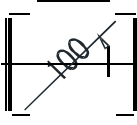
Type	A	B	C	G	N	T
12mm	330	21±0.8	13±0.4	12.0	100	16.4

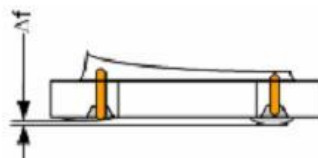
7. PACKAGE SPECIFICATION:

1.5KPCS/Reel 4.5KPCS/Inner Box 13.5KPCS/Outer Box



Visual Inspection Standard of Product

No	Detect Item	Figure	Rejection Identification	Acceptance
1	Core Defect		The defect length (r or t) more than L/6 or W/6 NC	AQL=0.65
2	Core Crack		Visual cracks NC	AQL=0.65
	Starvation		(1)Pole starved length a more than L/2 NC (2)When $L > 2mm$ $b > H/2$ NC ()When $L \leq 2mm$ b don't control	AQL=0.65
4	Excessive glue		The length width or height of product beyond specified value NC	AQL=0.65
	Cold Solder		(1)For CP2020 Series cold solder $N > 0.2mm$ NC (2)For other series cold solder $N > 1mm$ NC	AQL=0.65
6	Marking Detect		The marking angle $\alpha > 45^\circ$ NC	AQL=0.65



Δf : Clearance between terminal and the surface of plate must be 0.2mm max when coil is placed on a flat plate.