

# Thin Film Chip Resistors

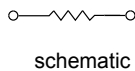
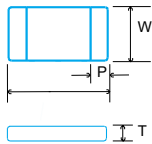
## RG Series

Lead Free

### 1.0 Description

Tight resistance tolerance of  $\pm 0.02\%$  and temperature coefficient of resistance of  $5\text{ppm}/^\circ\text{C}$  are achieved. Under high temperature and humidity of  $85^\circ\text{C}$  and  $85\% \text{RH}$ , and at  $155^\circ\text{C}$  (1000 hours of operation), superior reliability of less than  $\pm 0.1\%$  change in resistance.

### 2.0 Mechanical



Dimension mm	RG1005 (0402)	RG1608 (0603)	RG2012 (0805)
L	1.00 $\pm 0.05$	1.60 $\pm 0.20$	2.00 $\pm 0.20$
W	0.50 $\pm 0.05$	0.80 $\pm 0.20$	1.25 $\pm 0.20$
P	0.20 $\pm 0.10$	0.30 $\pm 0.20$	0.40 $\pm 0.20$
T	0.35 $\pm 0.05$	0.40 $\pm 0.10$	0.40 $\pm 0.10$

dimension mm

### 3.0 Electrical

Type	RG1005			RG1608			RG2012			
Power	General	1/16W			1/10W			1/8W		
	Ultra-reliability	1/32W			1/16W			1/10W		
Resistance Tolerance (%)	$\pm 0.02\text{(P)}, \pm 0.05\text{(W)}$ $\pm 0.10\text{(B)}, \pm 0.25\text{(C)}$			$\pm 0.02\text{(P)}, \pm 0.05\text{(W)}$ $\pm 0.1\text{(B)}, \pm 0.25\text{(C)}$			$\pm 0.02\text{(P)}, \pm 0.05\text{(W)}$ $\pm 0.1\text{(B)}, \pm 0.25\text{(C)}$			
Resistance Range(ohm)	47-97.6	100-2.94k	3k-100k	47-97.6	100-4.99k	5.1k-270k	47-97.6	100-10k	10.2k-470k	
Temperature Coefficient of Resistance ppm/° (Code)	$\pm 10\text{(N)}$	$\pm 5\text{(V)}$	$\pm 10\text{(N)}$	$\pm 10\text{(N)}$	$\pm 5\text{(V)}$	$\pm 10\text{(N)}$	$\pm 10\text{(N)}$	$\pm 5\text{(V)}$	$\pm 10\text{(N)}$	
	$\pm 25\text{(P)}$	$\pm 10\text{(N)}$	$\pm 25\text{(P)}$	$\pm 25\text{(P)}$	$\pm 10\text{(N)}$	$\pm 25\text{(P)}$	$\pm 25\text{(P)}$	$\pm 10\text{(N)}$	$\pm 25\text{(P)}$	
Maximum Operating Voltage for an element	25V			75V			150V			
Resistance Value	E-24, E-96									
Operating Tem Range	$-55^\circ\text{C} - 155^\circ\text{C}$									
Package	5,000 pcs/reel (T5)			1,000 pcs/reel (T1)			1,000 pcs/reel (T1)			
	10,000 pcs/reel (TA)			5,000 pcs/reel (T5)			5,000 pcs/reel (T5)			

\* Please contact us for Resistance Tolerance  $\pm 0.01\%$ .  
Also please contact us for 1/4 W for RG3216.

### 4.0 Part Number

**RG** ————— Product designator  
**1608** ————— Package size  
**N** ————— Temperature coefficient of resistance  
**-102** ————— Resistance  
 (E-24: in a three digit number,  
 E-96: in a four digit number)  
**-B** ————— Resistance tolerance  
**-T5** ————— Package (T1, T5, TA)







Manufacturer(s) of the products described on this page are indicated by their respective logos.