



## Series: RT

### FEATURES

High Stability

Low TCR

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

Resistor ( $\text{RuO}_2$ )  
(Jumper chip is a conductor)

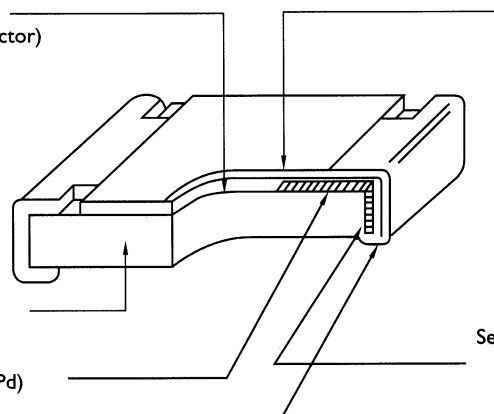
Overcoat

Alumina Substrate

Internal Electrode (Ag-Pd)

Secondary Electrode  
(Nickel Plated)

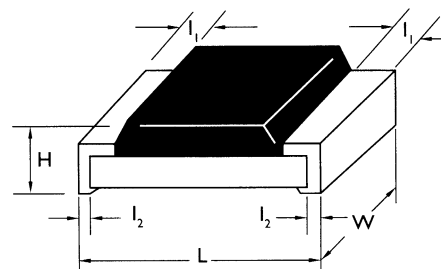
External Electrode  
(Solder Plated)



### 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)