

Specification Sheet for Approved

| | |
|--------------------|---------------|
| Customer Name: | |
| Customer Part No.: | |
| Ceaiya Part No: | CR4026 Series |
| Spec No: | L426 |

【For Customer Approval Only】

If you Approval, Please Stamp

【RoHS Compliant Parts】

| Approved By | Checked By | Prepared By |
|-------------|------------|-------------|
| 李庆辉 | 刘志坚 | 劳水花 |

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Http://www.szceaiya.com

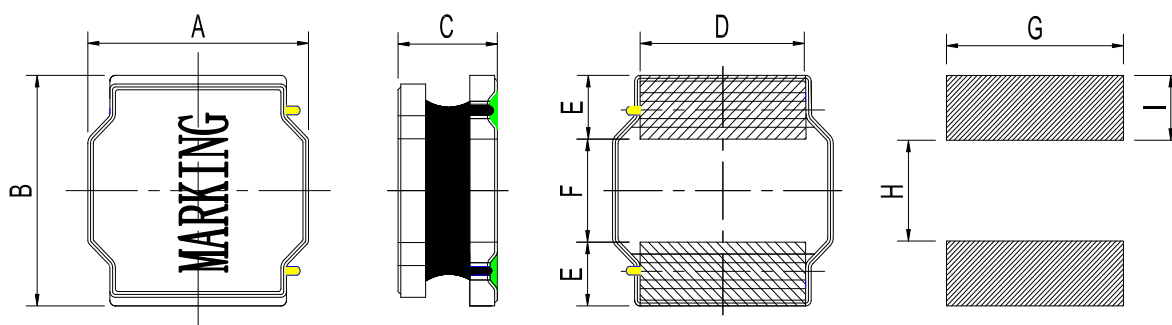
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【Version of Changed Record】

| Rev. | Effective Date | Changed Contents | Change Reasons | Approved By |
|------|----------------|------------------|----------------|-------------|
| A0 | 2023.05.25 | New release | / | Li qing hui |
| | | | | |

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 | 2.6 ± 0.3 | 3.3 ± 0.3 | 1.05 ± 0.2 | 1.9 Ref | 3.7 Ref | 1.9 Ref | 1.1 Ref |

2. Electronic Characteristics List

| Part Number | Inductance | DC Resistance | | Saturation Current | | Heat Rating Current | | Marking |
|-------------|----------------|---------------|----------|--------------------|------|---------------------|------|---------|
| | 100KHz/1V | Max. | Typ. | Max. | Typ. | Max. | Typ. | |
| Units | uH | Ω | Ω | A | A | A | A | |
| Symbol | L | DCR | | Isat | | I _{rms} | | |
| CR4026-1R0N | $1.0 \pm 30\%$ | 0.034 | 0.025 | 3.30 | 3.60 | 2.90 | 3.30 | 1R0 |
| CR4026-1R5N | $1.5 \pm 30\%$ | 0.039 | 0.030 | 2.50 | 3.50 | 2.20 | 3.00 | 1R5 |
| CR4026-2R2M | $2.2 \pm 20\%$ | 0.052 | 0.040 | 2.10 | 2.40 | 1.80 | 2.80 | 2R2 |
| CR4026-3R3M | $3.3 \pm 20\%$ | 0.069 | 0.053 | 1.90 | 2.20 | 1.60 | 2.40 | 3R3 |
| CR4026-4R7M | $4.7 \pm 20\%$ | 0.076 | 0.058 | 1.70 | 2.00 | 1.50 | 2.20 | 4R7 |
| CR4026-6R8M | $6.8 \pm 20\%$ | 0.112 | 0.088 | 1.50 | 1.70 | 1.20 | 1.80 | 6R8 |
| CR4026-100M | $10 \pm 20\%$ | 0.145 | 0.110 | 1.20 | 1.40 | 1.00 | 1.60 | 100 |
| CR4026-150M | $15 \pm 20\%$ | 0.203 | 0.156 | 1.10 | 1.30 | 1.00 | 1.30 | 150 |
| CR4026-220M | $22 \pm 20\%$ | 0.300 | 0.230 | 0.95 | 1.20 | 0.75 | 1.10 | 220 |
| CR4026-330M | $33 \pm 20\%$ | 0.455 | 0.350 | 0.90 | 1.10 | 0.50 | 0.90 | 330 |
| CR4026-470M | $47 \pm 20\%$ | 0.618 | 0.480 | 0.80 | 1.00 | 0.50 | 0.80 | 470 |
| CR4026-680M | $68 \pm 20\%$ | 0.891 | 0.690 | 0.72 | 0.86 | 0.48 | 0.68 | 680 |
| CR4026-101M | $100 \pm 20\%$ | 1.60 | 1.20 | 0.50 | 0.60 | 0.30 | 0.48 | 101 |

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

Isat (A) :

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

I_{rise}(A)

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

Measuring Instrument :

L:HIOKI3532-50

DCR:HIOKI 3540

Isat / I_{rise}:HP4284+42841A

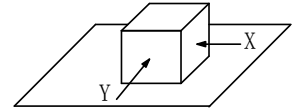
3. General Characteristics

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)

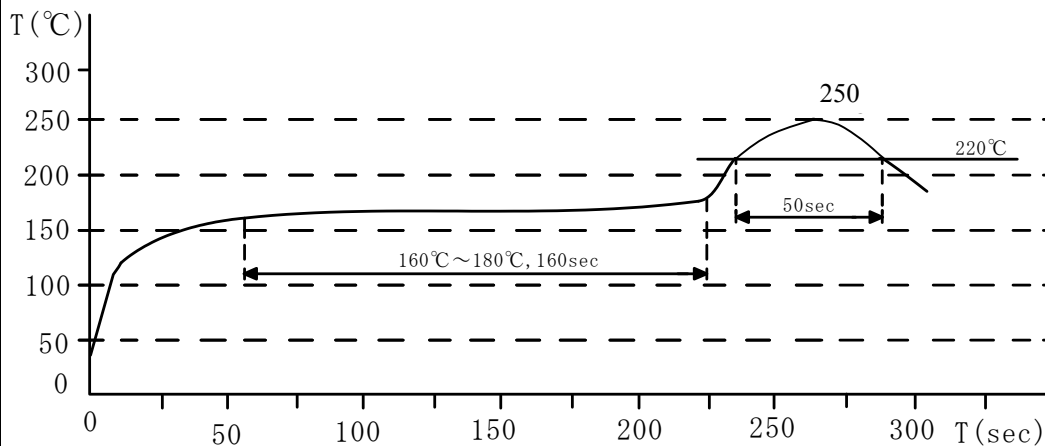
3-3. External appearance : No external defects can be found in the visual inspection.

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:

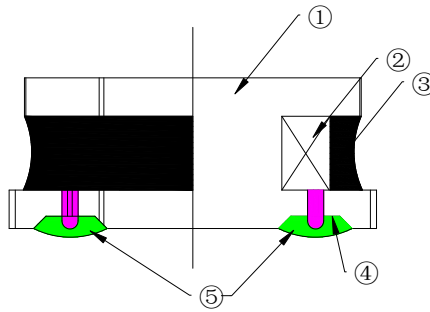


3-7. Humidity test : Inductance deviation is within $\pm 5.0\%$ after 96 ± 4 hours test under the condition of relative humidity of $90 \sim 95\%$ and temperature of $60 \pm 2^{\circ}\text{C}$, and 1 hour storage under room ambient conditions after the device is wiped with dry cloth.

LEAD-FREE

RoHS
Compliance

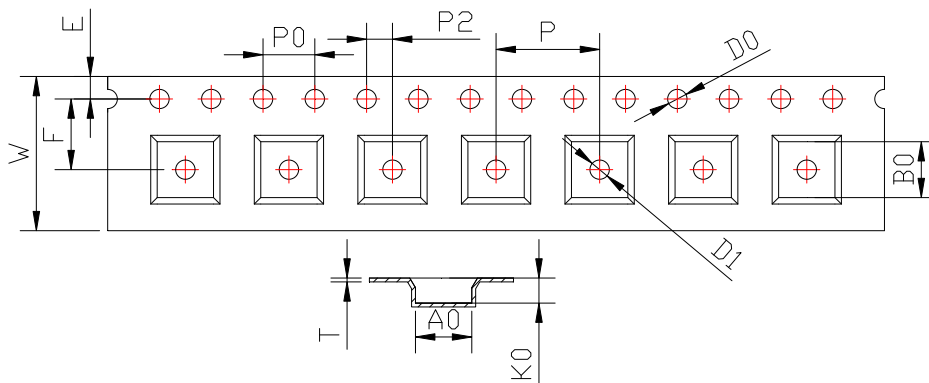
4. Construction and materials



| No. | Part name | Material | Ceaiya P/N |
|-----|--------------------|---|------------|
| ① | Drum Core | Ni-Zn Ferrite Core | YN/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 |

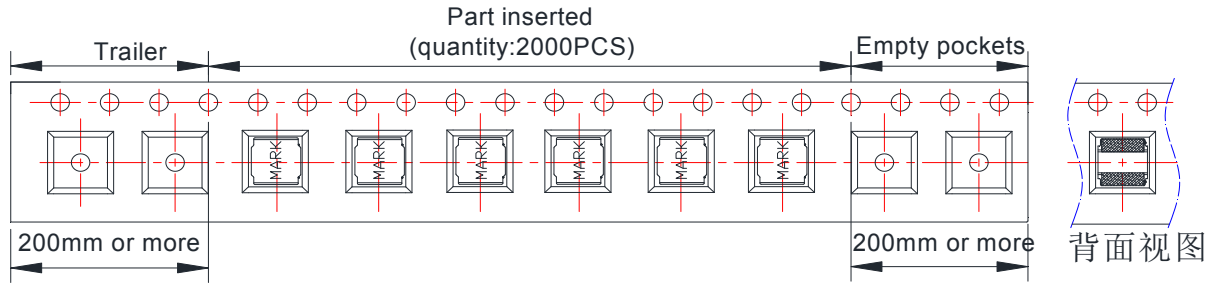
5.Packaging and Marking:

5-1.Carrier Tape Dimensions:

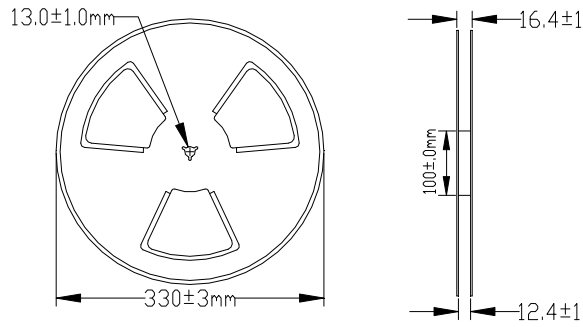


| ITEM | W | A0 | B0 | K0 | P | F | E | D0 | D1 | P0 | P2 | T |
|------|----------------|-----------|-----------|-----------|-----------|-----------|-----------|------|------|-----------|-----------|------------|
| DIM | 12.00 | 4.3 | 4.3 | 3.0 | 8.00 | 5.50 | 1.75 | 1.50 | 1.50 | 4.00 | 2.00 | 0.30 |
| 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:



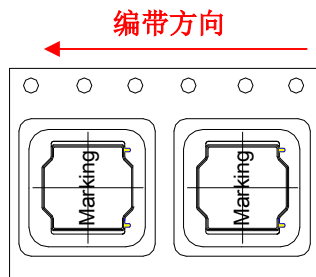
5-3. Reel Dimensions:



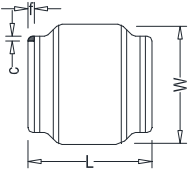
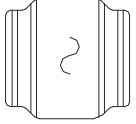
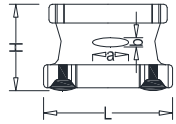
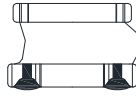
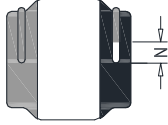
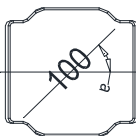
6. PACKAGE SPECIFICATION:

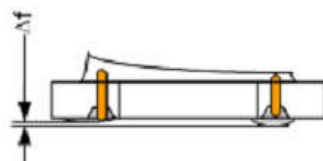
2.5KPCS/ Reel 7.5KPCS/ Inner Box 22.5KPCS/ Outer Box

编带方向 , 如下图所示



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 0.15mm max when coil is placed on a flat plate.

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