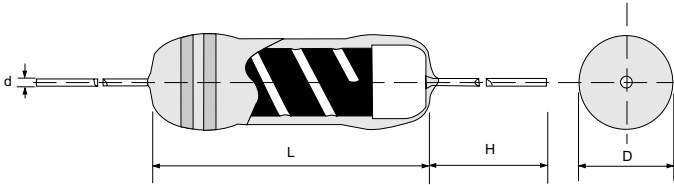


PWR Power Metal Film Resistor

Quality • Reliability
Cost-Down via Innovation.

PWR



Specifications Per

- IEC 60115-1
- MIL-R-10509

Features

- Conformal multi-layer coating
- Color code per MIL & EIA standards
- Special tin-plated electrolytic copper lead wire
- Products meet RoHS requirements and do not contain substances of very high concern identified by European Chemicals Agency

DIMENSIONS

Type	Body Length (L, mm)	Body Diameter (D, mm)	Lead Wire Length (H, mm)	Lead Wire Diameter (d, mm)	Net Weight Per 1000 Pcs
PWR01	6.50 ± 1.0	2.4 ± 0.2	26 ± 3.0	0.60 ± 0.02	220 Grams
PWR02	11.0 ± 1.0	4.0 ± 0.5	28 ± 3.0	0.80 ± 0.03	220 Grams

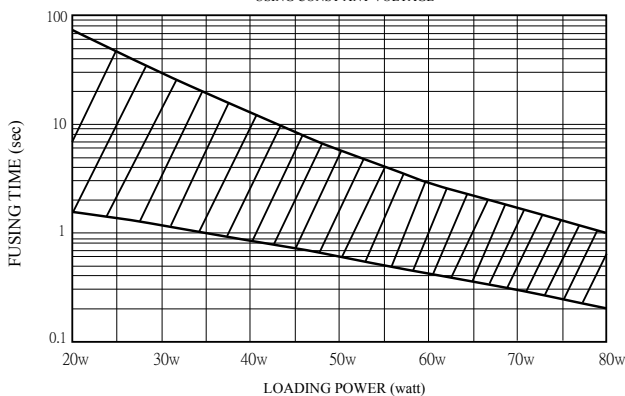
GENERAL SPECIFICATIONS

Type	Power Rating (at 70°C)	Maximum Working Voltage	Maximum Overload Voltage	Minimum Resistance	Maximum Resistance	Resistance Tolerance	Available Resistance Values
PWR01	0.6W	350V	500V	0.22Ω	0.91Ω	±5%	E-24
	1W	350V	500V	1Ω	1MΩ	±5%	E-24
PWR02	1.2W	500V	700V	0.33Ω	0.91Ω	±5%	E-24
	2W	500V	700V	1Ω	1MΩ	±5%	E-24

Special sizes, values, and specifications not listed available on special order.

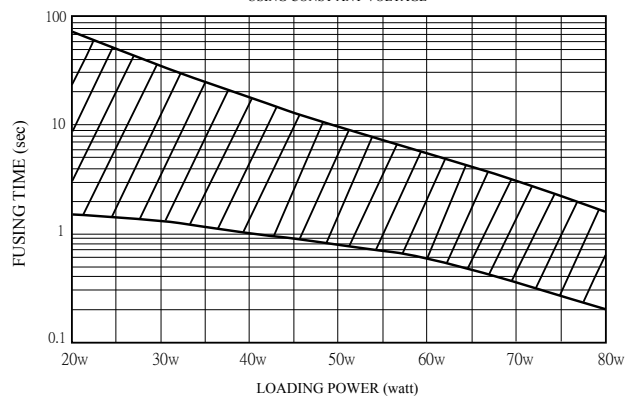
PWR01

FUSING CHARACTERISTICS
USING CONSTANT VOLTAGE



PWR02

FUSING CHARACTERISTICS
USING CONSTANT VOLTAGE



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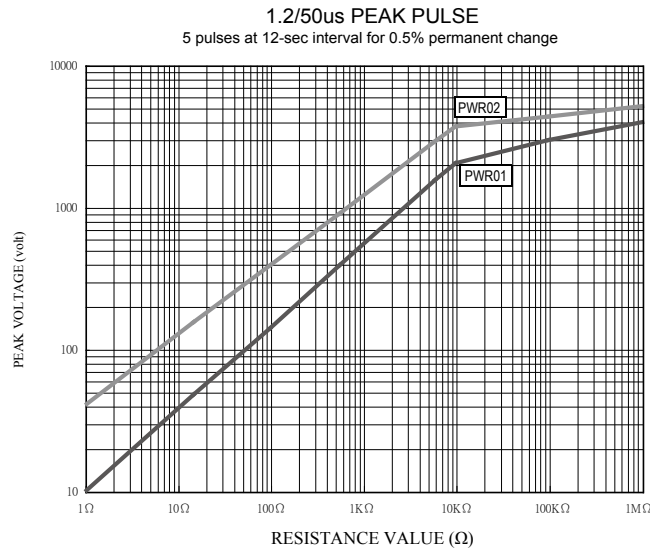
■ PART NUMBER

Example: PWR01J10K0TKZTB5K0

PWR01	J	10K0	TKZ	TB5K0
Type	Tolerance	Resistance	TCR	Packaging
	J (5%)	10KΩ 4-character code containing - 3 significant digits 1 letter multiplier OHM MULTIPLIER R = 1 K = 10 ³ M = 10 ⁶ G = 10 ⁹	3-character code TKZ = Default Product Temperature Coefficient. Information of typical product temperature coefficient can be found in the Technical Summary section of the datasheet.*	5-character code TB = Tape Box (pieces per box) PWR01 5K0 = 5,000 PWR02 1K0 = 1,000

* For the availabilities of non-default temperature coefficient, please check with us. Reference for TCR letter codes can be found in section (4) of Part Number Construction in the Appendices.

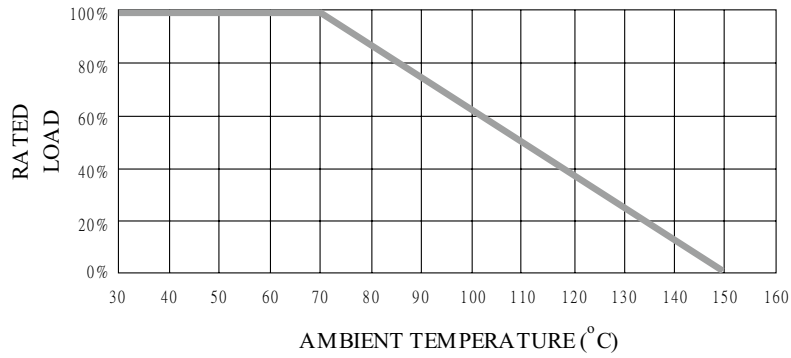
■ SURGE PERFORMANCE



Quality • Reliability
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PWR

■ POWER DERATING CURVE



■ TECHNICAL SUMMARY

Characteristics	Limits
Dielectric Withstanding Voltage, VAC or DC	500
Temperature Coefficient, PPM / °C*	±250
Operating Temperature Range, °C	-55~+150
Insulation Resistance, MΩ	10 ⁴

* Not applicable to all resistance values. Please check with us regarding the PPM of specific resistance value(s).

■ PERFORMANCE SPECIFICATIONS

Characteristics	Test Conditions	Limits
Short Time Over Load	IEC 60115-1 4.13 5 seconds 2.5x rated voltage (not over max. overload voltage)	±3%
Load Life In Humidity	IEC 60115-1 4.24 56 days rated load (not over max. working voltage) at (40±2)°C and (93±3)% relative humidity	±5%
Load Life 1,000 hours	IEC 60115-1 4.25.1 Rated load (not over max. working voltage) with 1.5 hours ON, 0.5 hours OFF, at (70±2)°C	±5%
Resistance To Soldering Heat	IEC 60115-1 4.18.2 Leads immersed till 3mm from the body in (260±5)°C solder for 10±1 seconds	±1%
Solderability	IEC 60115-1 4.17.2 Solder area covered after (235±3)°C/(2±0.2) seconds with flux applied	95% Min.
Vibration	IEC 60115-1 4.22 Six hours in each parallel and axial direction with a simple harmonic motion having an amplitude of 1.52mm and 10 to 2,000 Hz.	±1%
Thermal Endurance	IEC 60115-1 4.25.3 1000 hours at 150°C without load	±3%
Thermal Shock	IEC 60115-1 4.19 -55°C 30minutes, +150°C 30minutes, 5 cycles	±3%