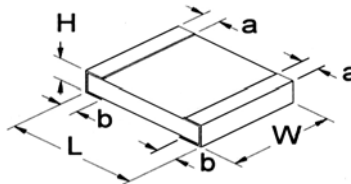


- Features:
- Precision performance
  - RoHS compliant / lead-free
  - Highly stable performance over time
  - Power derating from 100% at 70°C to zero at 150°C
  - Tolerances of 0.1% may be available - contact factory for details
  - Temperature coefficient of resistance as low as  $\pm 50 \text{ ppm}/^\circ\text{C}$



Electrical Specifications							
Type / Code	Old Package Code	Power Rating (Watts) @ 70°C	Maximum Working Voltage (1)	Maximum Overload Voltage	TCR (ppm/°C)	Ohmic Range ( $\Omega$ ) and Tolerance	
						0.5%	1%
RGC0201	-	0.05W	25V	50V	$\pm 200 \text{ ppm}/^\circ\text{C}$	10 - 10M	-
RGC0402	1/16S	0.063W	50V	100V	$\pm 50 \text{ ppm}/^\circ\text{C}$ $\pm 100 \text{ ppm}/^\circ\text{C}$	100 - 1M 10 - 1M	100 - 1M 10 - 1M
RGC0603	1/16	0.1W	50V	100V	$\pm 50 \text{ ppm}/^\circ\text{C}$ $\pm 100 \text{ ppm}/^\circ\text{C}$	10 - 10M	10 - 10M
RGC0805	1/10	0.125W	150V	300V	$\pm 50 \text{ ppm}/^\circ\text{C}$ $\pm 100 \text{ ppm}/^\circ\text{C}$	10 - 10M	10 - 10M
RGC1206	1/8	0.25W	200V	400V	$\pm 50 \text{ ppm}/^\circ\text{C}$ $\pm 100 \text{ ppm}/^\circ\text{C}$	10 - 10M	10 - 10M
RGC1210	1/4	0.33W	200V	400V	$\pm 50 \text{ ppm}/^\circ\text{C}$ $\pm 100 \text{ ppm}/^\circ\text{C}$	10 - 10M	10 - 10M
RGC2010	1/2	0.75W	200V	400V	$\pm 50 \text{ ppm}/^\circ\text{C}$ $\pm 100 \text{ ppm}/^\circ\text{C}$	10 - 10M	10 - 10M
RGC2512	1	1W	200V	400V	$\pm 50 \text{ ppm}/^\circ\text{C}$ $\pm 100 \text{ ppm}/^\circ\text{C}$	10 - 10M	10 - 10M

(1) Lesser of  $\sqrt{\text{PR}}$  or maximum working voltage.

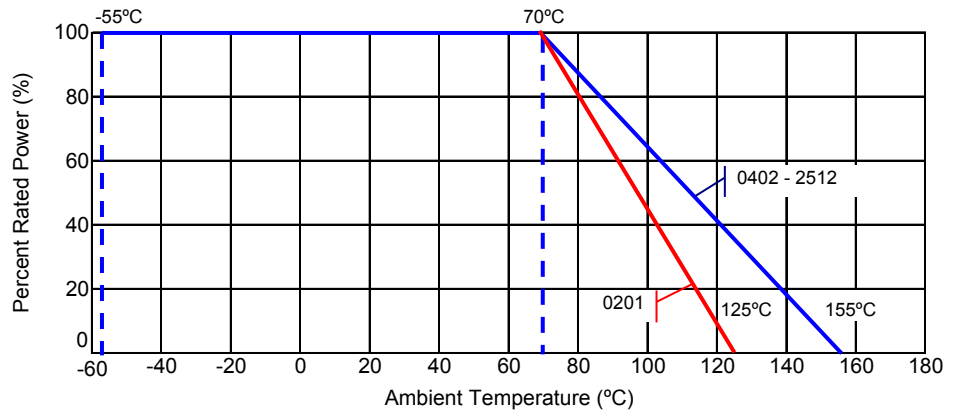


Mechanical Specifications						
Type / Code	L Body Length	W Body Width	H Body Height	a Top Termination	b Bottom Termination	Unit
RGC0201	0.024 $\pm$ 0.001 0.60 $\pm$ 0.03	0.012 $\pm$ 0.001 0.30 $\pm$ 0.03	0.009 $\pm$ 0.001 0.23 $\pm$ 0.03	0.006 $\pm$ 0.002 0.15 $\pm$ 0.05	0.006 $\pm$ 0.002 0.15 $\pm$ 0.05	inches mm
RGC0402	0.039 $\pm$ 0.004 1.00 $\pm$ 0.10	0.020 $\pm$ 0.002 0.50 $\pm$ 0.05	0.012 $\pm$ 0.004 0.30 $\pm$ 0.10	0.008 $\pm$ 0.004 0.20 $\pm$ 0.10	0.010 $\pm$ 0.006 0.25 $\pm$ 0.15	inches mm
RGC0603	0.063 $\pm$ 0.004 1.60 $\pm$ 0.10	0.031 $\pm$ 0.004 0.80 $\pm$ 0.10	0.018 $\pm$ 0.004 0.45 $\pm$ 0.10	0.012 $\pm$ 0.008 0.30 $\pm$ 0.20	0.012 $\pm$ 0.008 0.30 $\pm$ 0.20	inches mm
RGC0805	0.079 $\pm$ 0.004 2.00 $\pm$ 0.10	0.049 $\pm$ 0.004 1.25 $\pm$ 0.10	0.020 $\pm$ 0.004 0.50 $\pm$ 0.10	0.016 $\pm$ 0.010 0.40 $\pm$ 0.25	0.016 $\pm$ 0.008 0.40 $\pm$ 0.20	inches mm
RGC1206	0.122 $\pm$ 0.006 3.10 $\pm$ 0.15	0.061 $\pm$ 0.004 1.55 $\pm$ 0.10	0.024 $\pm$ 0.006 0.60 $\pm$ 0.15	0.020 $\pm$ 0.010 0.50 $\pm$ 0.25	0.020 $\pm$ 0.012 0.50 $\pm$ 0.30	inches mm
RGC1210	0.126 $\pm$ 0.010 3.20 $\pm$ 0.25	0.102 $\pm$ 0.006 2.60 $\pm$ 0.15	0.022 $\pm$ 0.004 0.55 $\pm$ 0.10	0.020 $\pm$ 0.010 0.50 $\pm$ 0.25	0.020 $\pm$ 0.008 0.50 $\pm$ 0.20	inches mm
RGC2010	0.197 $\pm$ 0.008 5.00 $\pm$ 0.20	0.098 $\pm$ 0.006 2.50 $\pm$ 0.15	0.022 $\pm$ 0.004 0.55 $\pm$ 0.10	0.024 $\pm$ 0.010 0.60 $\pm$ 0.25	0.024 $\pm$ 0.012 0.60 $\pm$ 0.30	inches mm
RGC2512	0.250 $\pm$ 0.008 6.35 $\pm$ 0.20	0.124 $\pm$ 0.008 3.15 $\pm$ 0.20	0.022 $\pm$ 0.004 0.55 $\pm$ 0.10	0.024 $\pm$ 0.010 0.60 $\pm$ 0.25	0.024 $\pm$ 0.012 0.60 $\pm$ 0.30	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

Operating Temperature Range for 0402-2512: -55°C to +150°C  
Operating Temperature Range for 0201: -55°C to 125°C

**Power Derating Curve:**



**How to Order**

1	2	3	4	5	6	7	8	9	10	11	12	13	14
R	G	C	0	6	0	3	F	T	C	4	K	7	0
Product Series		Size	Power	Tolerance			Packaging			TCR		Resistance Value	
RGC	Semi-Precision Thick Film	0201	0.05W	Code	Tol	Value	Code	Description	Size	Quantity	Code	ppm	Four characters with the multiplier used as the decimal holder.
		0402	0.063W	D	0.5%	E24, E96	T	7" Reel Paper Tape	0201, 0402	10,000	C	50	100 ohm = 100R
		0603	0.1W	F	1%			7" Reel Plastic Tape	0603, 0805	5,000	D	100	10.5 Kohm = 10K5
		0805	0.125W						1206, 1210		L	200	1 Mohm = 1M00
		1206	0.25W						2010, 2512	4,000			
		1210	0.33W										
		2010	0.75W										
		2512	1W										

**Legacy Part Number (before January 3, 2011):**

SEI Type	Code	TCR	Nominal Resistance	Tolerance	Packaging
<b>RGC</b>	<b>1/16</b>	<b>T2</b>	<b>4.7K</b>	<b>1%</b>	<b>R</b>
	Code	Wattage	Size	TCR	
	1/16S	0.063W	0402	T1 = 100ppm	
	1/16	0.1W	0603	T2 = 50ppm	
	1/10	0.125W	0805		
	1/8	0.25W	1206		
	1/4	0.33W	1210		
	1/2	0.75W	2010		
	1	1W	2512		
	Tolerance	Values			
	0.5%	E24, E96			
	1%				
	SEI Types	Pkg Qty	Description	Code	
	0402	10,000	7" reel paper tape	R	
	0603, 0805, 1206, 1210	5,000	7: reel plastic tape		
	2010, 2512	4,000			