

**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		

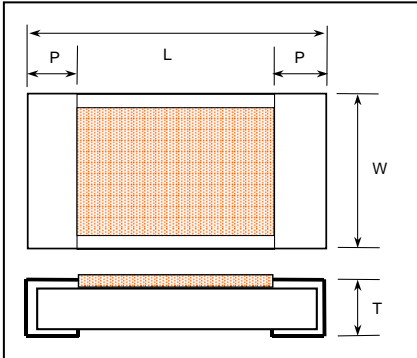
**Reliability Test Data**

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

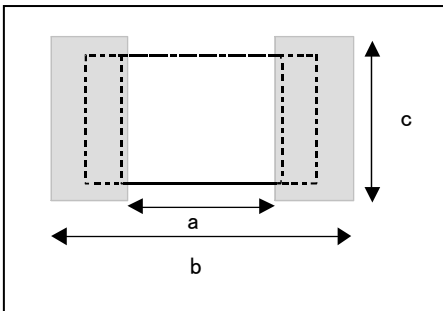
Dimensions inch (mm)



	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)

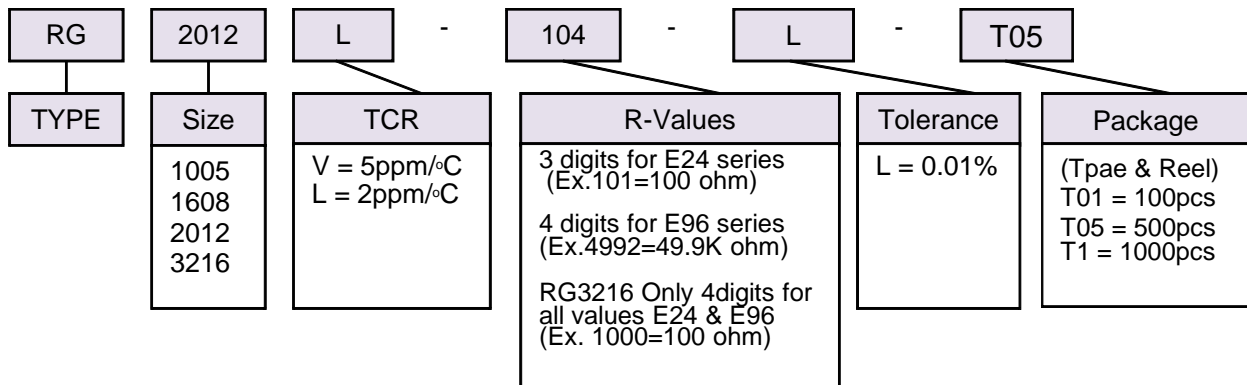
Recommended Mounting Footprints

Dimensions (mm)



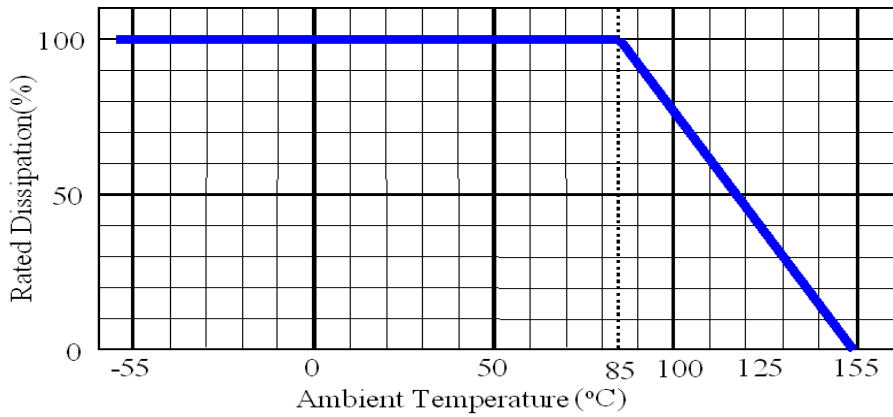
	a	b	c
RG1005	0.5	1.6	0.6
RG1608	1.0	3.0	1.2
RG2012	1.2	4.0	1.7
RG3216	2.0	5.0	2.0

Ordering information

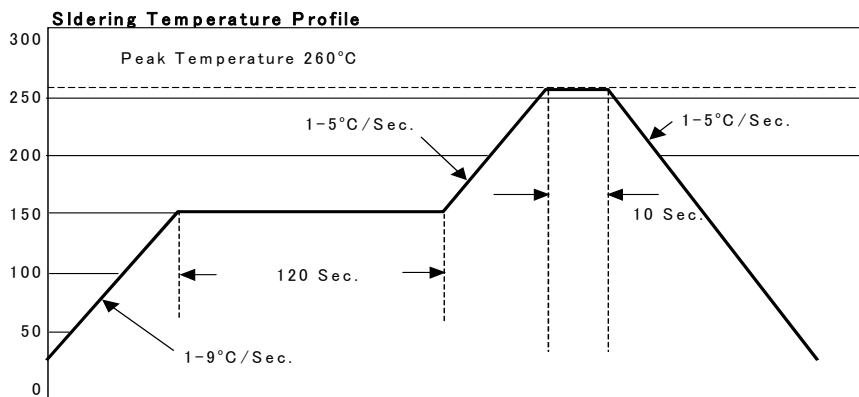


### Power Derating Curve

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

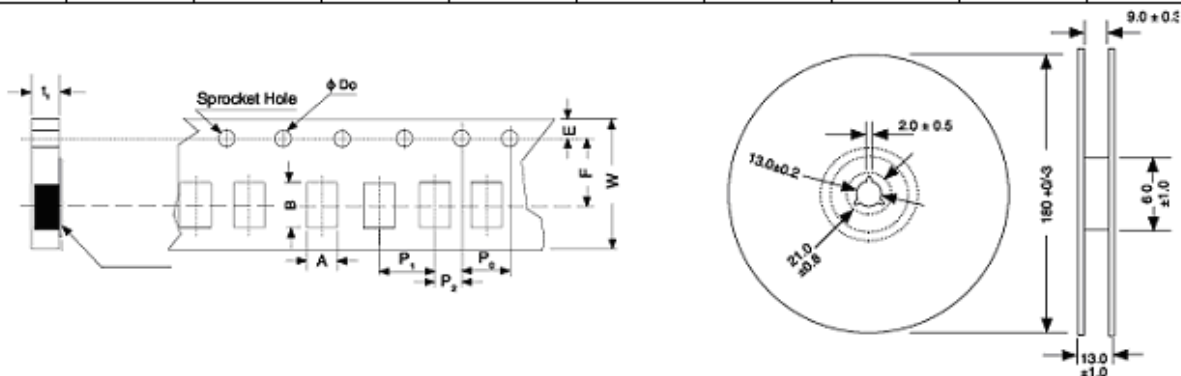


### Recommended Reflow Curve



### Tape & Reel Dimensions (mm)

Type	A	B	E	F	W	P <sub>0</sub>	P <sub>1</sub>	P <sub>2</sub>	t <sub>1</sub>
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		



This RG1005PB Kit includes below items

- |                     |                     |                     |                     |
|---------------------|---------------------|---------------------|---------------------|
| 1 RG1005P-470-B-T5  | 21 RG1005P-331-B-T5 | 41 RG1005P-222-B-T5 | 61 RG1005P-153-B-T5 |
| 2 RG1005P-510-B-T5  | 22 RG1005P-361-B-T5 | 42 RG1005P-242-B-T5 | 62 RG1005P-163-B-T5 |
| 3 RG1005P-560-B-T5  | 23 RG1005P-391-B-T5 | 43 RG1005P-272-B-T5 | 63 RG1005P-183-B-T5 |
| 4 RG1005P-620-B-T5  | 24 RG1005P-431-B-T5 | 44 RG1005P-302-B-T5 | 64 RG1005P-203-B-T5 |
| 5 RG1005P-680-B-T5  | 25 RG1005P-471-B-T5 | 45 RG1005P-332-B-T5 | 65 RG1005P-223-B-T5 |
| 6 RG1005P-750-B-T5  | 26 RG1005P-511-B-T5 | 46 RG1005P-362-B-T5 | 66 RG1005P-243-B-T5 |
| 7 RG1005P-820-B-T5  | 27 RG1005P-561-B-T5 | 47 RG1005P-392-B-T5 | 67 RG1005P-273-B-T5 |
| 8 RG1005P-910-B-T5  | 28 RG1005P-621-B-T5 | 48 RG1005P-432-B-T5 | 68 RG1005P-303-B-T5 |
| 9 RG1005P-101-B-T5  | 29 RG1005P-681-B-T5 | 49 RG1005P-472-B-T5 | 69 RG1005P-333-B-T5 |
| 10 RG1005P-111-B-T5 | 30 RG1005P-751-B-T5 | 50 RG1005P-512-B-T5 | 70 RG1005P-363-B-T5 |
| 11 RG1005P-121-B-T5 | 31 RG1005P-821-B-T5 | 51 RG1005P-562-B-T5 | 71 RG1005P-393-B-T5 |
| 12 RG1005P-131-B-T5 | 32 RG1005P-911-B-T5 | 52 RG1005P-622-B-T5 | 72 RG1005P-433-B-T5 |
| 13 RG1005P-151-B-T5 | 33 RG1005P-102-B-T5 | 53 RG1005P-682-B-T5 | 73 RG1005P-473-B-T5 |
| 14 RG1005P-161-B-T5 | 34 RG1005P-112-B-T5 | 54 RG1005P-752-B-T5 | 74 RG1005P-513-B-T5 |
| 15 RG1005P-181-B-T5 | 35 RG1005P-122-B-T5 | 55 RG1005P-822-B-T5 | 75 RG1005P-563-B-T5 |
| 16 RG1005P-201-B-T5 | 36 RG1005P-132-B-T5 | 56 RG1005P-912-B-T5 | 76 RG1005P-623-B-T5 |
| 17 RG1005P-221-B-T5 | 37 RG1005P-152-B-T5 | 57 RG1005P-103-B-T5 | 77 RG1005P-683-B-T5 |
| 18 RG1005P-241-B-T5 | 38 RG1005P-162-B-T5 | 58 RG1005P-113-B-T5 | 78 RG1005P-753-B-T5 |
| 19 RG1005P-271-B-T5 | 39 RG1005P-182-B-T5 | 59 RG1005P-123-B-T5 | 79 RG1005P-823-B-T5 |
| 20 RG1005P-301-B-T5 | 40 RG1005P-202-B-T5 | 60 RG1005P-133-B-T5 | 80 RG1005P-913-B-T5 |
|                     |                     |                     | 81 RG1005P-104-B-T5 |