

Specification Sheet for Approved

Customer Name:	
Customer Part No.:	
Ceaiya Part No:	CR4018 Series
Spec No:	L040-1

【For Customer Approval Only】

If you Approval, Please Stamp

【RoHS Compliant Parts】

Approved By	Checked By	Prepared By
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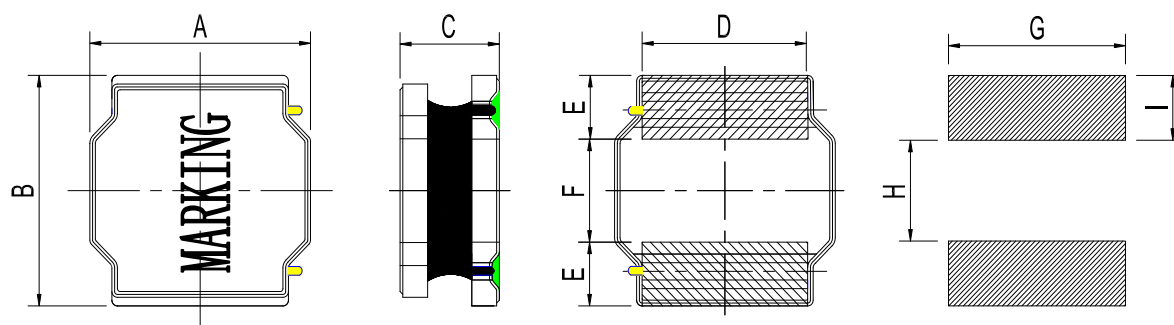
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1. Shape and Dimension (Unit:mm)



注：喷码尺寸长 2.5 ± 0.5 mm, 宽 2.0 ± 0.5 mm

A	B	C	D	E	F	G	H	I
4.0 ± 0.2	4.0 ± 0.2	1.85Max	3.3 ± 0.3	1.0 ± 0.2	2.0 ± 0.3	3.7 Ref	1.9 Ref	1.1 Ref

2. Electronic Characteristics List

Part Number	Inductance (uH)	Tolerance ($\pm\%$)	DCR(m Ω) $\pm 30\%$	Isat (A)	Irise (A)	Test Condition	Marking
CR4018-R56N	0.56	30	18	5.50	3.50	100KHz /0.25V	R56
CR4018-R68N	0.68	30	18	4.90	3.20	100KHz /0.25V	R68
CR4018-1R0N	1.0	30	23	4.50	2.50	100KHz /0.25V	1R0
CR4018-1R2N	1.2	30	28	4.30	2.40	100KHz /0.25V	1R2
CR4018-1R5N	1.5	30	33	3.35	2.34	100KHz /0.25V	1R5
CR4018-1R8N	1.8	30	44	3.00	2.00	100KHz /0.25V	1R8
CR4018-2R2M	2.2	20	44	2.70	2.00	100KHz /0.25V	2R2
CR4018-3R3M	3.3	20	70	2.45	1.90	100KHz /0.25V	3R3
CR4018-4R7M	4.7	20	90	1.70	1.70	100KHz /0.25V	4R7
CR4018-5R6M	5.6	20	103	1.60	1.50	100KHz /0.25V	5R6
CR4018-6R8M	6.8	20	124	1.45	1.30	100KHz /0.25V	6R8
CR4018-8R2M	8.2	20	180	1.40	1.15	100KHz /0.25V	8R2
CR4018-100M	10	20	200	1.30	1.10	100KHz /0.25V	100
CR4018-120M	12	20	230	1.15	0.95	100KHz /0.25V	120
CR4018-150M	15	20	268	0.94	0.92	100KHz /0.25V	150
CR4018-180M	18	20	320	0.86	0.85	100KHz /0.25V	180
CR4018-220M	22	20	390	0.80	0.80	100KHz /0.25V	220
CR4018-330M	33	20	560	0.65	0.60	100KHz /0.25V	330
CR4018-470M	47	20	850	0.57	0.50	100KHz /0.25V	470

※ All test data is referenced to 25°C ambient;

Isat (A) :

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

Irise((A)

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

Measuring Instrument :

L:HIOKI3532-50

DCR:HIOKI 3540

Isat / Irise:HP4284A+42841

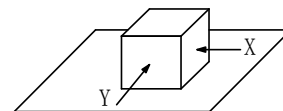
3. General Characteristics

3-1. Storage Temperature range : $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$

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

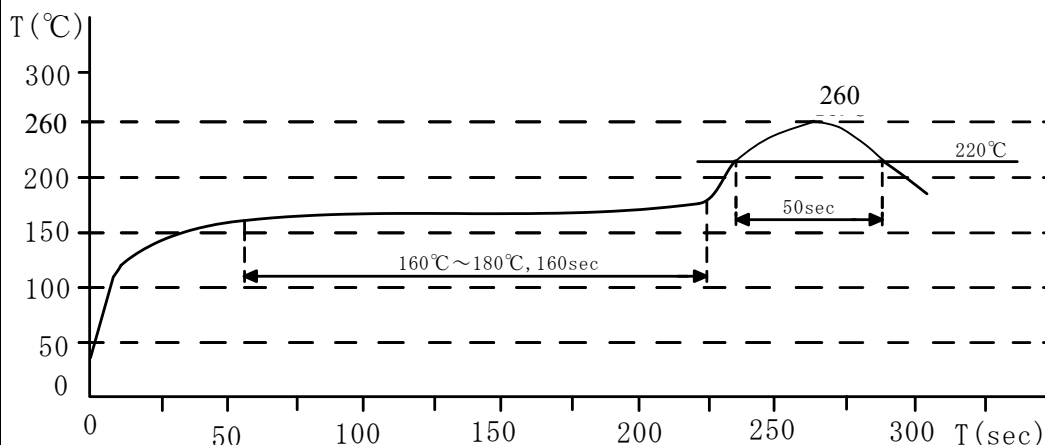
3-3. External appearance : No external defects can be found in the visual inspection.

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:

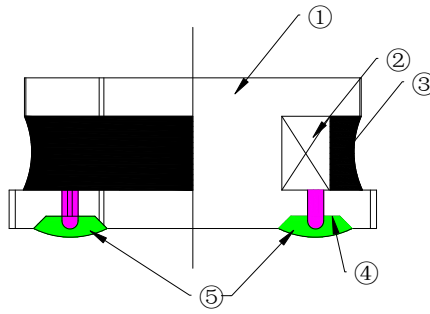


3-7. Humidity test : Inductance deviation is within $\pm 5.0\%$ after 96 ± 4 hours test under the condition of relative humidity of $90 \sim 95\%$ and temperature of $60 \pm 2^{\circ}\text{C}$, and 1 hour storage under room ambient conditions after the device is wiped with dry cloth.

LEAD-FREE



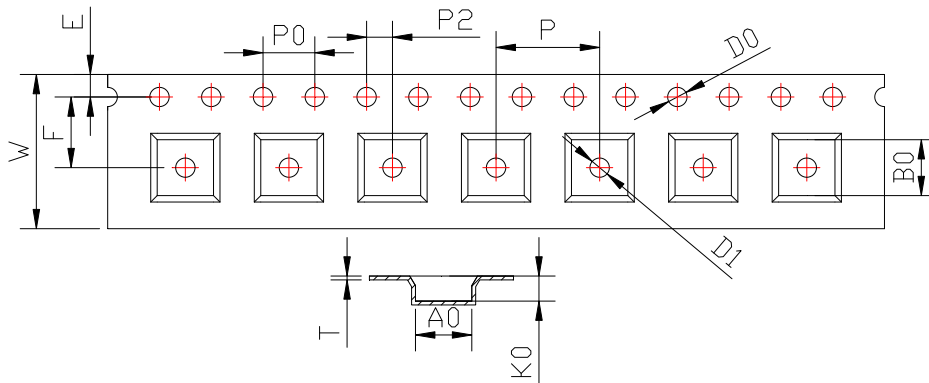
4. Construction and materials



No.	Part name	Material	Ceaiya P/N
①	Drum Core	Ni-Zn Ferrite Core	MT/CY
②	Wire	Polyurethane enameled copper wire	3210200
③	Adhesive	Epoxy Resin Magnetic Powder	7001007
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

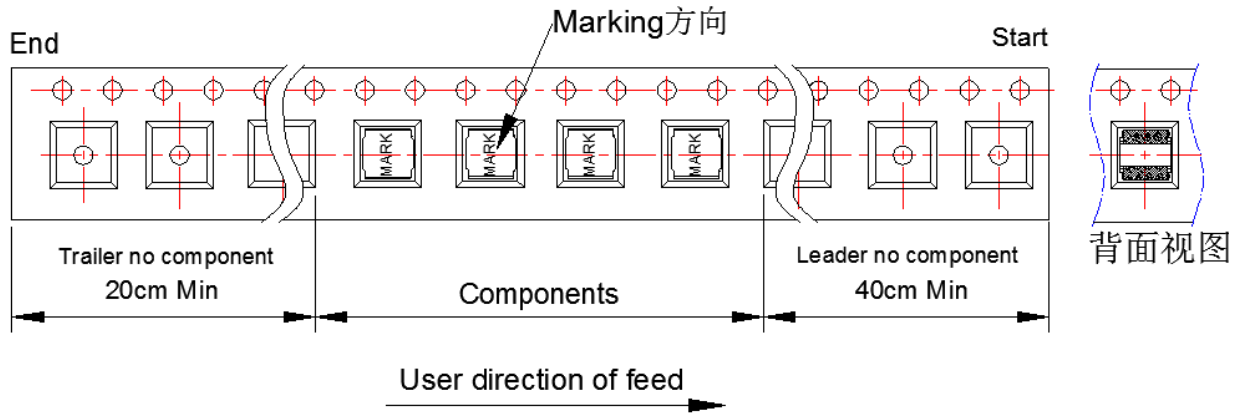
5.Packaging and Marking:

5-1.Carrier Tape Dimensions:

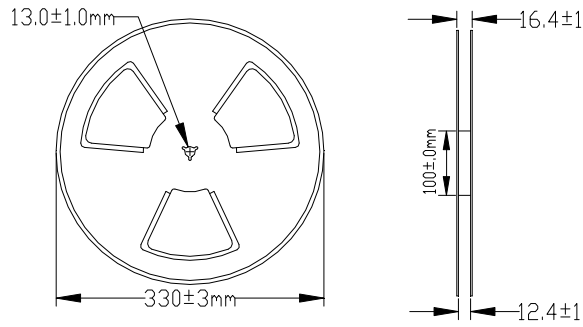


ITEM	W	A0	B0	K0	P	F	E	D0	D1	P0	P2	T
DIM	12.00	4.35	4.35	1.95	8.00	5.50	1.75	1.50	1.50	4.00	2.00	0.30
TOLE	+0.30 -0.10	± 0.1	± 0.1	± 0.1	± 0.1	± 0.1	± 0.1	+0.1	+0.1	± 0.1	± 0.1	± 0.05

5-2. Taping Dimensions:



5-3. Reel Dimensions:

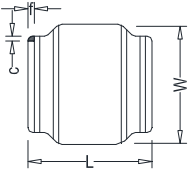
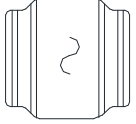
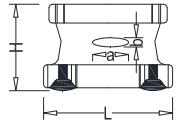
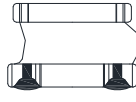
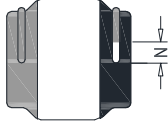
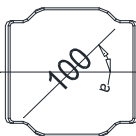


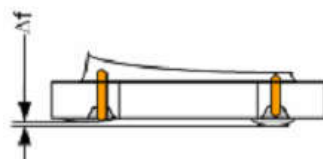
6. PACKAGE SPECIFICATION:

3KPCS/ Reel 9KPCS/ Inner Box 27KPCS/ Outer Box

热封编带，方向如上图所示

Visual Inspection Standard of Product

No.	Defect Item	Figure	Rejection Identification	Acceptance
1	Core Defect		The defect length(c or f) more than L/6 or W/6 , NG	AQL=0.65
2	Core Crack		Visual cracks , NG	AQL=0.65
3	Starvation		(1)Resin starved length a more than L/2, NG (2)When $L > 2\text{mm}$, $b > H/2$, NG (3)When $L \leq 2\text{mm}$, b don't control	AQL=0.65
4	Excessive glue		The length, width or height of product beyond specified value, NG	AQL=0.65
5	Cold Solder		(1)For CR2520** Series , cold solder $N > 0.5\text{mm}$, NG (2)For other series, cold solder $N > 1\text{mm}$, NG	AQL=0.65
6	Marking Defect		The marking angle $a > 45^\circ$, NG	AQL=0.65



Δf : Clearance between terminal and the surface of plate must be 0.1mm max when coil is placed on a flat plate.