Precision Electronic Components Mfg. Co.

Wirewound Resistors



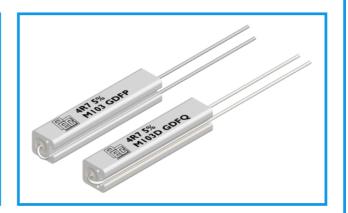


Slotted Ceramic Cased, Vertical Mounting / Dual Mounting

Series PGM/PGMD

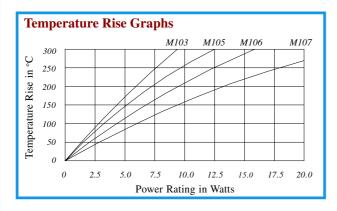
Key Features

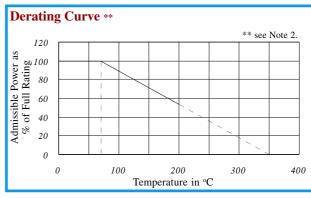
- 4W to 17W Power Rating, Ceramic Encased.
- PGM Lead Through Hole for Vertical Mounting.
- PGMD-Long Lead for Horizontal & Vertical Mounting.
- High Insulation Resistance.
- · High Surge Versions.
- Low Surface Temperature.
- · Reference Standards.
 - IEC 115-1



Electrical Specifications and Environmental Characteristics Type Power Ohmic Range **Additional Specifications** @70°C Ohms Watts Standard < $10\Omega \pm 10\%$, > $10\Omega \pm 5\%$, On Request $\pm 2\%$ Min Max Tolerance M101/M101D 4 0R1 6K8 Applicable E-Series E24(5%), E12(10%); Other Values on Request M102/M102D 0R33 10K Derating From 70°C to 350°C M103/M103D 7 0R47 22K TCR -Low Values, IEC 115-1, 4.8.4.2, 2.2.20.2 450ppm/°C (Max) M104/M104D Std.:<150ppm/°C; On Request: 50ppm/°C, 20ppm/°C TCR -Mid Values & High Values 0R33 10K M105/M105D 0R47 22K -55°C to 200°C Temperature Range M106/M106D 0R82 22K Climatic Category M107/M107D 1R5 27K Solvent Resistance As per IEC 115.1- Clause 4.30(Test XA of IEC-68-2-45)

Performance Characteristics						
Test Methods	Test Conditions	Test Limits				
Insulation Resistance	At 500V DC, IEC115-1, Clauses-4.6, 2.2.19	10000 ΜΩ				
Dielectric Strength	2000V peak for 1 min, IEC 115-1, Clause 2.2.17	No Break Down				
Terminal Strength	Tensile Test, IEC115-1, Clause 4.16, Test Uai, IEC68-2-21	>50N				
Solderability	As per MIL-STD 202F, Test 208, IEC 115, Clause 4.17.3	95% Coverage				
Endurance at Rated Temperature	Rated Power @70°C(1.5hrs ON,0.5hrs OFF), IEC115-1, Clause 4.25	$\Delta R < 5\% + 0R05$				
Damp Heat Steady State	90-95% RH @40°C Ambient Temperature for 56days, IEC115-1, Clause 4.24	$\Delta R < 5\% + 0R05$				
Resistance to Soldering Heat	10 Seconds Dip in Solder Bath at 260°C, IEC115-1, Clause 4.18	$\Delta R < 1\% + 0R05$				
Climatic Sequence	As per IEC 115.1, Clause 4.23	$\Delta R < 5\% + 0R05$				





Dimensions For M104, M105, M106, M107 For M101, M102, M103 PEC M103 4R7 5% GDFP M103D Type PEC M103D 4R7 5% GDFQ PEC M103D 4R7 5% GDFQ

Dimensions (mm)					
Туре	L	W	Н	l	d
		± 0.5	± 0.5	± 3.0	± 0.05
M101/M101D	20.0 ± 1.0	7.0	8.0	32.0	0.80
M102/M102D	25.0 ± 1.0	7.0	8.0	32.0	0.80
M103/M103D	38.0 ± 1.0	7.0	8.0	32.0	0.80
M104/M104D	25.0 ± 1.0	9.0	10.0	32.0	0.80
M105/M105D	38.0 ± 1.0	9.0	10.0	32.0	0.80
M106/M106D	50.0 ± 1.5	9.0	10.0	32.0	0.80
M107/M107D	75.0 ± 2.0	9.0	10.0	32.0	0.80

Dimensions (Inches)					
Туре	L	W	Н	I	d
		± 0.02	± 0.02	± 0.118	± 0.002
M101/M101D	0.787 ± 0.04	0.276	0.315	1.260	0.0314
M102/M102D	0.984 ± 0.04	0.276	0.315	1.260	0.0314
M103/M103D	1.496 ± 0.04	0.276	0.315	1.260	0.0314
M104/M104D	0.984 ± 0.04	0.354	0.394	1.260	0.0314
M105/M105D	1.496 ± 0.04	0.354	0.394	1.260	0.0314
M106/M106D	1.960 ± 0.06	0.354	0.394	1.260	0.0314
M107/M107D	2.950 ± 0.08	0.354	0.394	1.260	0.0314

To Order - Please Specify							
PEC Type.	Ohmic Value	Tolerance	Packing Style	Release Condition	Standard / Non-Std. Leads	TCR	
M101/ M101D	0.1 Ohm	2% » G 5% » J 10% » K	Bulk » B	Commercial » X	Standard » S 38mm / 1.5" » L Others » M	Standard » S Others » M Please Specify	
A Sample Part No.: M101 1K0 JBXSS / M101D 1K0 JBXSS							

Application Notes

Do not Scale Drawings. All dimensional tolerances in mm

- 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.

Delhi, U.P., Punjab, Haryana, Jammu & Kashmir, N. India Prem Verma, Modern Radio Components Co.

Ph. (0)11 2386 5587, 2386 3476, 2541 3343, (0)98 108 35000.

Mumbai, Pune, Western India

S.B. Dhurandar, Vikas R. Kothare, Electronica Sales. Ph. (0)22 2352 0718, 3416 1762. email: eeddcee@vsnl.com

Kolkata, Eastern India

M.W. Haque, Indian Electronics.

Ph. (0)33 2237 2165, 2237 7748, (0)98 312 32412.

Hyderabad, Southern India

R. Ramaswamy, Electronic Agencies. Ph. (0)40 2763 1919.

Factory Representatives

Delhi:

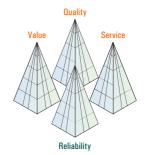
J.R. Logani Ph. (0)11 2722 0767.

Bangalore

S.P. Bhandarkar Ph. (0)80 310 3330.

Chennai: K. Natarajan Ph. (0)44 2461 4436.

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

At PEC we aim to offer finely tuned customised support to you.