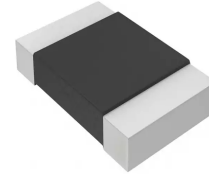
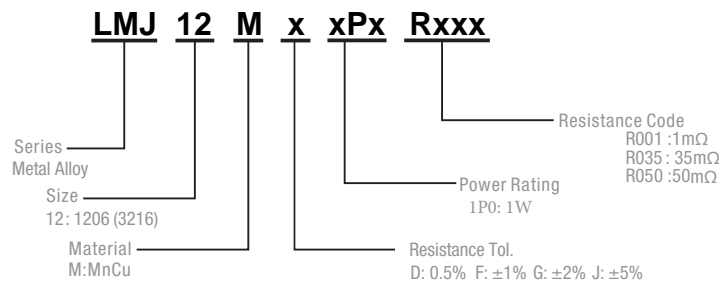


Description

- Proprietary processing technique produces extremely low resistance values
- Very low inductance
- Low thermal EMF
- Metallic Material



Part Numbering System



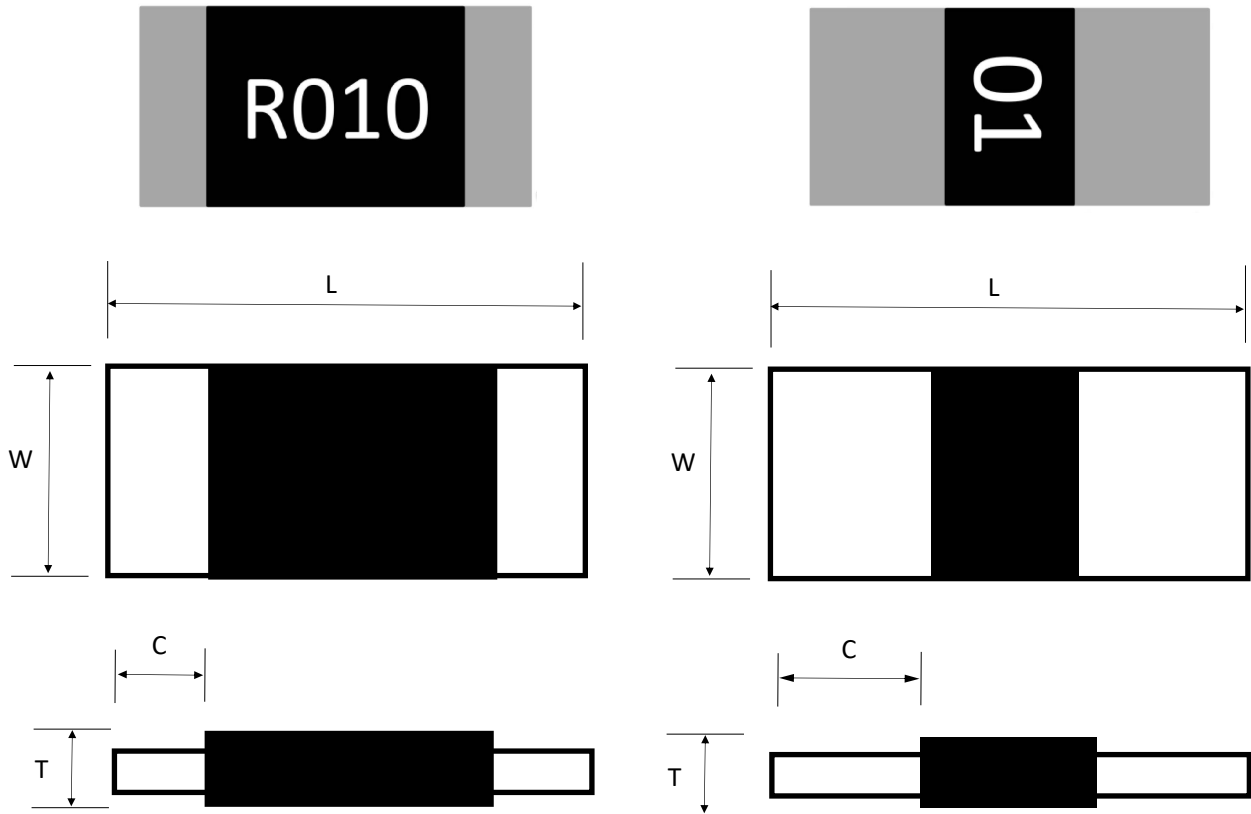
| Parameter | Standard |
|-----------------------------------------|----------------------|
| Power Rating | 1W |
| Resistance Value | 1~100mΩ |
| Operating Temperature Range | -55 to +170°C |
| Component Temperature Coefficient (TCR) | ± 50 ppm/°C |
| Maximum Working Voltage (V) | $(P \times R)^{1/2}$ |
| Rating Current(A) | $(P / R)^{1/2}$ |

P=Power Rating; R=Resistance Value

Standard Electrical Specifications

| Type | Rating Power at 70°C | T.C.R. (ppm/°C) | Resistance Range(mΩ) | Material | Operating Temperature(°C) |
|-------|----------------------|-----------------|----------------------------------------------|----------------|---------------------------|
| | | | 0.5% (D) 1.0% (F) 2.0% (G) 5.0% (J) | | |
| LMJ12 | 1W | 50 | 1~100 | R001~R100:MnCu | -55~+170°C |

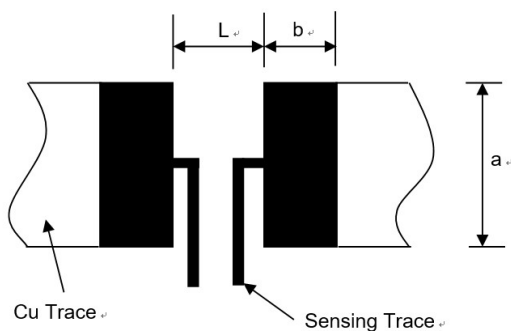
Dimensions



Unit: Millimeters

| Type | L | W | C | T |
|--------|---------|---------|---------|----------|
| LMJ 12 | 3.2±0.2 | 1.6±0.2 | 0.5±0.3 | 0.7±0.15 |

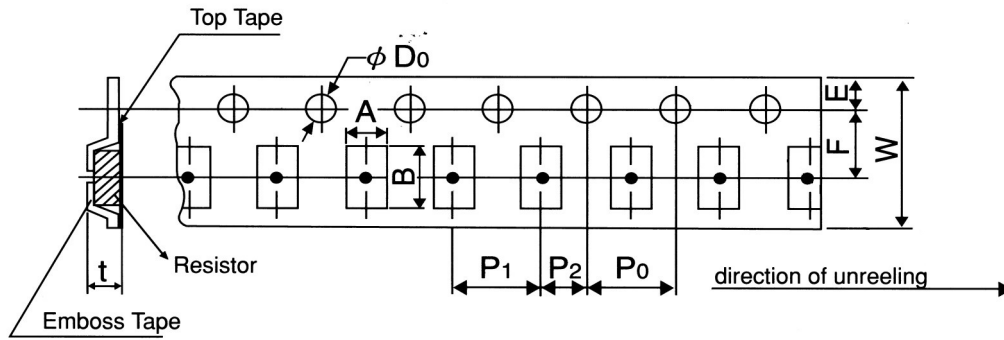
Recommended land pattern



Unit: Millimeters

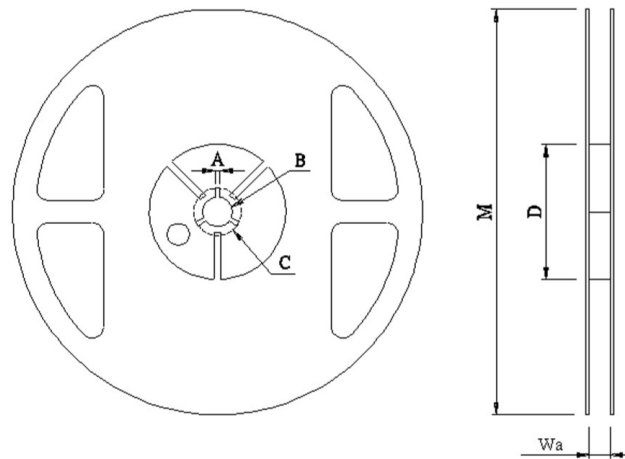
| Resistance Range (Ω) | a | b | L |
|----------------------|---------|---------|---------|
| 0.001~0.1 | 1.8±0.1 | 2.3±0.1 | 1.0±0.1 |

Tapping & Package



| Type | Pack | A ±0.2 | B ±0.2 | D0 +0.5-0 | E ±0.1 | F ±0.05 | P0 ±0.1 | P1 ±0.1 | P2 ±0.1 | W ±0.2 | T ±0.15 |
|------|-------|-----------|-----------|--------------|-----------|------------|------------|------------|------------|-----------|------------|
| 1206 | Paper | 2.00 | 3.60 | 1.50 | 1.75 | 3.50 | 4.00 | 4.00 | 2.00 | 8.00 | 0.81 |

Reel Specification

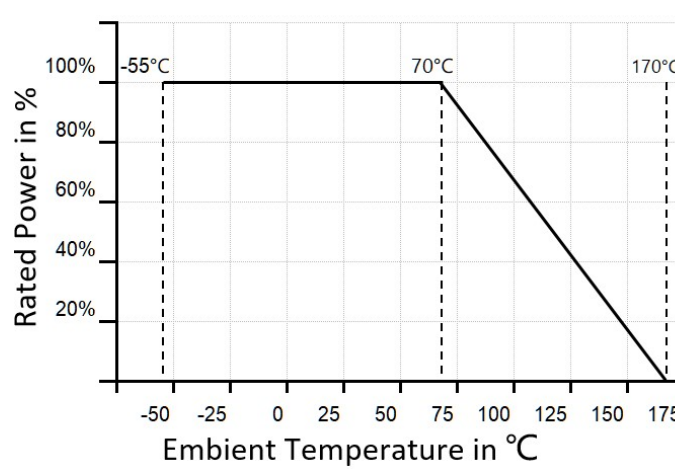


| Type | A | B | C | D | M | W |
|------|----------|----------|-----------|-----------|------------|----------|
| 1206 | 2.00±0.5 | 13.5±0.5 | 21.00±0.5 | 60.00±1.0 | 178.00±2.0 | 9.00±1.0 |

Product Characteristics

| Item | Test condition/ Methods | Limited | Standard |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------------------------|
| Resistance | Measuring resistance value at room temperature 25°C±5°C | Refer to Spec | IEC60115-1 4.5 |
| Temperature coefficient of resistance | $TCR = \frac{(R-R_0)/R_0}{T_2-T_1} \times 10^6$ R ₀ : resistance of room temperature R: resistance of 125°C T ₁ : Room temperature T ₂ : Temperature at 125°C | Refer to Spec | MIL-STD-202 Method 304 |
| Short time Overload | 5×Rated power for 5 seconds | ≤±0.5% | MIL-STD-202 Method 210 |
| Resistance to Soldering Heat | 260°C± 5°C time: 10sec± 1sec | ≤±0.5% | MIL-STD-202 Method 210 |
| Temperature Cycling | -55°C (30min)/+125°C(30min), 1000 cycles | ≤±0.5% | MIL-STD-202 Method107G |
| Low temperature Storage | -55°C for 1000hours, No power | ≤±0.5% | MIL-STD-26E |
| High Temperature Storage | 125°C for 1000hours, No power | ≤±1% | IEC6011501-4.25 |
| Bias Humidity | +85°C, 85% RH, 10%bias, 1.5 h "ON", 0.5 h "OFF", 1000hours | ≤±0.5% | MIL-STD-202 Method103 |
| Joint Strength of Solder | Soldered on the bending test plate, put on the bending testing machine, pressed under force in the center of the test plate, measure its resistance variance rate under load | ≤±0.5% | JIS-C5201 |
| Solderability | Temperature of Solder: 245±5°C Dipping time:3±1s | Solder coverage over 95% | IEC60115-1 4.17 |
| Load life | 1000 h at 70 °C , 1.5 h "ON", 0.5 h "OFF" | ≤±1% | JIS-C5201 |
| Operational life | 125°C± 3°C, 1000 hours, at rated power | ≤±0.5% | MIL-STD-202 Method 108 |

Derating Curve



Packaging

Quantity: 5, 000pcs

8mm wide tape on 178mm(7 inch)
diameter reel -specification EIA
Standard 481.