



Series: RT

FEATURES

High Stability

Low TCR

High Accuracy ($\pm 0.1\%$, $\pm 0.5\%$)

Resistor (RuO_2)
(Jumper chip is a conductor)

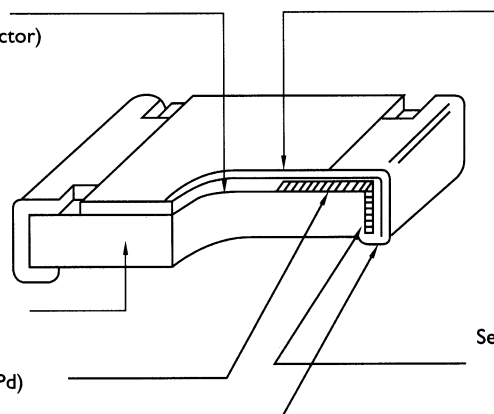
Overcoat

Alumina Substrate

Internal Electrode (Ag-Pd)

Secondary Electrode
(Nickel Plated)

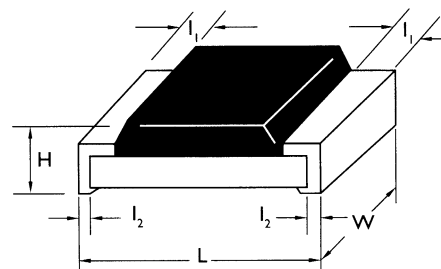
External Electrode
(Solder Plated)



DIMENSIONS

Unit: mm

| STYLE | L | W | H | I1 | I2 |
|--------------|-----------------|--|-----------------|-----------------|-----------------|
| RT115 (0603) | 1.60 \pm 0.10 | 0.80 ^{+0.15} _{-0.05} | 0.45 \pm 0.10 | 0.30 \pm 0.20 | 0.30 \pm 0.20 |
| RT210 (0805) | 2.00 \pm 0.15 | 1.25 ^{+0.10} _{-0.05} | 0.50 \pm 0.10 | 0.40 \pm 0.20 | 0.40 \pm 0.20 |



ELECTRICAL CHARACTERISTICS

| STYLE | RT115 (0603) | RT210 (0805) |
|------------------------------|---|---|
| Power Rating at 70°C | 1/16W | 1/10W |
| Operating Temp. Range | -55°C to +125°C (Derated to 0 Load at +125°C) | |
| Maximum Working Voltage | 50V | 100V |
| Maximum Overload Voltage | 100V | 200V |
| Dielectric Withstand Voltage | 100V | 250V |
| Resistance Range | 1Ω ~ 10MΩ : ±100ppm/°C | 1Ω ~ 10MΩ : ±100ppm/°C |
| E-24 Only, E-96 on Request | 10Ω ~ 91MΩ : ±50ppm/°C 100Ω ~ 33KΩ : ±25ppm/°C 36KΩ ~ 330KΩ : ±50ppm/°C | 10Ω ~ 91MΩ : ±50ppm/°C 100Ω ~ 100KΩ : ±25ppm/°C 110KΩ ~ 1MΩ : ±50ppm/°C |
| Tol.±2%, ±5% (E-24) | 10Ω ~ 3.3MΩ | 1Ω ~ 10MΩ |
| Temperature Coefficient | ±25 ~ 100ppm/°C | |
| Resistance Tolerance | ±0.1%, ±0.5% | |

ENVIRONMENTAL CHARACTERISTICS

| PERFORMANCE TEST | TEST METHOD | APPRAISE |
|------------------------------|--|---|
| Temperature Coefficient | MIL-STD-202F, Method 304 | -55°C to +125°C by Type |
| Thermal Shock | MIL-STD-202F, Method 107 | 5 Cycles, -55°C to +125°C (Step by Step 2 min) ±(0.5%+0.05Ω) |
| Low Temperature Operation | MIL-R-55342D, Para. 4.7.4 | One Hour at -65°C Followed by 45 Minutes RCWV ±(0.5%+0.05Ω) |
| Short Time Overload | MIL-R-55342D, Para. 4.7.5 | 2.5 Times RCWV for 5 Seconds ±(0.5%+0.05Ω) |
| Insulation Resistance | MIL-STD-202F, Method 302 | RCOV for 1 Minute 10000MΩ |
| Dielectric Withstand Voltage | MIL-STD-202F, Method 301 | R.M.S. for 1 Minute by Type |
| Resistance to Soldering Heat | MIL-STD-202F, Method 210C | Soldered to Test Board at 260°C for 10 Seconds ±(0.5%+0.05Ω) |
| Moisture Resistance | MIL-STD-202F, Method 106F | 42 Cycles. Total 1000 Hours ±(0.5%+0.05Ω) |
| Life | MIL-STD-202F, Method 108A | 1000 Hours at 70°C RCWV Intermittent ±(0.5%+0.05Ω) |
| Solderability | MIL-STD-202F, Method 208G | 230°C for 5 Seconds 95% min. coverage |
| Bending Strength | JIS-C-5202, Para. 6.1.4, Unit Mounted in Center of 90mm Board Length, Deflected 5mm in Either Direction for 5 Seconds | ±(0.5%+0.05Ω) |