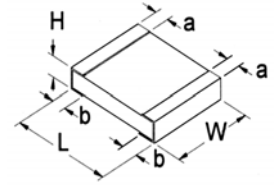


RGC Series — Semi-Precision Thick Film Chip Resistors



Features

- Precision performance
- Tolerances of $\pm 0.5\%$ and $\pm 1\%$
- RoHS compliant / lead-free
- Less sensitive to ESD discharges than comparable thin film devices
- Highly stable performance over time
- Power derating from 100% at 70°C to zero at 150°C
- Temperature coefficient of resistance of $\pm 50\text{ppm}/^\circ\text{C}$ and $\pm 100\text{ppm}/^\circ\text{C}$



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	50V	100V	$\pm 50\text{ ppm}/^\circ\text{C}$ $\pm 100\text{ ppm}/^\circ\text{C}$	100Ω – 1M 10Ω – 97.6Ω	100Ω – 1M 10Ω – 97.6Ω
RGC 1/16	0603	0.063W	50V	100V	$\pm 50\text{ ppm}/^\circ\text{C}$	100Ω – 1M	100Ω – 1M
RGC 1/10	0805	0.100W	150V	300V	$\pm 50\text{ ppm}/^\circ\text{C}$	100Ω – 1M	100Ω – 1M
RGC 1/8	1206	0.125W	200V	400V	$\pm 50\text{ ppm}/^\circ\text{C}$	100Ω – 1M	100Ω – 1M

* Lesser of $\sqrt{\text{PR}}$ 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 ± 0.004 0.80 ± 0.10	0.018 ± 0.004 0.45 ± 0.10	0.012 ± 0.008 0.30 ± 0.20	0.012 ± 0.008 0.30 ± 0.20	inches mm
RGC 1/10	0.079 ± 0.004 2.00 ± 0.10	0.050 ± 0.004 1.25 ± 0.10	0.020 ± 0.004 0.50 ± 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 +0.002/-0.008 3.20 +0.05/-0.20	0.063 + 0.002/-0.006 1.60 +0.05/-0.15	0.024 ± 0.004 0.60 ± 0.10	0.020 ± 0.010 0.50 ± 0.25	0.020 ± 0.08 0.50 ± 0.20	inches mm

Performance Characteristics

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

Operating Temperature Range : -55°C to +150°C

How to Order

RGC			1/16	T1	4.75K	0.5%	R			
SEI Type			Code	TCR	Nominal Resistance	Tolerance	Packaging			
Code	Wattage	Size	TCR		Tolerance	Values	SEI Types	Pkg Qty	Description	Code
1/16S	0.063W	0402	T1 = 100ppm		0.5%	E96	1/16S	10,000	Paper	R
1/16	0.063W	0603	T2 = 50ppm		1.0%	E96	1/16, 1/10, 1/8	5,000		
1/10	0.100W	0805								
1/8	0.125W	1206								