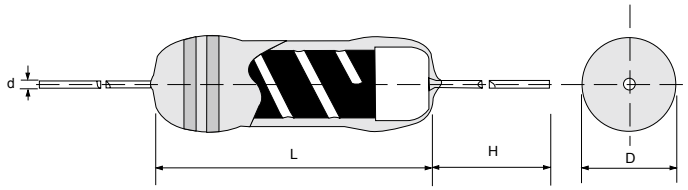
PSR
Power Sink Resistor

Quality • Reliability
Cost-Down via Technology



Specifications Per

- IEC 60115-4
- MIL-11804

Features

- Designed to replace cement resistors
- Reduces assembly cost with feasibility auto insertion
- Enhanced conductive film absorbs pulse noise
- Superior-grade ceramic core dissipates heat efficiently
- Flameproof multi-layer coating meets UL 94 V-0 & overload test UL 1412
- Products meet RoHS requirements and do not contain substances of very high concern identified by European Chemicals Agency

DIMENSIONS

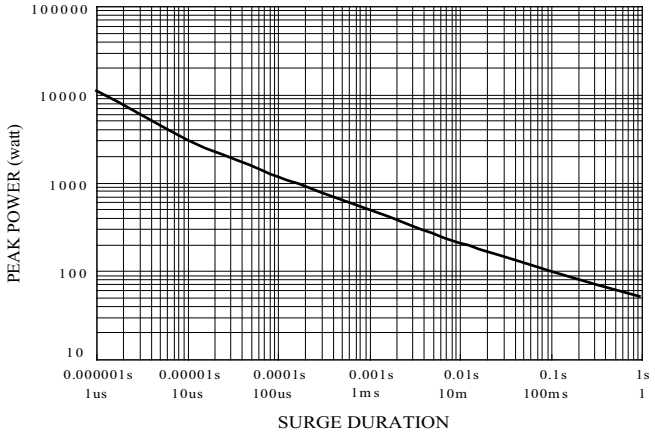
Type	Body Length (L, mm)	Body Diameter (D, mm)	Lead Wire Length (H, mm)	Lead Wire Diameter (d, mm)	Net Weight Per 1000 Pcs
PSR650	24.0 ± 1.0	8.0 ± 0.5	30 ± 3.0	0.8 ± 0.03	3700 Grams

GENERAL SPECIFICATIONS

Type	Power Rating (at 70°C)	Maximum Working Voltage	Maximum Overload Voltage	Maximum Rermissible Surge Voltage	Minimum Resistance	Maximum Resistance	Resistance Tolerance	Available Resistance Values
PSR650	6W	550V	1100V	20KV	1Ω	4.7MΩ	±5%	E-24

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

SURGE PERFORMANCE



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PART NUMBER

Example: PSR650J10K0TKZTB400

PSR650	J	10K0	TKZ	TB400
Type	Tolerance	Resistance	TCR	Packaging
	J (5%)	10KΩ **4-character code** containing - 3 significant digits 1 letter multiplier 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) PSR650 400 = 400

*** 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.**

TECHNICAL SUMMARY

Characteristics	Limits
Power Derating, Linear	100% at < 70°C, zero at 155°C
Dielectric Withstanding Voltage, VAC or DC	1000
Temperature Coefficient, PPM / °C*	±750, ±1200
Operating Temperature Range, °C	-55 ~ +155
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 2X max. working voltage)	±2%	
Load Life In Humidity	**IEC 60115-1 4.24** 56 days rated load at (40±2)°C and (93±3)% relative humidity	±5%	
Load Life 1,000 hours	**IEC 60115-1 4.25.1** Rated load 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	90% Min.	
Vibration	**IEC 60115-1 4.22** Six hours in each parallel and axial direction with a simple harmonic motion having an amplitude of 0.75mm and 10 to 500 Hz.	±1%	
Thermal Endurance	**IEC 60115-1 4.25.3** 1000 hours at 155°C without load	±2%	
Thermal Shock	**IEC 60115-1 4.19** -55°C 30minutes, +155°C 30minutes, 5 cycles	±2%	
Surge Test	Surge voltage = $\sqrt{(1200 \times P \times R)}$ DC P is power rating, R is resistance value, surge voltage is not more than listed at right. Surge spec = 1.2/50μs Period = 1 sec Number of surges = 50	20KV	5%