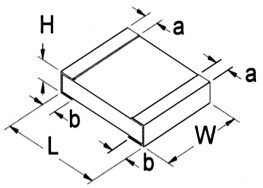
RGC Series — Semi-Precision Thick Film Chip Resistors

Features

- Precision performance
- Tolerances to ±0.5% and ±1%
- Operating temperature range from -55°C to +150°C
- Less sensitive to ESD discharges than comparable thin film devices
- RoHS compliant / lead-free
- Highly stable performance over time
- Power derating from 100% at 70°C to zero at 150°C
- Temperature coefficient of resistance of ±50ppm/°C and ±100ppm/°C



Electrical Specifications

Type / Code	Package Type	Power Rating (Watts) @ 70°C	Maximum Working Voltage*	Maximum Overload Voltage*	Resistance Temperature Coefficient	Ohmic Range and Tolerance	
						0.5%	1%
RGC 1/16S	0402	0.063W	50	100	±50 ppm/°C ±100 ppm/°C	10Ω – 3.24M 10Ω – 3.24M	100Ω – 1M 10Ω – 3.24M
RGC 1/16	0603	0.10W	50	100	±50 ppm/°C ±100 ppm/°C	100Ω – 1M 100Ω – 1M	100Ω – 1M 3.32Ω – 3.24M
RGC 1/10	0805	0.125W	150	300	±50 ppm/°C ±100 ppm/°C	10Ω – 3.24M 10Ω – 3.24M	3.32Ω – 3.24M 3.32Ω – 3.24M
RGC 1/8	1206	0.25W	200	400	±50 ppm/°C ±100 ppm/°C	10Ω – 4.64M 10Ω – 4.64M	3.32Ω – 4.64M 3.32Ω – 4.64M

* Lesser of √PR or maximum working voltage.

Mechanical Specifications

Type / Code	L Body Length	W Body Width	H Body Height	a Top Termination	b Bottom Termination	Units
RGC 1/16S	0.039 ± 0.002 1.00 ± 0.05	0.020 ± 0.002 0.50 ± 0.05	0.014 ± 0.002 0.35 ± 0.05	0.008 ± 0.004 0.20 ± 0.10	0.010 +0.002/-0.004 0.25 +0.05/-0.10	inches mm
RGC 1/16	0.063 ± 0.004 1.60 ± 0.10	0.031 +0.006/-0.002 0.80 +0.15/-0.05	0.018 ± 0.004 0.45 ± 0.10	0.010 ± 0.004 0.25 ± 0.10	0.012 ± 0.004 0.30 ± 0.10	inches mm
RGC 1/10	0.079 ± 0.004 2.00 ± 0.10	0.050 ± 0.004 1.25 ± 0.10	0.024 ± 0.004 0.60 ± 0.10	0.016 ± 0.008 0.40 ± 0.20	0.016 ± 0.008 0.40 ± 0.20	inches mm
RGC 1/8	0.126 ± 0.006 3.20 ± 0.15	0.063 ± 0.006 1.60 ± 0.15	0.024 ± 0.004 0.60 ± 0.10	0.020 ± 0.010 0.50 ± 0.25	0.020 ± 0.10 0.50 ± 0.25	inches mm

Performance Characteristics

Test	Test Conditions	Test Results
Endurance @ 125°C	125°C, No load, 1,000 hrs.	±5%
Endurance @ 70°C	Rated Voltage, 1.5 hr. On, 0.5 hr. Off, 1,000 hrs. 70°C	±5%
Resistance to Soldering Heat	260°C ± 5°C, 5 seconds +1/-0	±1%
Short Time Overload	2 seconds at 2.5 times rated or limiting voltage	±1%
Voltage Proof	100 volts AC, 60 seconds	No breakdown or flashover R ≥ 1GΩ

How to Order

RGC	1/16	T1	4.75K	0.5%	R
SEI Type	Code	TCR	Nominal Resistance	Tolerance	Packaging

Code	Wattage	Size
1/16S	0.063W	0402
1/16	0.1W	0603
1/10	0.125W	0805
1/8	0.25W	1206

TCR
T1 = 100ppm
T2 = 50ppm

Tolerance	Values
0.5%	E96
1%	E96

Code	Description	Pkg Qty
R	Paper	5,000
A	Bulk	1,000