



Features

- Formerly a Riedon™ product
- Resistances from 0.05 to 5M Ω
- Resistance tolerances to ±1 %
- TCR to ±50 PPM/°C
- Power rating to 200 watts
- TO-227 (TO-238) housing
- High reliability
- RoHS compliant*

Applications

- Power supplies
- Motor drives
- Test and measurement
- Capacitor discharging
- Snubber circuits
- Current limiting

PSD227x Series – Riedon™ Thick Film Power Resistors by Bourns

Electrical Characteristics

| Bourns Model | Power Rating @ 70 °C with Heat Sink | Resistance Range (Ω) | TCR ¹ (PPM/°C) | Tolerance | Thermal Resistance | Dielectric Withstanding Voltage |
|--------------------|-------------------------------------|----------------------|---------------------------|-------------------------------|--------------------|---------------------------------|
| PSD2272, PSD2274 | 100 W | 0.05 to 0.09 Ω | ±300 | ±2 % ±5 % ±10 % | 0.7 K/W | 1500 VDC |
| | | 0.1 to 5 MΩ | ±100 | ±1 % ±2 % ±5 % ±10 % | | |
| PSD2272H, PSD2274H | 200 W | 0.05 to 0.09 Ω | ±300 | ±2 % ±5 % ±10 % | 0.35 K/W | |
| | | 0.1 to 5 MΩ | ±100 | ±1 % ±2 % ±5 % ±10 % | | |

1. ±50 PPM/°C available upon request

Environmental Characteristics

| Specification | Value |
|---|---------------------------------|
| Operating Temperature | -40 °C to +155 °C |
| Inductivity | ≤50 nH |
| Max. Torque Backplate Terminals | 1.5 Nm 1.3 Nm |
| Storage Conditions Temperature Humidity | +5 °C to +35 °C 40 % to 75 % |
| Moisture Sensitivity Level | 1 |



CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant. See www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

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“Riedon Logo” is a registered trademark of BE Services Company, Inc., in the United States.

“Riedon” is a trademark of BE Services Company, Inc.

Additional Information

Click these links for more information:



[PRODUCT](#) [TECHNICAL LIBRARY](#) [INVENTORY](#) [SAMPLES](#) [CONTACT](#)

Packaging Information

Bulk 50 pcs./box

BOURNS®

Americas: Tel: +1 951-781-5500

Email: americus@bourns.com

Mexico: Tel: +52-614-478-0400

Email: mexicus@bourns.com

Asia: Tel: +886-2-2562-4117

Email: asiacus@bourns.com

EMEA: Tel: +36 88 885 877

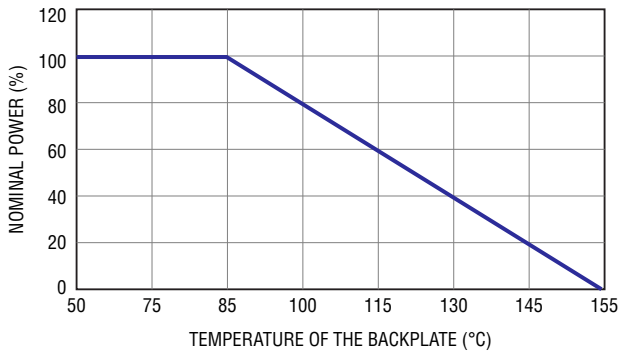
Email: euocus@bourns.com

www.bourns.com

PSD227x Series – Riedon™ Thick Film Power Resistors by Bourns

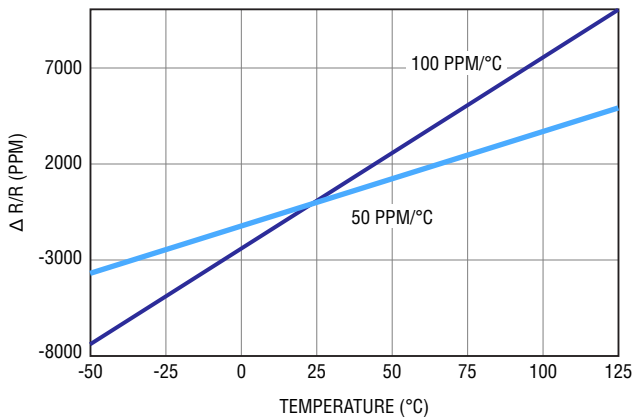


Current Rating Thermal Derating Curve



These resistors must be attached to a suitable heat sink. The maximum internal resistor temperature is +175 °C.

Temperature Coefficient



How To Order

PSD227 2 H - F V - R005 B 1

Model _____
 PSD227

Terminals _____
 2
 4

Power _____
 (blank) = 100 W
 H = 200 W

Resistance Tolerance _____
 F = ±1 % J = ±5 %
 G = ±2 % K = ±10 %

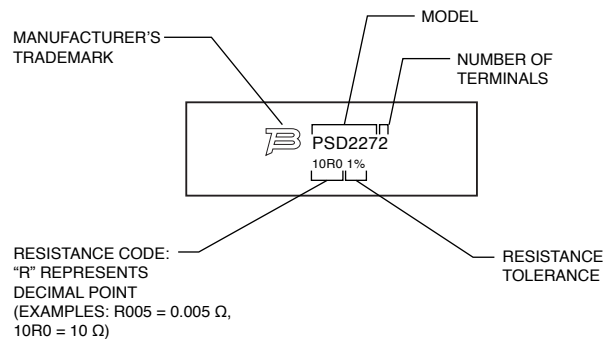
TCR (PPM/°C) _____
 V = ±300
 X = ±100
 Z = ±50

Resistance Value Code _____
 <100 Ω: "R" represents decimal point
 (example: R005 = 0.005 Ω, 5R00 = 5.00 Ω)
 ≥100 Ω: First three digits are significant,
 fourth digit represents number of zeros to follow
 (example: 1000 = 100 Ω, 5001 = 5000 Ω)

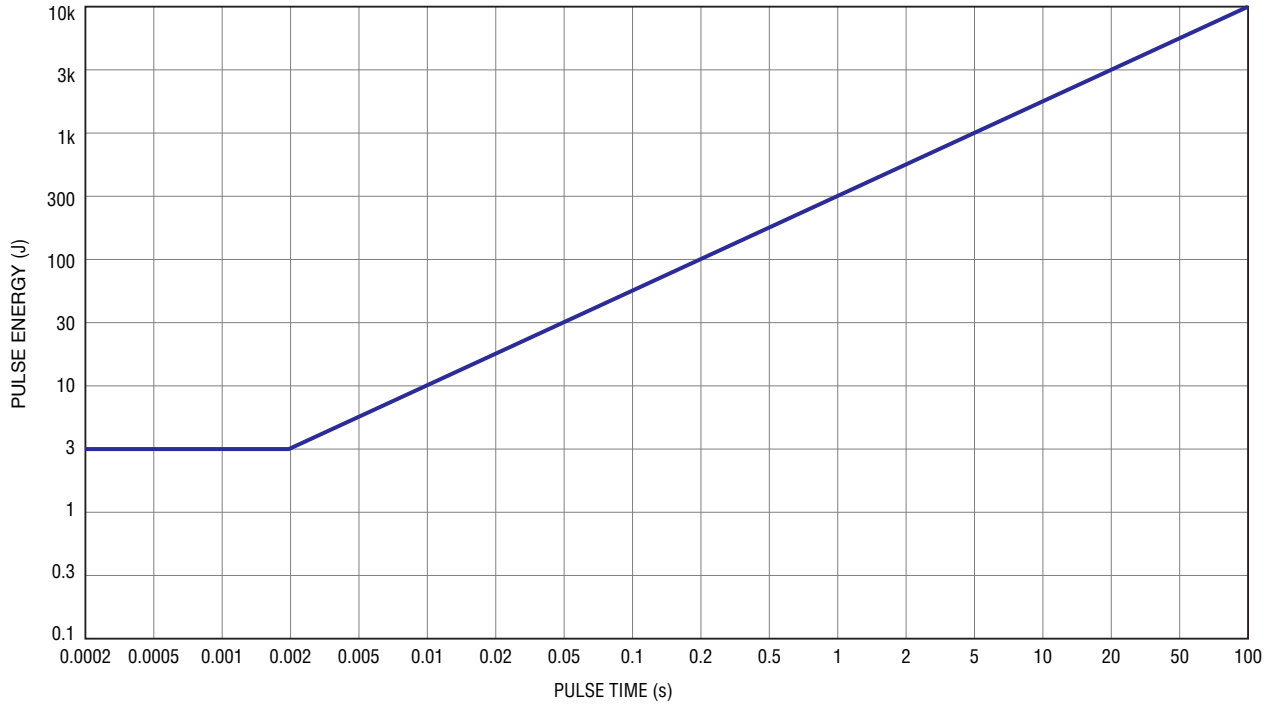
Packaging _____
 B = bulk

Pin Configuration (see Pin Configuration diagrams) _____
 (blank) = standard configuration
 1 = 1-3 configuration
 2 = 2-4 configuration

Typical Part Marking

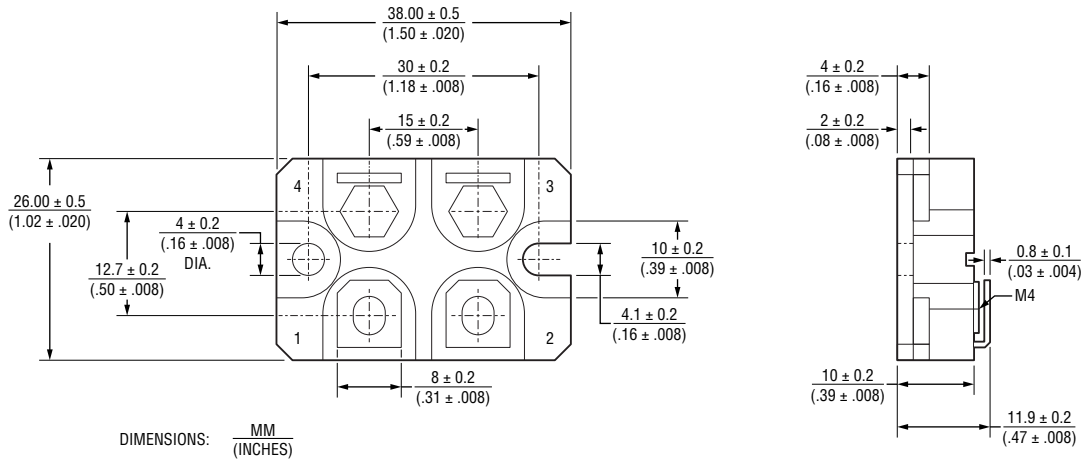


Pulse Stability

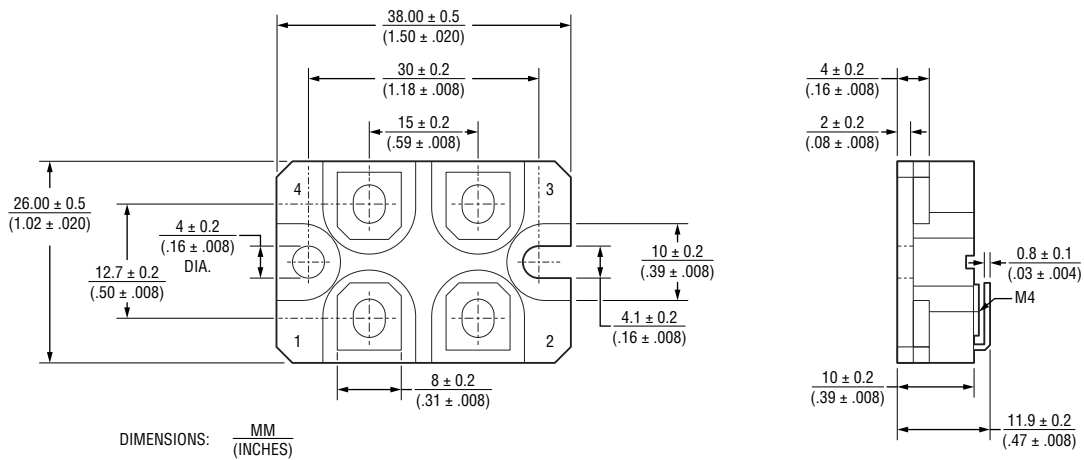


Product Dimensions

PSD2272



PSD2274



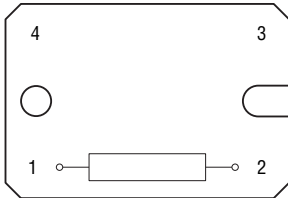
Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

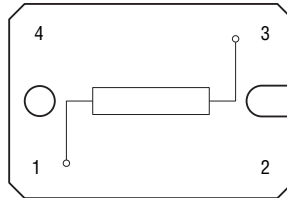
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Pin Configurations

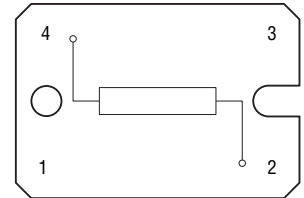
PSD2272



STANDARD CONFIGURATION

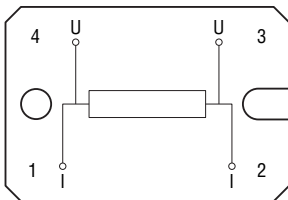


1: 1-3 CONFIGURATION



2: 2-4 CONFIGURATION

PSD2274



STANDARD CONFIGURATION

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