Fibre Core Silicone Coated, Radial

Series PGR

Key Features

- 2W to 8W Power Rating.
- Fibre Core Crimped Resistor.
- Direct Insertion on PCB.
- Non-Flammable Construction.
- Conformal Silicone Coating.
- Choice of Low and High Profile Terminals.
- Reference Standards.
  - IEC 115-1

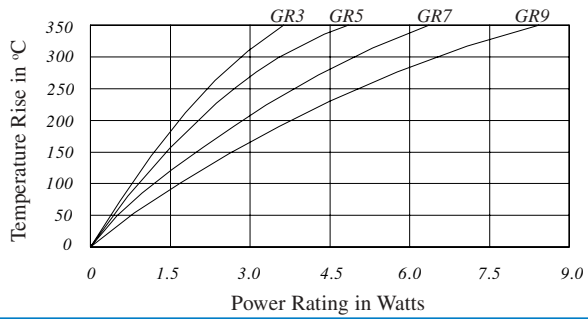
Electrical Specifications and Environmental Characteristics

Type	Power @70°C Watts	Resistance Range for TCRs (Ohms)						Additional Specifications	
		400 ± 50ppm/°C		0^{+40}_{-80} ppm/°C		± 20ppm/°C			
		Min	Max	Min	Max	Min	Max		
GR2	2	0R20	0R30	0R33	47R	56R	3K9		
GR3	4	0R30	0R39	0R47	82R	100R	5K6	Tolerance	5%, 10%
GR5	5	0R47	0R56	0R68	120R	150R	15K	Applicable E-Series	E24, Other Values on Request
GR7	6.5	0R68	0R91	1R0	220R	240R	20K	Derating	From 70°C to 350°C
GR9	8	0R91	1R2	1R3	250R	270R	22K	Max. Voltage	√(P x R)

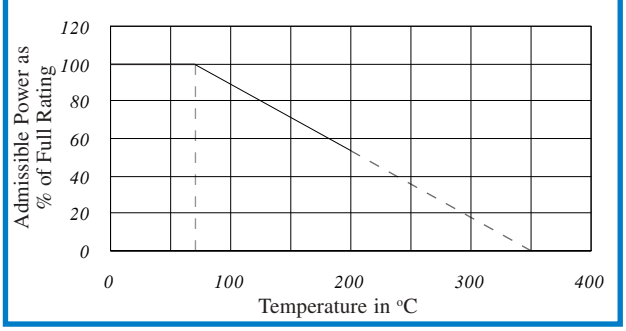
Performance Characteristics

Test Methods	Test Conditions	Test Limits
Terminal Strength	2Kg Pull Test for 10 Seconds, IEC 115-1, Clause 4.16	ΔR < 2% + 0R05
Solderability	As per MIL-STD 202F, Test 208; IEC 115-1, Clause 4.17.3	95% Coverage
Endurance at Rated Temperature	Rated Power @70°C(1.5hrs ON,0.5hrs OFF), IEC 115-1, Clause 4.25	ΔR < 5% + 0R05
Damp Heat Steady State	90-95% RH @40°C Ambient Temperature for 56days, IEC 115-1, Clause 4.24	ΔR < 5% + 0R05
Resistance to Soldering Heat	10 Seconds Dip in solder Bath at 260°C, IEC 115-1, Clause 4.18	ΔR < 1% + 0R05
Climatic Sequence	As per IEC 115-1, Clause 4.23	ΔR < 5% + 0R05

Temperature Rise Graphs

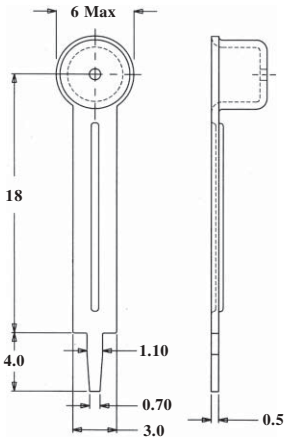


Derating Curve[2]



Dimensions

D Tag



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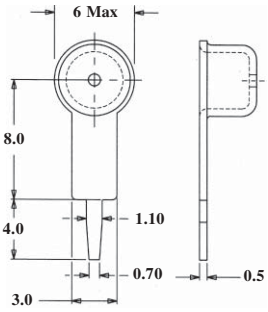
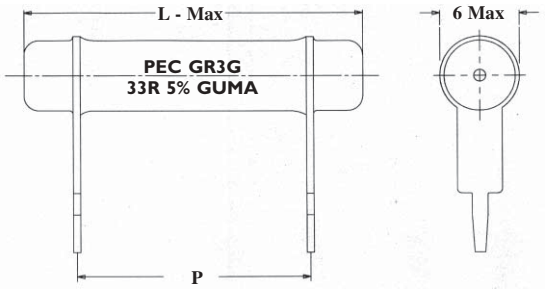


Do not Scale Drawings.
All dimensional tolerances in mm.

Type	P		L - Max	
	mm	Inches	mm	Inches
GR2	10.2 ± 1.0	0.401 ± 0.039	20.2	0.795
GR3	15.0 ± 1.0	0.590 ± 0.039	25.3	0.996
GR5	25.4 ± 1.0	1.000 ± 0.039	35.4	1.394
GR7	35.6 ± 1.0	1.401 ± 0.039	45.5	1.791
GR9	45.7 ± 1.0	1.799 ± 0.039	55.7	2.193



To Order - Please Specify

PEC Type.	Ohmic Value	Tolerance	Packing Style	Release Condition	Special Requirements
GR3*	0.1 Ohm » 0R1 / R10 1 Ohm » 1R0 1 KOhm » 1K0 10.7 KOhm » 10K7	5% » J 10% » K	Bulk » B	Commercial » X	Standard » S Others » M Please Specify

A Sample Part No.: GR3G 33R JBXS

* Specify 'D' & 'G' For D & G Tags resp. after the PEC Type

Application Notes

1 On request we undertake tests for Batch Acceptance to a specified Reference Standard.

2 The Derating Curve specifies the maximum allowable Power at a particular ambient temperature while ensuring that the maximum surface temperature remains within the designed limit.

3 When the Resistor is subjected to a Pulse Load, please ensure that the *average* Power dissipated remains below the rated Power specified.

4 Resistor performance with Pulse Loads will have to be application tested. Please utilise our Pulse Application Questionnaire for selecting a suitable type or for requesting any design-in assistance from us.

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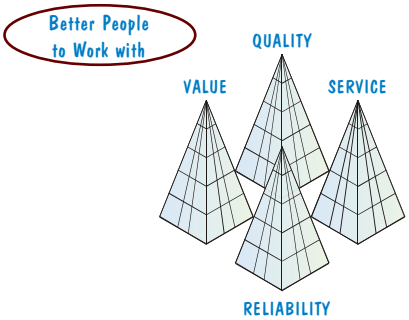

Thoughtful engineering and production by a well trained work-force, backed by strong design and development skills, enable us to maintain a level of manufacture and service recognised internationally.

At PEC we offer well-tuned customised support.

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