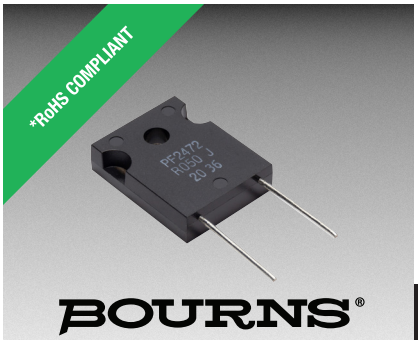


Features

- Formerly a Riedon™ product
- Resistances from 0.1 to 20K ohms
- Power rating to 100 watts
- Resistance tolerances to ±1 %
- High stability film resistance elements
- Back plate isolated from both pins
- Low inductance
- Excellent pulse handling
- TO-247 housing
- RoHS compliant*

PF2472 Series – Riedon™ TO-247 Power Resistors by Bourns

Electrical Characteristics

Characteristic	Model
	PF2472
Power Rating (with heat sink)[1]	100 W
Power Rating (without heat sink)[2]	3 W
Thermal Resistance	1.3 °C/W
Resistance Range[3]	0.1 (min.) to 20K (max.) ohms
Tolerances	±1 % ±5 %
Temperature Coefficient	
Resistive Element	±50 PPM/°C (R ≥ 10 W) ±100 PPM/°C (0.1 W ≤ R < 10 W) ±250 PPM/°C (R < 0.1 W)
With Terminals	±200 PPM/°C (R ≥ 20 Ω) ±300 PPM/°C (0.1 Ω ≤ R < 20 Ω)

Notes:
1. Power rating based on 25 °C flange temperature.
2. Power rating based on 25 °C ambient temperature.
3. Consult factory for higher or lower values.

Additional Information

Click these links for more information:

PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

General Specifications

Temperature Range....-55 °C to +175 °C
Dielectric Strength .....2500 VAC
Max. Operating Voltage
.....700 V or √P*R, whichever is less
Inductance.....50 nH
Insulation Resistance ...>1000 megohms
Terminal Finish .....Tin-plated copper
Mass.....6.3 g
Flammability Rating.....94-V0

Environmental Performance

Specification	ΔR	Test Conditions
Load Life	±1 % + 0.05 Ω	25 °C, 90 min. on, 30 min. off, 1000 hrs.
Humidity Resistance	±1 % + 0.05 Ω	40 °C, 90-95 % RH, DC 0.1 W, 1000 hrs.
Temperature Cycle	±0.25 % + 0.05 Ω	-55 °C for 30 min., +155 °C for 30 min., 5 cycles
Solder Heat	±0.1 % + 0.05 Ω	+350 °C, 3 s.
Vibration	±0.25 % + 0.05 Ω	0.35 mm or 50 m/s², 10 Hz-500 Hz-10 Hz 2 hr./axis

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

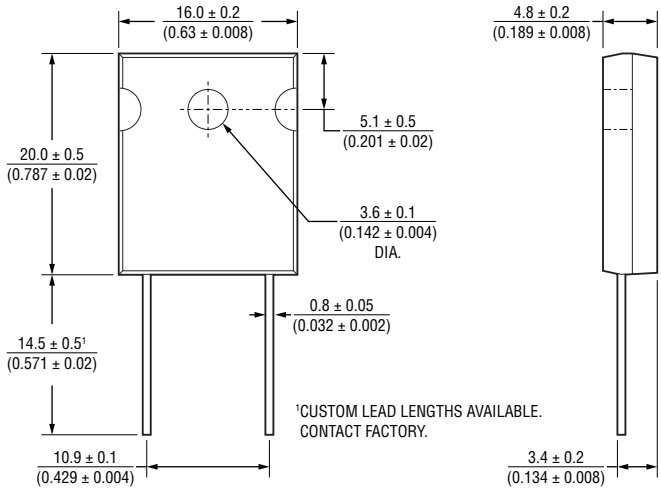
*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

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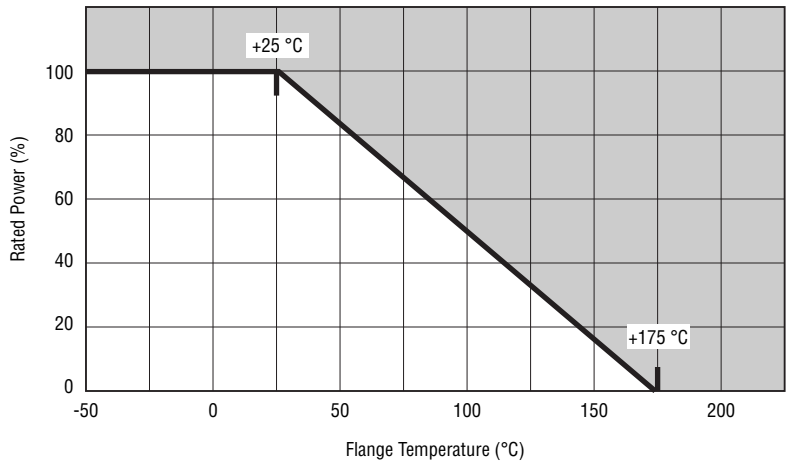
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Product Dimensions



Derating Curve



Power Rating Notes

The PF2472 Series Power Resistors must be attached to a suitable heat sink. The maximum internal resistor temperature is 175 °C.

To specify an appropriate heat sink use the following formula:

$$R_{\Theta H} = \frac{T_{MAX} - (P * R_{\Theta R}) - T_A}{P}$$

Where: $R_{\theta H}$ = Thermal Resistance of Heat Sink (°C/W)
$R_{\theta R}$ = Thermal Resistance of Resistor (°C/W)
T_{MAX} = Maximum Temperature of Resistor
T_A = Ambient Temperature of Heat Sink (°C)
P = Power Through Resistor (W)

How to Order

PF2472 - 1R J 1

Model
PF2472

Resistance Code
For values <1K Ω,
"R" represents decimal point
(Example: 0R1 = 0.1 Ω);
For values 1K-10K Ω,
"K" represents decimal point
(Example 1K = 1K Ω,
1K5 = 1.5K Ω)

Tolerance
F = ±1 %
J = ±5 %

Internal Use

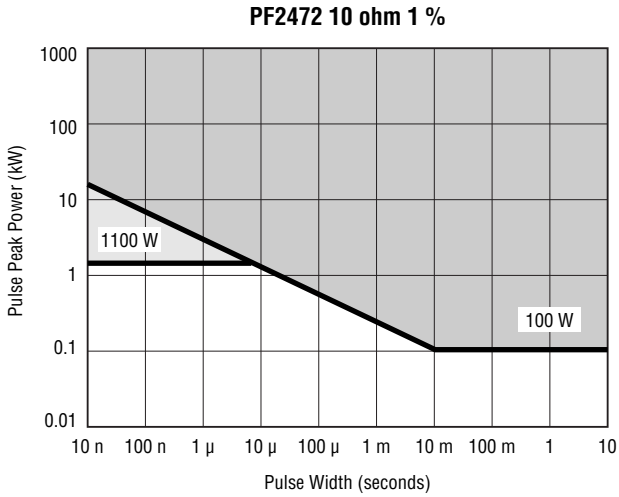
Packaging Specifications

Tube ..... 25 pcs. per tube

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Pulse Durability



Tentative continuous pulse power allowance at duty 0.01. Load life test will be necessary in actual equipment because curve may be changed by resistance, repetition, duty, and operating temperature.

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