

1206 1% Thick film chip resistor

A range of high stability, close tolerance, thick film resistors in the industry standard 1206 package. The multiple layer electrode construction with nickel barrier termination prevents leaching and offers excellent solderability. They are compatible with both flow and re-flow soldering. Supplied on 8mm tape in reels of 5,000 or packs of 100 and individually marked with a 4-digit resistance code.

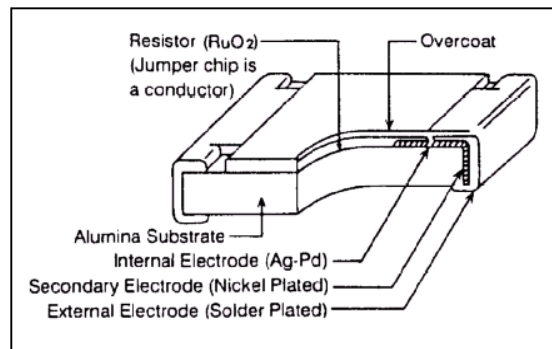
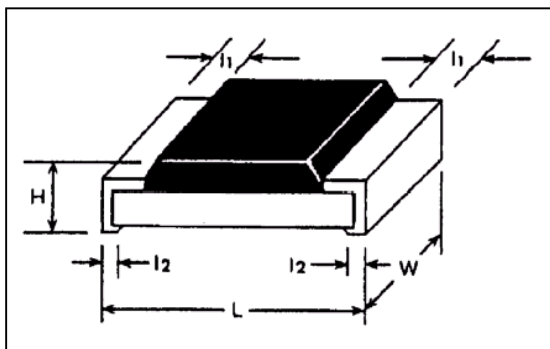
Features

- Extremely light and thin
- Highly reliable multi-layer electrode construction
- Compatible with both flow and re-flow soldering
- Highly stable in auto-placement surface mounting applications
- Barrier layer and end termination
- Zero ohm jumper available
- Available in 8mm tape & reel per EIA RS481

Electrical characteristics

| | |
|--|--|
| Power rating @ 70°C: | 0.25W |
| Operating temp. range: Derated to 0 load at: | -55°C to 125°C +125°C |
| Maximum working voltage: Maximum overload voltage: | 200V 400V |
| Resistance range 1%, E-96: 5%, E-24: Zero ohm jumper <math><0.01\Omega</math> | 10 Ω -1M Ω 1 Ω - 10M Ω |
| Temperature coefficient: | Special value on request 1%: $\pm 100\text{ppm}/^\circ\text{C}$, 5% $\pm 200\text{ppm}/^\circ\text{C}$ 1 Ω -10 Ω : $-200\text{ppm}/^\circ\text{C}$ to $+500\text{ppm}/^\circ\text{C}$ |

| L(mm) | W(mm) | H(mm) | I1(mm) | I2(mm) |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| 3.20 \pm 0.15 | 1.60 \pm 0.15 | 0.60 \pm 0.10 | 0.50 \pm 0.20 | 0.50 \pm 0.20 |



Environmental Characteristics

| Performance test | Test method | 1% tolerance | 5% tolerance |
|------------------------------------|--|----------------------|----------------------|
| Temperature coefficient (by type): | MIL-STD-202F, method 304 -55°C to +125°C | ±100ppm/°C | +200ppm/°C |
| Thermal shock: | MIL-STD-202F, method 107 5 cycles, -55°C to 125°C | ±(0.5%, + 0.05Ω) | ±(1.0%, + 0.05Ω) |
| Low temperature operation: | MIL-R-55342D, Para. 4.7.4 One hour at -55°C followed by 45 mins RCWV | ±(0.5%, + 0.05Ω) | ±(1.0%, + 0.05Ω) |
| Short time overload: | MIL-R-55342D, para. 4.7.5 2.5 times RCWV for 5 seconds | ±(0.5%, + 0.05Ω) | ±(2.0%, + 0.05Ω) |
| High temperature exposure: | MIL-R-553442D, para. 4.7.6 125°C for 100 hours | ±(0.5%, + 0.05Ω) | ±(2.0%, + 0.05Ω) |
| Resistance to soldering heat: | MIL-R-553442D, para. 4.7.7 Soldered to test board at 260°C for 10 seconds | ±(0.5%, + 0.05Ω) | ±(1.0%, + 0.05Ω) |
| Moisture resistance: | MIL-STD-202F, method 106, 10 cycles, total 240 hours | ±(0.5%, + 0.05Ω) | ±(2.0%, + 0.05Ω) |
| Life: | MIL-STD-202F, method 108A, 1000hrs at 70°C RCWV intermittent | ±(1.0%, + 0.05Ω) | ±(3.0%, + 0.1Ω) |
| Solderability: | MIL-STD-202F, method 208 230°C for 5 seconds | 95% min. coverage | 95% min. coverage |
| Bending strength: | Unit mounted in centre of 90mm board length, deflected 5mm in either direction for 10 seconds | ±(1.0%, + 0.05Ω) | ±(1.0%, + 0.05Ω) |