

Thick Film Chip Resistor (RC Series)

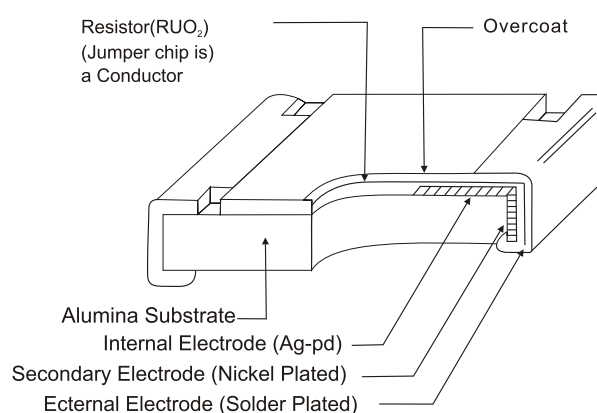
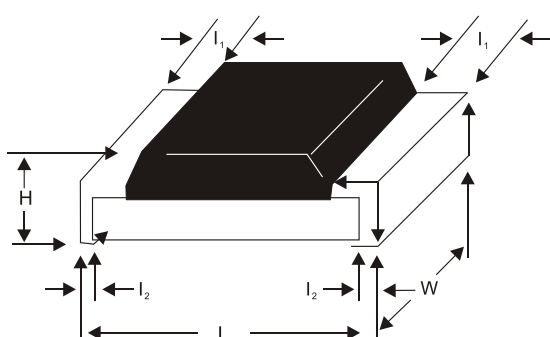
Features

- RUO₂ Thick Film Elements
- Extremely Thin & Light
- Very Low Cost
- Compatible with All SMT Process
- RoHS Compliance

Applications

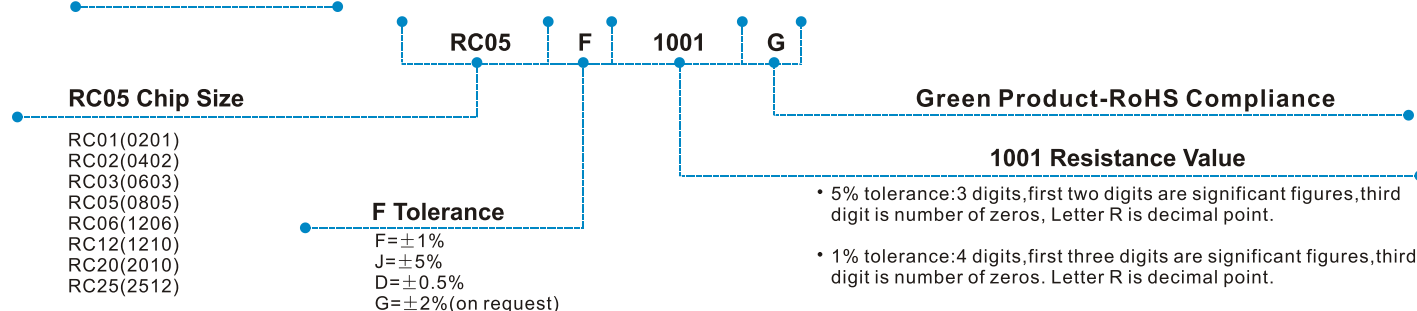
- Computer Products(PCs)
- Telecommunication Electronics
- Consumer Electronics
- Testing & Measurement Meters

Dimensions & Structure



Type	L	W	H	I ₁	I ₂
0201(RC01)	0.60±0.10	0.30±0.05	0.25±0.05	0.15±0.10	0.15±0.10
0402(RC02)	1.00±0.10	0.50±0.05	0.35±0.05	0.20±0.10	0.25±0.10
0603(RC03)	1.60±0.10	0.80±0.10	0.45±0.10	0.25±0.15	0.25±0.15
0805(RC05)	2.00±0.10	1.20±0.10	0.50±0.10	0.35±0.20	0.35±0.20
1206(RC06)	3.20±0.20	1.60±0.15	0.55±0.10	0.45±0.20	0.40±0.20
1210(RC12)	3.20±0.20	2.50±0.15	0.55±0.10	0.50±0.25	0.45±0.20
2010(RC20)	5.00±0.25	2.50±0.15	0.55±0.10	0.50±0.25	0.45±0.20
2512(RC25)	6.40±0.25	3.20±0.20	0.55±0.10	0.60±0.25	0.45±0.20

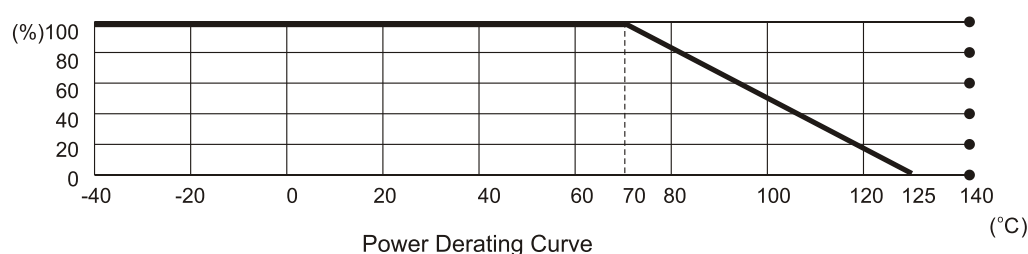
Part Number



Electrical Characteristics

Size Code	RC01 (0201)	RC02 (0402)	RC03 (0603)	RC05 (0805)	RC06 (1206)	RC12 (1210)	RC25 (2510)
Power Rating@70°C	1/20W	1/16W	1/10W	1/8W	1/4W	1/3W	1W
Operating Temp. Range Derated to Zero Load at	-55oC to +125°C +125°C						
Maximum Working Voltage Maximum Overload Voltage	25V 50V	50V 100V	50V 100V	150V 300V	200V 400V	200V 400V	200V 400V
Resistance Range 1%,E-96 5%,E-24 Zero Ohm Jumper<0.05Ω	10Ω-22KΩ 10Ω-1MΩ	10Ω-1.21MΩ 2.2Ω-10MΩ	1Ω-1.21MΩ 1Ω-22MΩ	1Ω-2.2MΩ 1Ω-22MΩ	1Ω-2.2MΩ 1Ω-22MΩ	1Ω-2.21MΩ 1Ω-22MΩ	1Ω-1MΩ 1Ω-10MΩ
Temperature Coefficient*	+ -200ppm/°C for + -5% tolerance resistors + -100ppm/°C for + -1% tolerance resistors						

*Please consult G.G for T.C.Value on resistance from 1Ω to 10Ω and 1MΩ to 22MΩ .



The rated power is the maximum continuous loading power at 70°C ambient temperature.
For ambient temperature's above 70oC the loading power follow the above power derating curve.

Environmental Characteristics

PERFORMANCE TEST	TEST METHOD	1%TOLERANCE	5%TOLERANCE
Temperature Coefficient(by Type)	MIL-STD-202F,Method304 -55°Cto + 125°C	By Type	By Type
Thermal Shock	MIL-STD-202F,Method107 5 cycles,-55°Cto + 125°C	±(0.5%+0.05Ω)	±(1.0%+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)	±(1.0%+0.05Ω)
Short Time Overload	MIL-R-55342D,Para.4.7.4 2.5 times RCWV for 5 seconds	±(1.0%+0.05Ω)	±(2.0%+0.05Ω)
High Temperature Exposure	MIL-R-55342D,Para.4.7.6 125°C for 100 hours	±(1.0%+0.05Ω)	±(2.0%+0.1Ω)
Resistance to Soldering Heat	MIL-R-55342D,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 1000 hours at 70°C RCWV intermfent	±(1.0%+0.05Ω)	±(3.0%+0.1Ω)
Solderability	MIL-STD-202F,Method 208 230°C ffor 5 seconds	95%+min. coverage	95%min. coverage
Bending Strength	Unit mounted in center of 90mm board Length,defected 5mm in either direction for 10 seconds	±(1.0%+0.05Ω)	±(1.0%+0.05Ω)