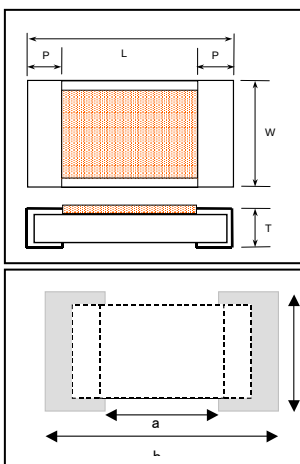


Ultra precision 0.02%, 0.05%, 0.1%, 0.25%, 0.5%, tolerance Thin Film Chip Resistor

Performance

Item	Test Method	Specification: drift limits for each power rating						(Typical)
		Low		Regular		High		
		≤47Ω	≥47Ω	≤47Ω	≥47Ω	≤47Ω	≥47Ω	
Short time Overload	Applied voltage : 2.5 times. Test duration: 5 seconds. (When maximum operating voltage: 2 times or less)	±0.10%	±0.05%	±0.10%	±0.05%	—	±0.10%	±(0.01%)
Load Life	Test temperature : 85℃ (When high voltage : 70℃). Applied voltage : rated voltage. Repeat 1000 hours as follow : 90 mins on/30mins off.	±0.25%	±0.10%	±0.50%	±0.25%	—	±0.50%	±(0.01%)
Moisture load life	Test condition: 85℃, 85% RH. Applied power : 1/10 rated power. Repeat 1000 hours as follow : 90 mins on/30mins off.	±0.25%	±0.10%	±0.50%	±0.25%	—	±0.50%	±(0.05%)
Temperature Cycle	Repeat 1000 cycle as follow : —55℃ (30 min.)/Room Temp.(2 min.) / +125℃ (30min.)/Room Temp.(2min.)	±0.25%	±0.10%	±0.25%	±0.10%	—	±0.10%	±(0.01%)
High temperature Exposure	+155℃ for 1000 hours with no load	±0.25%	±0.10%	±0.25%	±0.10%	—	±0.10%	±(0.01%)

Dimensions & Footprints

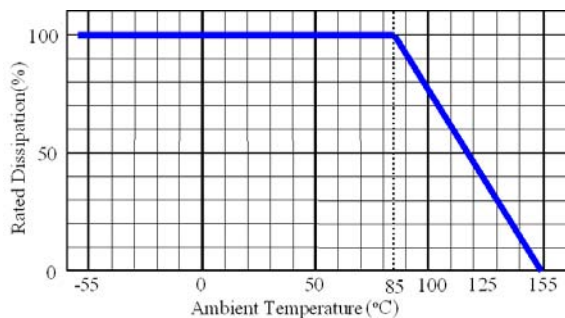


Dimensions inch (mm)				
	L	W	P	T
R G 1005	.040 ± .002 (1.0 ± 0.05)	.020 ± .002 (0.5 ± 0.05)	.008 ± .004 (0.2 ± 0.1)	.014 ± .002 (0.35 ± 0.05)
R G 1608	.063 ± .008 (1.6 ± 0.2)	.031 ± .008 (0.8 ± 0.2)	.012 ± .008 (0.3 ± 0.2)	0.016 ± .004 (0.4 ± 0.1)
R G 2012	.079 ± .008 (2.0 ± 0.2)	.049 ± .008 (1.25 ± 0.2)	.016 ± .008 (0.4 ± 0.2)	0.016 ± .004 (0.4 ± 0.1)
R G 3216	.126 ± .008 (3.2 ± 0.2)	.063 ± .008 (1.6 ± 0.2)	.02 ± .01 (0.5 ± 0.25)	0.016 ± .004 (0.4 ± 0.1)

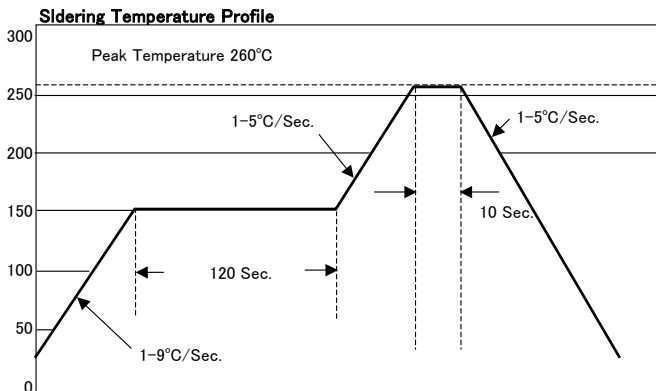
Dimensions (mm)			
	a	b	c
R G 1005	0.5	1.6	0.6
R G 1608	1.0	3.0	1.2
R G 2012	1.2	4.0	1.7
R G 3216	2.0	5.0	2.0

Power Derating Curve

:For operation above 85degC, power rating must be derated according to the following chart



Recommended Reflow Curve



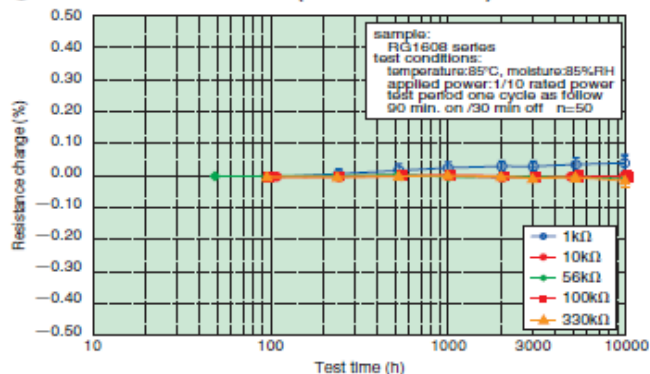
Ordering information

RG	1608	N	104	W	T5
TYPE	Size	TCR	R-Values	Tolerance	Package
	1005 1608 2012 3216	V=5ppm/°C N=10ppm/°C P=25ppm/°C Q=50ppm/°C R=100ppm/°C	3 digits for E24 series (Ex.104=100K ohm) 4 digits for E96 series (Ex.4992=49.9K ohm)	P=0.02% W=0.05% B=0.1% C=0.25% D=0.5%	T1=1000 T5=5000

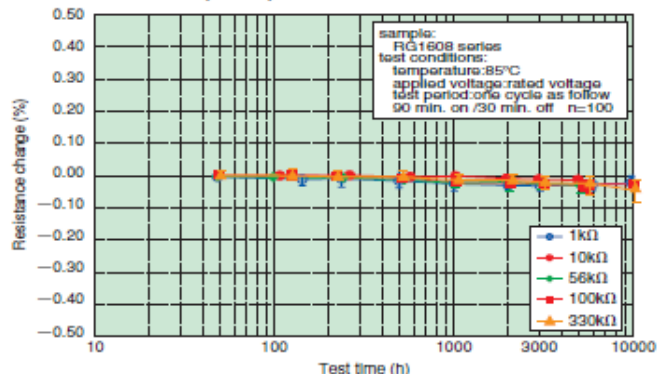
Ultra precision 0.02%, 0.05%, 0.1%, 0.25%, 0.5%, tolerance
Thin Film Chip Resistor

Reliability Test Data

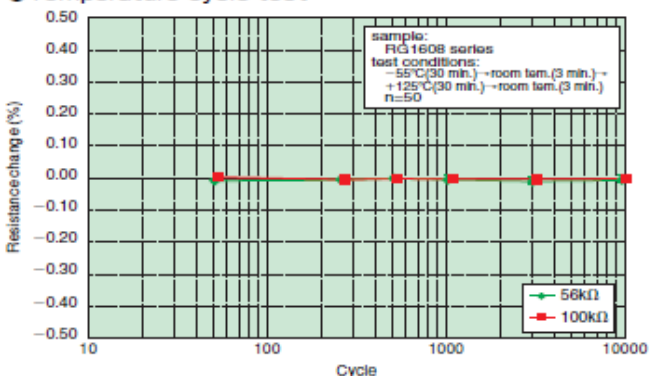
● Moisture and life test (THB 85°C 85%)



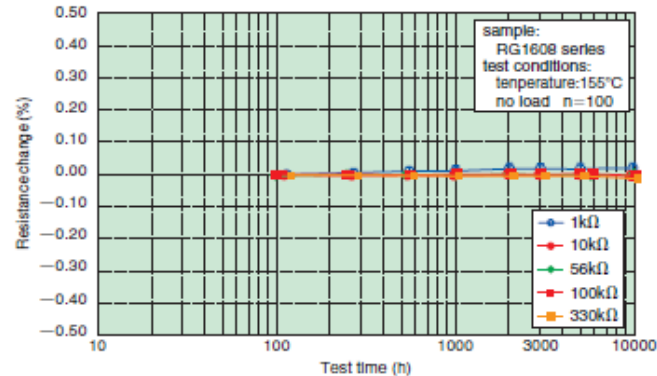
● Load life test (85°C)



● Temperature cycle test



● High temperature expose test (155°C)



Tape & Reel Dimensions (mm)

Type	A	B	E	F	W	P ₀	P ₁	P ₂	t ₁
RG1005	0.63 ± 0.05	1.13 ± 0.05	1.75 ± 0.1	3.5 ± 0.05	8.0 ± 0.3	4.0 ± 0.1	2.0 ± 0.05	2.0 ± 0.05	0.43 ± 0.05
RG1608	1.1 ± 0.1	1.9 ± 0.1					4.0 ± 0.1		0.6 ± 0.05
RG2012	1.65 ± 0.2	2.4 ± 0.2							0.75 ± 0.05
RG3216	1.9 ± 0.1	3.5 ± 0.1							1.0 ± 0.2

