

FEATURES

- High Reliability and Excellent Stability at different environmental conditions
- Low noise, THIN FILM(NiCr) construction
- EIA Standard case size(0402, 0603, 0805, 1206)
- RoHS Compliance and 100% Lead-Free (Matte Sn termination finished)

APPLICATIONS

- Automotive
- Test & Measurement
- Optical & Telecommunication
- Medical and Industrial Equipment

Electrical Specification

Type	Size	Power Rating ar 85 °C		Resistance Tolerance (Code)	Resistance Rnage (ohm)	Temperature Coefficient (Code)	Max. operating Voltage	Resistance Vaues (E-series)	Packaging
		Regular	Ultra Reliability			(ppm/°C)			
RG1005	0402	0.063W	0.032W	±0.01% (L)	240 - 3.9K	5 (V)	25V	E-24, E-96	T05:500pcs T1:1000pcs
RG1608	0603	0.1W	0.063W		240 - 7.5K	5 (V)	75V		
RG2012	0805	0.125W	0.1W		250 - 36K	5 (V) 2 (L)	150V		
RG3216	1206	0.25W	0.125W		250 - 68K	5 (V) 2 (L)	200V		

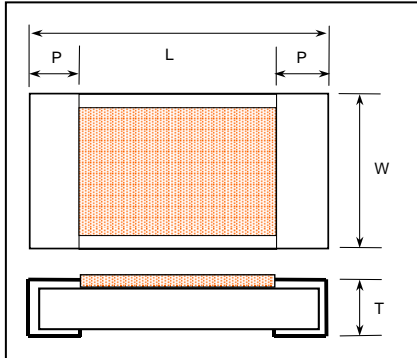
Reliability Test Data

Item	Test Methode	Performance of High Reliability		
		Rgluar	Ultra-Reliability	Typical
Short Time Overload	2.5 times of Rated Load X 5sec.	+/- 0.05%	+/- 0.05%	+/- 0.01%
Load Life	85°C Rated Load 90min. On/ 30min. Off per Cycle X1000	+/- 0.25%	+/- 0.1%	+/- 0.01%
Temp. Hum. Biasa	85°C 85% RH 1/10 power loaded 90min. On/ 30min. Off per Cycle X1000	+/- 0.25%	+/- 0.1%	+/- 0.05%
Temperature Cycles	-55°C (30min)/room temp.(2min) / +125°C(30min)/room temp.(2min) No Load per Cycle X1000	+/- 0.1%	+/- 0.1%	+/- 0.05%
High Temperature	155°C for 1000h with No Load	+/- 0.1%	+/- 0.1%	+/- 0.01%

Remarks: Depending on customer's reliability requirements, power rating between high power, regular power and low power can be selected.

Dimensions & Footprints

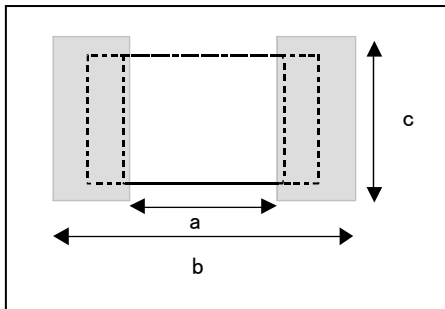
Dimensions inch (mm)



	L	W	P	T
RG1005	.040±.002 (1.0 ± 0.05)	.020±.002 (0.5 ± 0.05)	.008±.004 (0.2 ± 0.1)	.014±.002 (0.35 ± 0.05)
RG1608	.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)
RG2012	.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)
RG3216	.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)

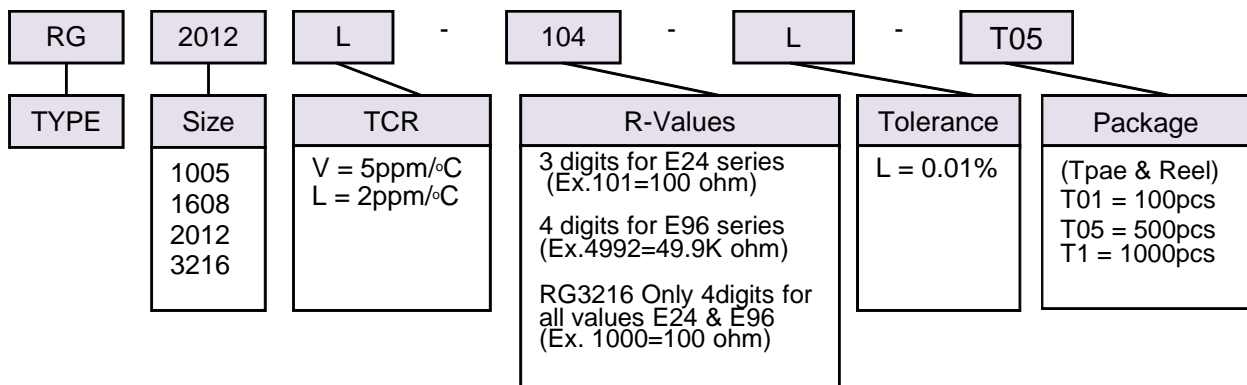
Recommended Mounting Footprints

Dimensions (mm)



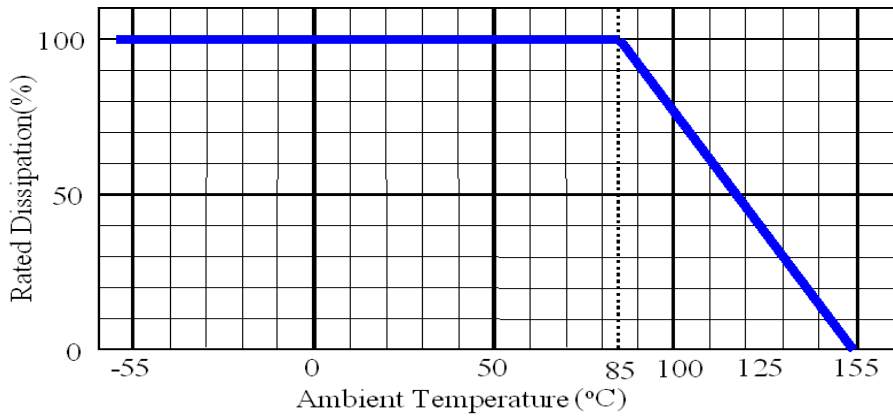
	a	b	c
RG1005	0.5	1.6	0.6
RG1608	1.0	3.0	1.2
RG2012	1.2	4.0	1.7
RG3216	2.0	5.0	2.0

Ordering information

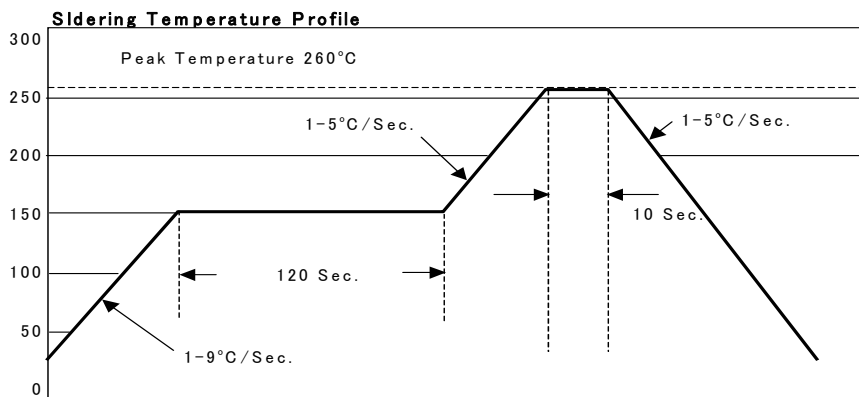


Power Derating Curve

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

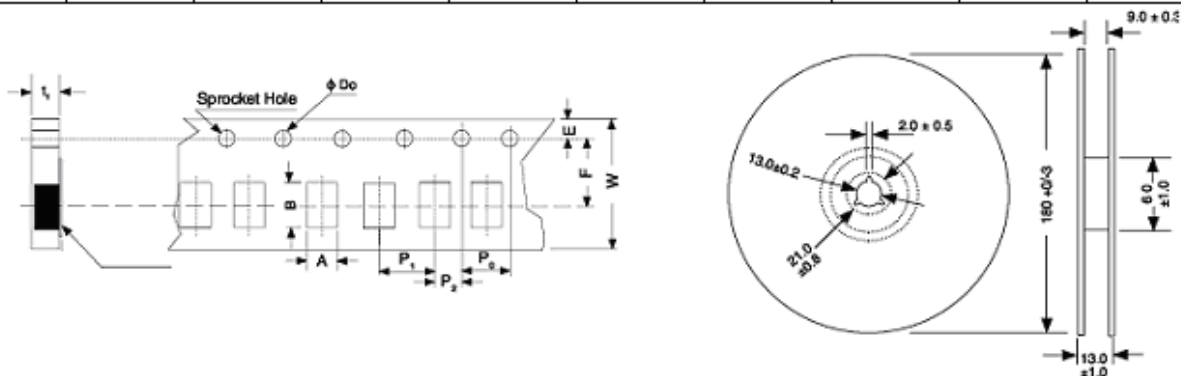


Recommended Reflow Curve



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					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		



Mouser Electronics

Authorized Distributor

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[RG1005V-101-W-T1](#) [RG1005V-101-W-T5](#) [RG1005V-1020-B-T1](#) [RG1005V-1020-B-T5](#) [RG1005V-1020-C-T10](#)
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