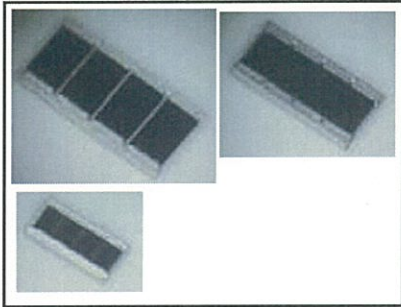


Fixed metal thin film chip resistors rectangular type
(Reliability and long electrode type)



FEATURES

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

APPLICATIONS

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

Electrical Specification

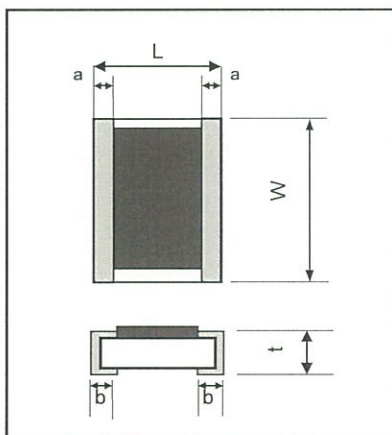
Type	Size (in inch)	Power Rating	Resistance Tolerance (Code)	Resistance Range (ohm) *E24 & E96 series R value	Temperature Coefficient (Code) *1)	Packaging (Code)
PRG3216	1206	1.0W	±0.1%(B)	3.6 - 200k	±25ppm/°C(P) ±50ppm/°C(Q)	Tape & Reel (T&R) 10 = 1000pcs 50 = 5000pcs
			±0.5%(D)	1.0 - 200k		
PRG5025	1909	1.5W~2.0W	±0.1%(B)	3.6 - 200k		
			±0.5%(D)	1.0 - 200k		
PRG6432	2412	2.0W~3.0W	±0.1%(B)	3.6 - 200k		
			±0.5%(D)	1.0 - 200k		10 = 1000pcs 40 = 4000pcs

*1) Assurance temperature range: -20°C~125°C

Reliability Test Data

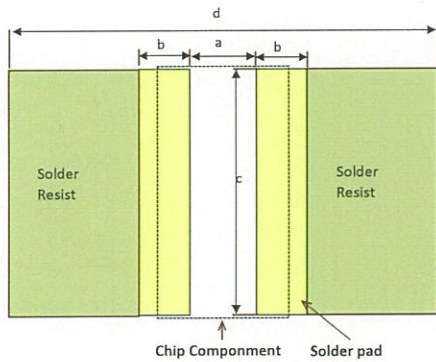
Item	Test Method (JIS G5201-1)	Δ R Limits
Short Time Overload	2.5 times of Rated Load for 5sec.	Under 47 Ω ±(0.1%+0.01 Ω) 47 Ω and more ±(0.05%+0.01 Ω)
Load Life	70°C Rated Load 90min. On/ 30min. Off for 1000hrs.	Under 47 Ω ±(0.25%+0.05 Ω) 47 Ω and more ±(0.1%+0.01 Ω)
Temp. Hum. Bias	85°C 85% RH 1/10 power loaded 90min. On/ 30min. Off for 1000hrs.	
Thermal Shock	-55°C (30min)/room temp.(2min) /+125°C(30min)/room temp.(2min) No Load per Cycle X 1000 cycle	
High Temperature	155°C for 1000h, no bias.	

Dimensions & Footprints



Type Codeletter	Dimension (mm)		
	PRG3216	PRG5025	PRG6432
W	3.2+0.4/-0.2	5.0±0.2	6.4+0.2/-0.4
L	1.6±0.2	2.5±0.2	3.2±0.2
t	0.4±0.1	0.5±0.1	0.5±0.1
a	0.3±0.2	0.4±0.2	0.5±0.2
b	0.4±0.2	0.6±0.1	0.6±0.1

Recommended Mounting Footprints



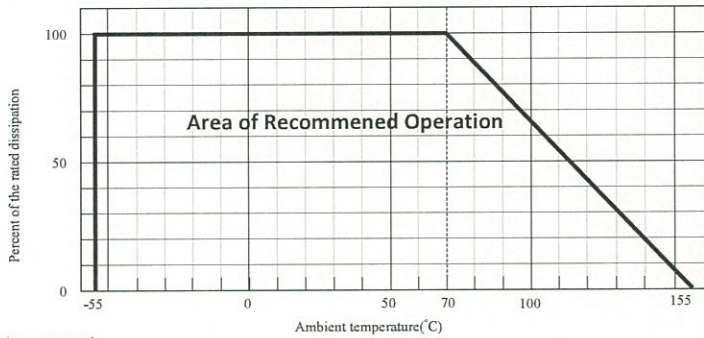
TYPE	Dimension (mm)			
	a	b	c	d (*1) (Reference value)
PRG3216	0.8±0.1	1.1±0.1	3.8±0.1	27mm or more
PRG5025	1.3±0.1	1.6±0.1	5.4±0.1	27mm or more
PRG6432	2.0±0.1	2.1±0.1	6.8±0.1	27mm or more

(*1) Please provide a design that takes into account the heat dissipation of the product.

Power Derating Curve

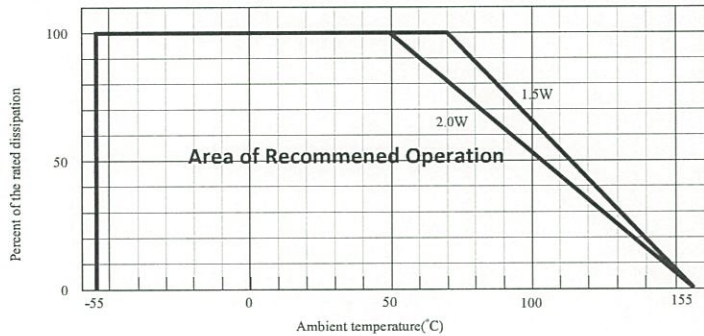
(PRG3216)

For operation above 70degC, power rating must be derated according to the following chart. However, the need to reduce the power to check the electrode temperature is in actual use.



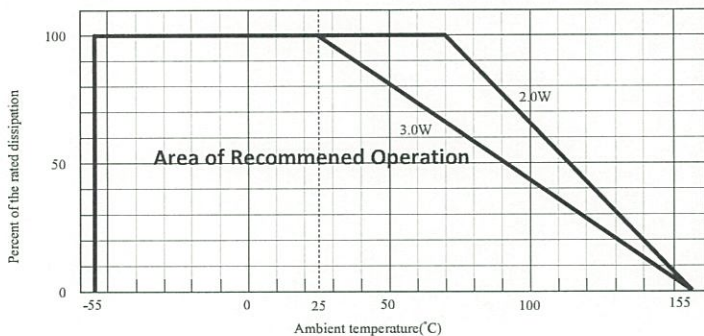
(PRG5025)

For operation above 1.5W:70degC, 2.0W:50degC, power rating must be derated according to the following chart. However, the need to reduce the power to check the electrode temperature is in actual use.

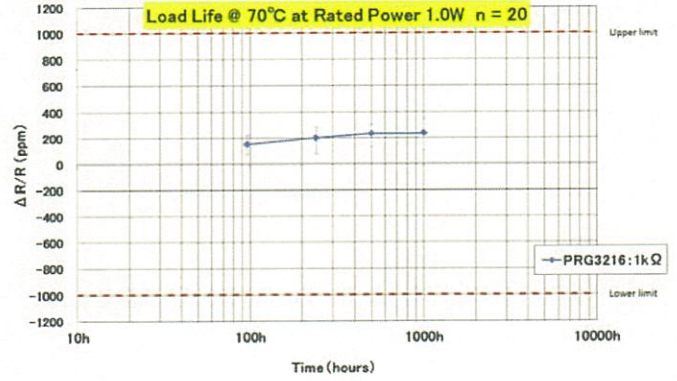
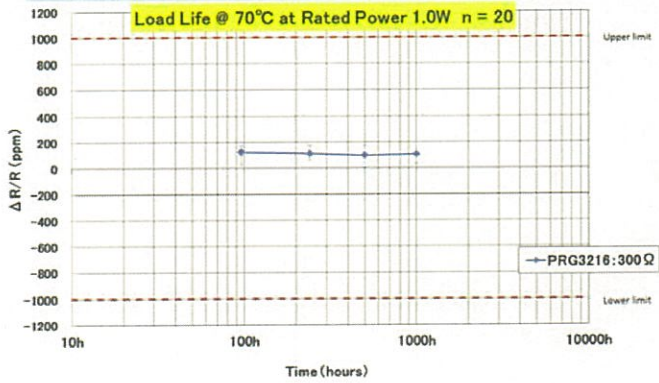


(PRG6432)

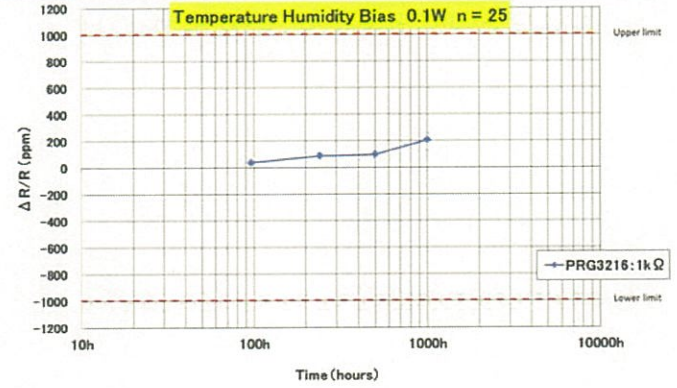
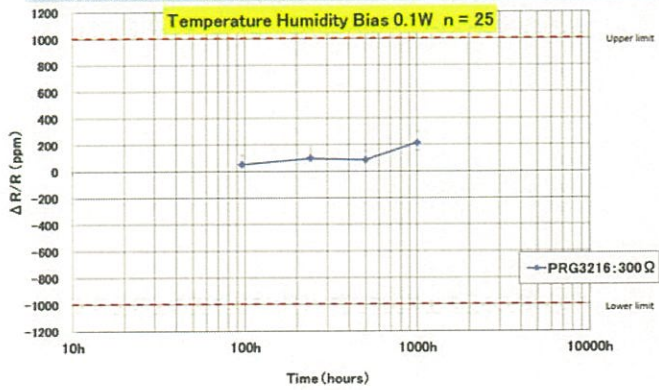
For operation above 2.0W:70degC, 3.0W:25degC, power rating must be derated according to the following chart. However, the need to reduce the power to check the electrode temperature is in actual use.



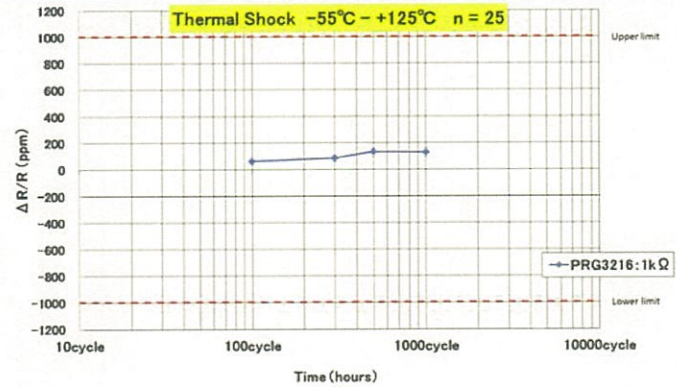
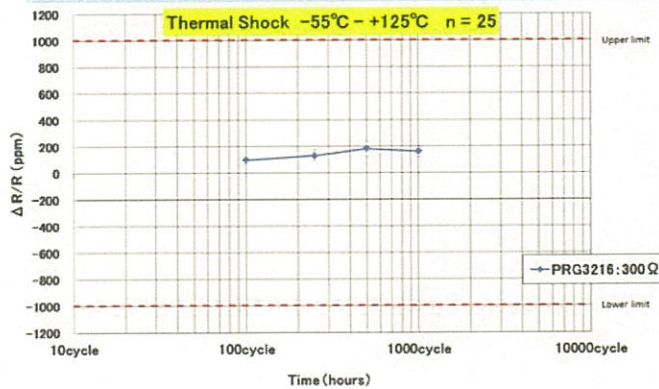
Load Life @ 70°C at Rated Power 1.0W



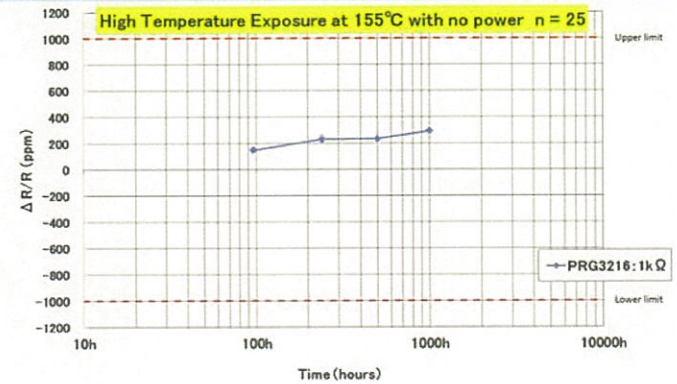
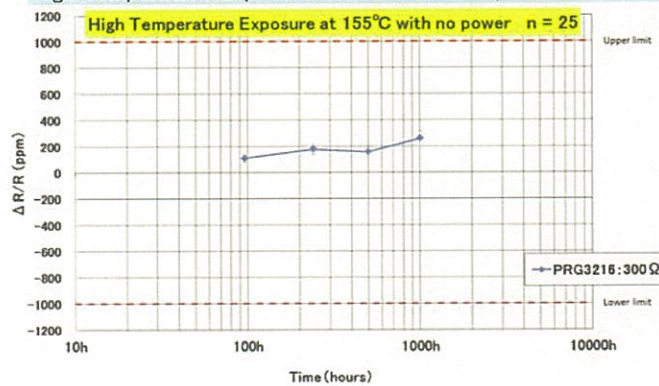
Temperature Humidity Bias



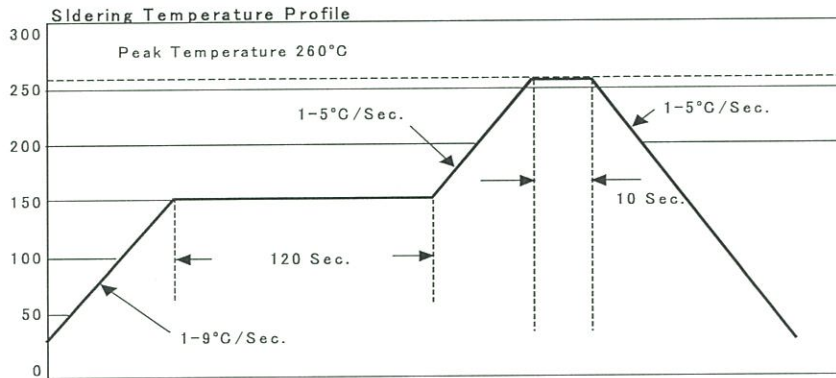
Thermal Shock -55°C - +125°C



High Temperature Exposure at 155°C with no power

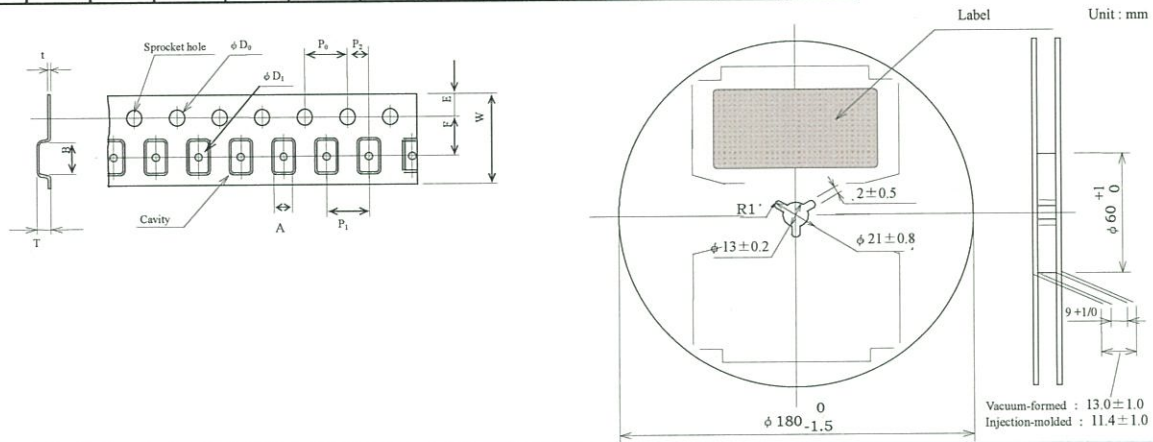


Recommended Reflow Curve

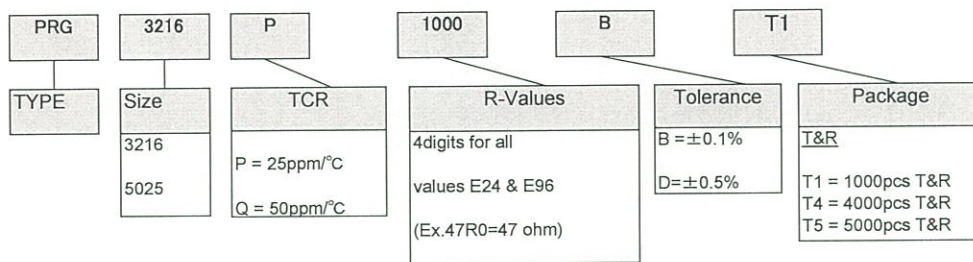


Tape & Reel Dimensions (mm)

TYPE	A	B	W	F	E	P ₀	P ₁	P ₂	D ₀	D ₁	T	t
PRG3216	2.0±0.2	3.6±0.2	8.0±0.3	3.5±0.05	1.75±0.1	4.0±0.1	4.0±0.1	2.0±0.05	1.55±0.05	1.05±0.05	1.5 max	0.3 max
PRG5025	2.8±0.1	5.3±0.1	12.0±0.2	5.5±0.1	1.75±0.1	4.0±0.1	4.0±0.1	2.0±0.05	1.55±0.05	1.1±0.1	1.0±0.1	0.2±0.05
PRG6432	3.5±0.1	6.9±0.1	12.0±0.2	5.5±0.1	1.75±0.1	4.0±0.1	4.0±0.1	2.0±0.05	1.5±0.1/0	1.5±0.1/0	0.75±0.1	0.25±0.05



Ordering information



Notice

For non-standard R-values requests, please contact our technical support.

