



Features

- Surface mount wirewound resistor
- High power
- Low temperature coefficient
- RoHS compliant*
- Non-inductive versions available

Applications

- Power supplies
- Motor drives
- Electricity metering

PWR2615/PWR4525 Surface Mount Wirewound Power Resistors

General Information

The PWR2615/PWR4525 Series are surface mount wirewound resistors offering 1 and 2 W power ratings as well as a wide resistance and operating temperature range.

Electrical Characteristics

Parameter	PWR2615	PWR4525
Resistance Range	0.01 to 3K ohms	0.01 to 15K ohms
Resistance Range (Non-Inductive Version)	0.01 to 1.5K ohms	0.01 to 7.5K ohms <i>(For resistances >2K ohms, please consult factory for availability)</i>
Power Rating @ 70 °C	1 W	2 W
Maximum Working Voltage	58 V	173 V
Absolute Tolerance Values	1 % / 5 %	
Temperature Coefficient (TCR) R>10 ohms 1 ohm≤R≤10 ohms 0.1 ohm ≤R<1 ohm R<0.1 ohm	±20 PPM/°C ±50 PPM/°C ±90 PPM/°C ±150 PPM/°C	
Operating Temperature	-55 to +275 °C	
Insulation Resistance	>1000 megohms	
Dielectric Strength	1000 VAC	

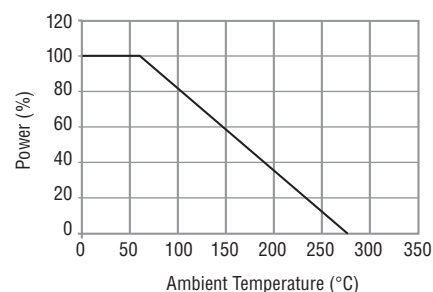
Environmental Characteristics

Tests per MIL-STD-202	ΔR Max.
Short Time Overload	0.5 % ±0.05 Ω
Load Life	1.0 % ±0.05 Ω
Moisture Resistance	1.0 % ±0.05 Ω
Thermal Shock	0.5 % ±0.05 Ω
Resistance to Solder Heat	0.25 % ±0.05 Ω
Shock	0.5 % ±0.05 Ω
Vibration	0.5 % ±0.05 Ω

Physical Characteristics

FlammabilityConforms to UL94V-0
Lead Frame Material
.....Copper, tin-plated
Body MaterialEpoxy resin

Characteristic Curve



*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

Specifications are subject to change without notice.

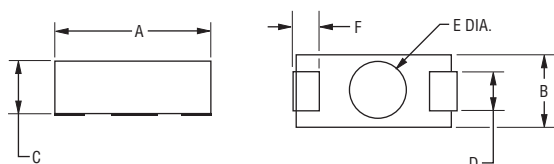
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

PWR2615/PWR4525 Surface Mount Wirewound Power Resistors

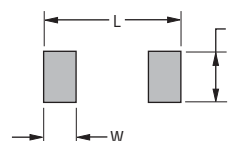
BOURNS®

Product Dimensions



DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

Recommended Pad Layout

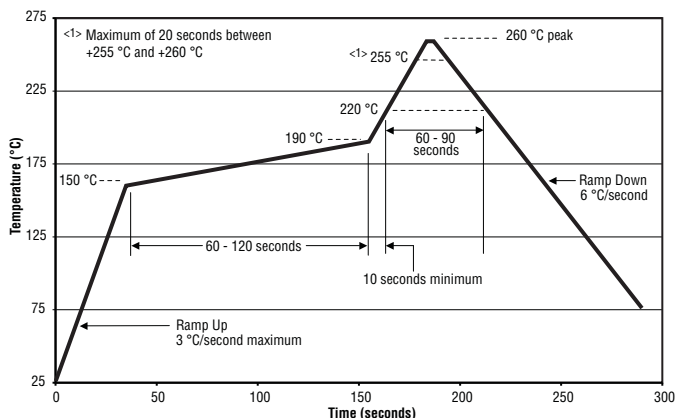


Model	A $\frac{\pm 0.4}{(\pm 0.015)}$	B $\frac{\pm 0.4}{(\pm 0.015)}$	C $\frac{\pm 0.4}{(\pm 0.015)}$	D $\frac{\pm 0.4}{(\pm 0.015)}$	F $\frac{\pm 0.4}{(\pm 0.015)}$	Lead Thickness $\frac{\pm 0.05}{(\pm 0.002)}$	E $\frac{\pm 0.4}{(\pm 0.015)}$	Height $\frac{\pm 0.13}{(\pm 0.005)}$	W $\frac{\pm 0.4}{(\pm 0.015)}$	H $\frac{\pm 0.4}{(\pm 0.015)}$	L $\frac{\pm 0.4}{(\pm 0.015)}$
PWR2615	$\frac{6.6}{(0.260)}$	$\frac{3.9}{(0.155)}$	$\frac{3.2}{(0.125)}$	$\frac{1.8}{(0.070)}$	$\frac{1.8}{(0.070)}$	$\frac{0.15}{(0.006)}$	$\frac{3.0}{(0.120)}$	$\frac{0.13}{(0.005)}$	$\frac{2.4}{(0.096)}$	$\frac{2.8}{(0.112)}$	$\frac{8.6}{(0.337)}$
PWR4525	$\frac{11.4}{(0.450)}$	$\frac{6.4}{(0.250)}$	$\frac{4.6}{(0.180)}$	$\frac{3.0}{(0.120)}$	$\frac{2.5}{(0.100)}$	$\frac{0.15}{(0.006)}$	$\frac{4.8}{(0.190)}$	$\frac{0.13}{(0.005)}$	$\frac{3.9}{(0.155)}$	$\frac{5.8}{(0.230)}$	$\frac{13.7}{(0.540)}$

Packaging Specifications

Model	Tape	Pieces per Reel	Bulk Pkg. Quantity
PWR2615	16 mm / Embossed Plastic	2000	250 pcs.
PWR4525	24 mm / Embossed Plastic	1000	250 pcs.

Soldering Profile



Typical Part Marking



How to Order

PWR4525 W 7R50 J E

Model _____
 • PWR2615
 • PWR4525

Type _____
 W = Wirewound Inductive
 N = Wirewound Non-Inductive

Resistor Value for all Tolerances _____
 <100 Ω "R" represents decimal point (examples: 7R50 = 7.5 Ω; R050 = 0.050 Ω)
 ≥100 Ω First three digits are significant, fourth digit represents number of zeros to follow (examples: 2000 = 200 Ω; 2002 = 20K Ω)

Absolute Tolerance*
 J = ±5 % F = ±1 %

Packaging _____
 E = Tape & Reel _____ = Bulk

*Tolerances as low as 0.01 % available on resistance values greater than 100 ohms. Consult factory.

REV. 01/17

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.