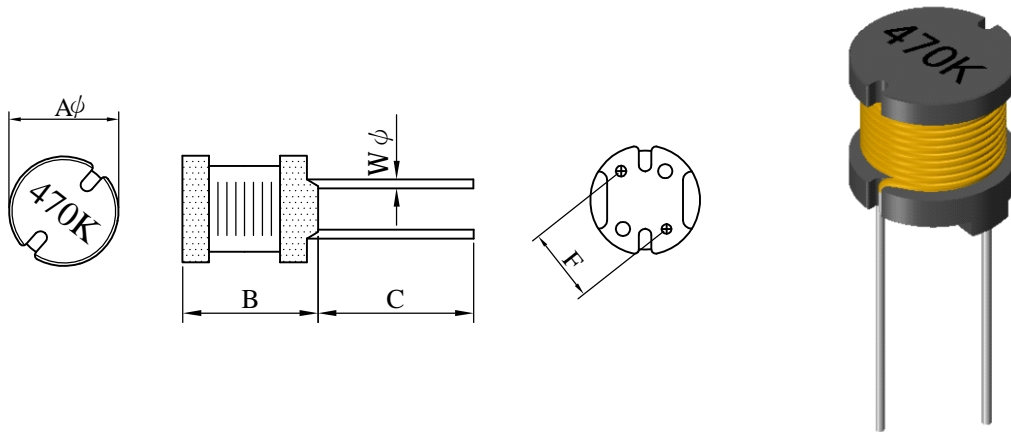


SPECIFICATION FOR APPROVAL

REF. :

| | | | | | |
|---------------|-----------------|---------------|------------------|------|---|
| PROD. NAME | Radial Inductor | ABC'S DWG NO. | RC1010□□□□L□-□□□ | | |
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I . Configuration and dimensions :



Unit : m/m

| Aφ | B | C | F | Wφ |
|------------|------------|------------|-----------|------------|
| 10.50 max. | 10.50 max. | 18.00 ±3.0 | 6.40 typ. | 0.80 ±0.05 |

II . Description :

- a . Ferrite drum core construction.
- b . Enamelled copper wire : F class
- c . Product weight : 3.50g (ref.)
- d . Moisture sensitivity Level 1
- e . Products comply with RoHS' requirements
- f . Halogen free available

III . General specification :

- a . Storage temp. : -40°C ~ +125°C
- b . Operating temp. : -40°C ~ +125°C
(Temp. rise included.)

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SPECIFICATION FOR APPROVAL

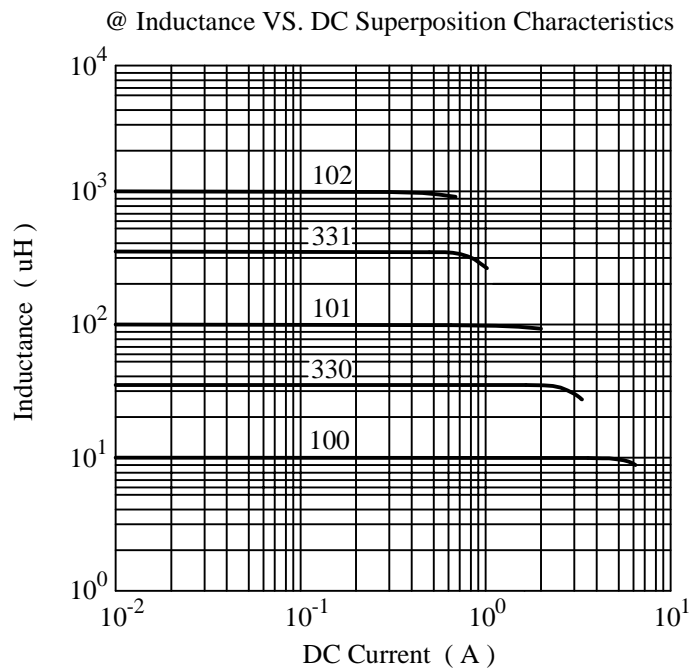
REF. :

| | | | | | |
|------------|-----------------|---------------|------------------|------|---|
| PROD. NAME | Radial Inductor | ABC'S DWG NO. | RC1010□□□□L□-□□□ | | |
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IV . Electrical characteristics :

| DWG No. | Inductance (μ H) | Test Freq. L | SRF (MHz) typ. | RDC (Ω) | | I _{rms} (A) typ. | I _{sat} (A) typ. |
|------------------|--------------------------|-----------------|----------------------|---------------------|-------|---------------------------------|---------------------------------|
| | | | | max. | typ. | | |
| RC1010100ML□-□□□ | 10 ±20% | 1V/1kHz | 16.0 | 0.023 | 0.017 | 4.80 | 4.80 |
| RC1010150ML□-□□□ | 15 ±20% | 1V/1kHz | 14.0 | 0.028 | 0.020 | 4.30 | 4.00 |
| RC1010220ML□-□□□ | 22 ±20% | 1V/1kHz | 11.5 | 0.040 | 0.029 | 3.60 | 3.30 |
| RC1010330ML□-□□□ | 33 ±20% | 1V/1kHz | 8.5 | 0.050 | 0.037 | 3.20 | 3.00 |
| RC1010470KL□-□□□ | 47 ±10% | 1V/1kHz | 7.0 | 0.070 | 0.053 | 2.60 | 2.50 |
| RC1010680KL□-□□□ | 68 ±10% | 1V/1kHz | 5.5 | 0.098 | 0.076 | 2.15 | 2.00 |
| RC1010101KL□-□□□ | 100 ±10% | 1V/1kHz | 5.0 | 0.128 | 0.100 | 1.90 | 1.70 |
| RC1010151KL□-□□□ | 150 ±10% | 1V/1kHz | 4.2 | 0.220 | 0.165 | 1.45 | 1.40 |
| RC1010221KL□-□□□ | 220 ±10% | 1V/1kHz | 3.2 | 0.320 | 0.245 | 1.20 | 1.10 |
| RC1010331KL□-□□□ | 330 ±10% | 1V/1kHz | 2.6 | 0.460 | 0.350 | 1.00 | 0.95 |
| RC1010471KL□-□□□ | 470 ±10% | 1V/1kHz | 2.2 | 0.620 | 0.492 | 0.85 | 0.80 |
| RC1010681KL□-□□□ | 680 ±10% | 1V/1kHz | 2.0 | 0.940 | 0.745 | 0.70 | 0.64 |
| RC1010102KL□-□□□ | 1000 ±10% | 1V/1kHz | 1.6 | 1.300 | 1.060 | 0.60 | 0.56 |

- 1). Electrical specifications at 25°C
- 2). I_{rms} base on temp. rise 30°C typ.
- 3). I_{sat} base on $\Delta L/L0A=10\%$ typ.



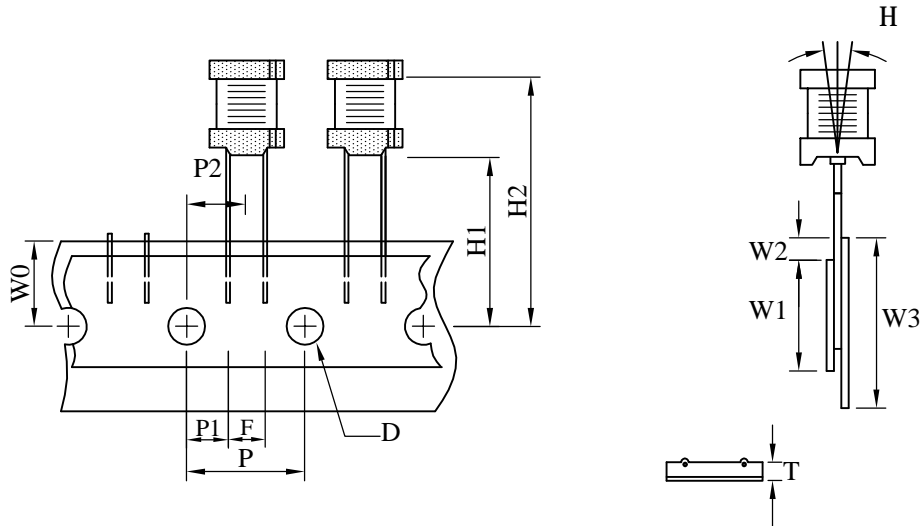
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SPECIFICATION FOR APPROVAL

REF. :

| | | | | | |
|------------|-----------------|---------------|------------------|------|---|
| PROD. NAME | Radial Inductor | ABC'S DWG NO. | RC1010□□□□L□-□□□ | | |
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V . Packaging information :



| Item | Symbol | Specification | | | |
|---------------------------------------|--------|---------------|-----------|--------------|-----------|
| | | Milimeter | | Inch | |
| | | Size | Tolerance | Size | Tolerance |
| Tape feed hole diameter | D | 4.00 | ±0.20 | 0.157 | ±0.008 |
| Component lead pitch | F | 6.40 | typ. | 0.252 | typ. |
| Front-to-rear deflection | H | 2.00 | max. | 0.079 | max. |
| Feed hole to bottom of component | H1 | 18.50 | ±0.80 | 0.728 | ±0.031 |
| Feed hole to overall component height | H2 | 32.50 | max. | 1.280 | max. |
| Feed hole pitch | P | 12.70 | ±0.30 | 0.500 | ±0.012 |
| Lead location | P1 | 3.15 | ±0.70 | 0.124 | ±0.028 |
| Center of component location | P2 | 6.35 | ±1.30 | 0.250 | ±0.051 |
| Overall taped package thickness | T | 1.42 | max. | 0.056 | max. |
| Feed hole location | W0 | 9.00 | ±0.50 | 0.354 | ±0.020 |
| Adhesive tape width | W1 | 15.00 | ±0.50 | 0.591 | ±0.020 |
| Adhesive tape position | W2 | 4.00 | max. | 0.157 | max. |
| Tape width | W3 | 18.00 | ±0.50 | 0.709 | ±0.020 |

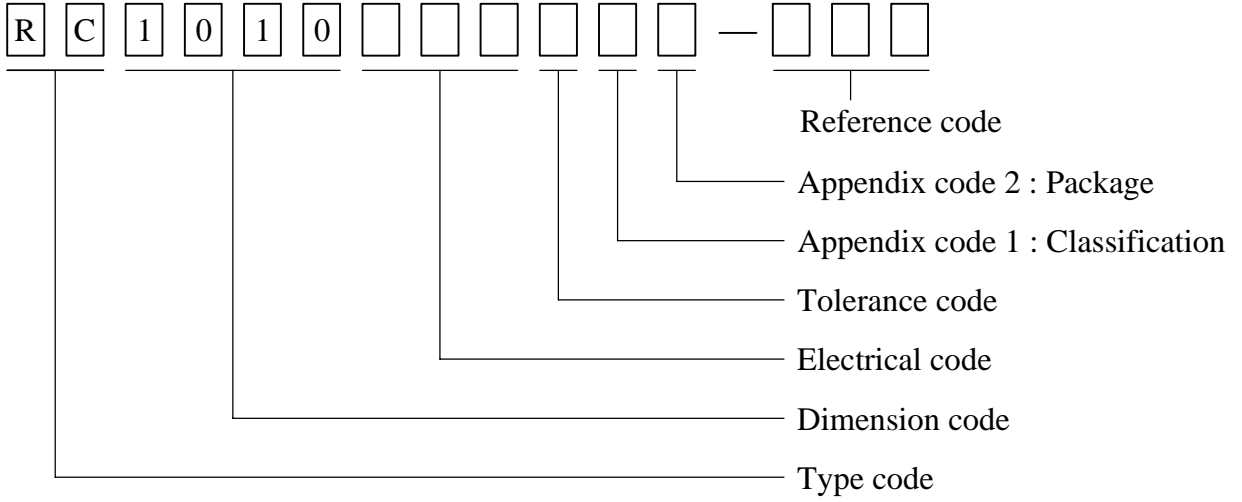
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SPECIFICATION FOR APPROVAL

REF. :

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|------------|-----------------|---------------|------------------|------|---|
| PROD. NAME | Radial Inductor | ABC'S DWG NO. | RC1010□□□□L□-□□□ | | |
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VI . Dwging number expression :



Appendix code 1 : Product Classification
 L : Lead Free Standard products comply with RoHS' requirements

Appendix code 2 : Package Information

| Code | Inner package | Inner package Q'TY | Remark |
|------|------------------------|--------------------|--------|
| A | Box | 130 pcs | |
| B | T / B (Box package) | 160 pcs | |
| C | T / B (Box package) | 500 pcs | |
| D | T / R (Reel package) | 500 pcs | |
| E | Tray | 200 pcs | |

SPECIFICATION FOR APPROVAL

REF. :

| | | | | | |
|------------|-----------------|---------------|------------------|------|---|
| PROD. NAME | Radial Inductor | ABC'S DWG NO. | RC1010□□□□L□-□□□ | | |
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VII . Reliability test :

| Item | Reference documents | Test Condition | Test Specification |
|-------------------------------------|--|--|---|
| 1.High Temperature Exposure | MIL-STD-202 Method 108 | 1.Temperature: 125±2℃ 2.Time:96±2 hours. | 1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%. |
| 2.Temperature Cycling | JESD22-A 104 | 1.Temperature: -40℃ ~ +125℃ 2.Number of cycle:100 cycle 3.Dwell time:30 minutes | 1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%. |
| 3.Biased Humidity Test | MIL-STD-202 Method 103 | 1.Temperature : 85±2 ℃ 2.Humidity: 85% RH. 3.Time:96±2 Hours | 1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%. |
| 4.Operational Life | JESD22-A 108 | 1.Temperature: 125℃ (Temp. rise included) 2.Time:96±2 hours. 3.Rated current | 1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%. |
| 5.External Visual | JESD22-B 101 & MIL-STD-883 Method 2009 | Inspect product constructions, marking and workmanship. | 1.No pollution on the surface of products. 2.Clear marking. 3.No crack. |
| 6.Physical Dimensions | JESD22-B 100 | Verify physical dimensions to the applicable product detail specification. | Per product specification standard |
| 7.Resistance to solvents | MIL-STD-202 Method 215 | Immerse into solvent for 3±0.5 minutes & brush 10 times for 3 cycles. | 1.No body change in appearance. 2.No marking blurred. 3.Inductance shall not change more than ±10%. |
| 8.Vibration Test | MIL-STD-202 Method 204 | 1.Frequency and Amplitued : 10-2000-10 Hz, 1.5 mm. 2.Direction:X, Y, Z 3.Test duration:2 hours for each direction, 6 hours in total. | 1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%. |
| 9.Resistance To Soldering Heat Test | MIL-STD-202 Method 210 | 1.Method : Dip 2.Temperature : 260±5℃ 3.Time : 10 second. 4.Number of times : 3 times. | 1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%. |
| 10.Saturation Current | JIS C 6436 & User SPEC. | 1.Applied rated current for 5 second. 2.Rated current | Inductance shall not drop more than 10% typ. |
| 11.Over load | JIS C 6436 & User SPEC. | 1.Applied one and half rated current for a period of 5 minutes. 2.Rated current | No electrical or mechanical damage |
| 12.Temperature Rise Current | JIS C 6436 & User SPEC. | 1.Applied rated current for 10 minutes. 2.Temperature measure by digital surface thermometer. 3.Irms current | Surface temperature rise is less than 30℃ typ. |
| 13.Solderability Test | J-STD-002 & JESD22-B 102 | 1.Baking in pre-testing : 150±5℃ / 16Hours±30 min. 2.Dip pads in flux then dip in solder pot at 240±5℃ for 5 seconds. | More than 95% soldering coverage min on terminations. |
| 14.Electrical Characteriazation | MIL-STD-202 Method 304 & User SPEC. | 1.Operating temperature : -40℃~125℃ 2.Room temperature : 25℃. | 1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%. |
| 15.Drop | CNS-C6354 & GB/T 2423.8 | 1.Products shall be mounted on SPEC. PCB and dropped down from a height of 1m 2.Drop total time : 6 time (Every side of sample drop 2 time) | 1. Adhesion on PCB shall be enough. 2. Product appearance shall not break. 3. No electrical damage. |
| 16.Terminal Strength Test | MIL-STD-202 Method 211 | 1.Apply pull force to samples of terminals 2.Force of 910g for 60±1 seconds. | After test, inductors shall be no mechanical damage. |

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