



Features

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

Applications

- Power supplies
- Motor drives
- Electricity metering

PWR1913/PWR2615/PWR4525/PWR6327 Surface Mount Wirewound Power Resistors

General Information

The PWR1913/PWR2615/PWR4525/PWR6327 Series are surface mount wirewound resistors offering 0.5, 1, 2 and 3 W power ratings as well as a wide resistance and operating temperature range.

Electrical Characteristics

Parameter	PWR1913	PWR2615	PWR4525	PWR6327
Resistance Range	0.01 to 400 ohms	0.01 to 3K ohms	0.01 to 15K ohms	0.01 to 25K ohms
Resistance Range (Non-Inductive Version)	Not Available	0.01 to 1.5K ohms	0.01 to 7.5K ohms	0.01 to 12.5K ohms
Power Rating @ 70 °C	0.5 W	1 W	2 W	3 W
Maximum Working Voltage	33 V	58 V	173 V	273 V
Absolute Tolerance Values	1 % / 5 %			
Temperature Coefficient (TCR) R>10 ohms 1 ohm≤R≤10 ohms R<1 ohm	±20 PPM/°C ±50 PPM/°C ±150 PPM/°C			
Operating Temperature	-55 to +275 °C			
Insulation Resistance	>1000 megohms			
Dielectric Strength	1000 VAC			

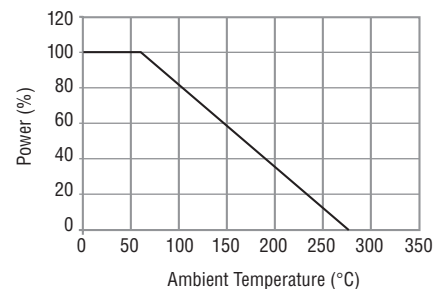
Environmental Characteristics

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



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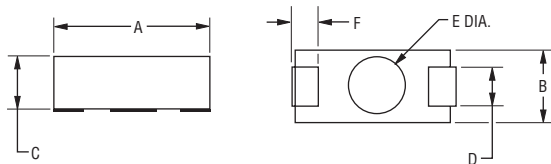
www.bourns.com

*RoHS Directive 2002/95/EC Jan 27, 2003 including Annex.

Specifications are subject to change without notice.

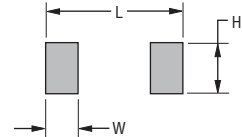
Customers should verify actual device performance in their specific applications.

Product Dimensions



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

Recommended Pad Layout

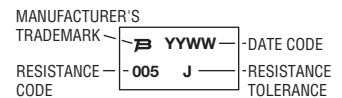


Model	A ± 0.4 (± 0.015)	B ± 0.4 (± 0.015)	C ± 0.4 (± 0.015)	D ± 0.4 (± 0.015)	F ± 0.4 (± 0.015)	Lead Thickness ± 0.05 (± 0.002)	E ± 0.4 (± 0.015)	Height ± 0.13 (± 0.005)	W ± 0.4 (± 0.015)	H ± 0.4 (± 0.015)	L ± 0.4 (± 0.015)
PWR1913	$\frac{4.8}{(0.190)}$	$\frac{3.3}{(0.130)}$	$\frac{2.8}{(0.110)}$	$\frac{1.5}{(0.060)}$	$\frac{1.0}{(0.040)}$	$\frac{0.15}{(0.006)}$	$\frac{2.5}{(0.100)}$	$\frac{0.13}{(0.005)}$	$\frac{1.6}{(0.062)}$	$\frac{2.5}{(0.100)}$	$\frac{6.4}{(0.250)}$
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	$\frac{11.4}{(0.450)}$	$\frac{6.4}{(0.250)}$	$\frac{4.6}{(0.180)}$	$\frac{3.0}{(0.120)}$	$\frac{2.5}{(0.100)}$	$\frac{0.15}{(0.006)}$	$\frac{4.8}{(0.190)}$	$\frac{0.13}{(0.005)}$	$\frac{3.9}{(0.155)}$	$\frac{5.8}{(0.230)}$	$\frac{13.7}{(0.540)}$
PWR6327	$\frac{15.9}{(0.625)}$	$\frac{6.9}{(0.270)}$	$\frac{6.4}{(0.250)}$	$\frac{3.0}{(0.120)}$	$\frac{3.4}{(0.135)}$	$\frac{0.15}{(0.006)}$	$\frac{2.8}{(0.110)}$	$\frac{0.13}{(0.005)}$	$\frac{5.1}{(0.200)}$	$\frac{3.8}{(0.150)}$	$\frac{17.8}{(0.700)}$

Packaging Specifications

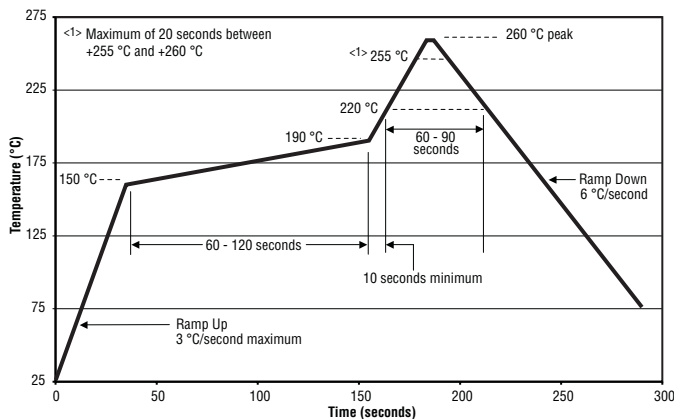
Model	Tape	Pieces per Reel	Bulk Pkg. Quantity
PWR1913	12 mm / Embossed Plastic	3000	250 pcs.
PWR2615	16 mm / Embossed Plastic	2000	250 pcs.
PWR4525	24 mm / Embossed Plastic	1000	250 pcs.
PWR6327	28 mm / Embossed Plastic	700	250 pcs.

Typical Part Marking



Note: PWR1913 will contain only the Resistance Code on the top line and the Resistance Tolerance on the bottom line. PWR2615 will not contain the Manufacturer's Trademark.

Soldering Profile



How to Order

PWR4525 W 7R50 J E

Model _____
 PWR1913 PWR4525
 PWR2615 PWR6327

Type _____
 W = Wirewound Inductive
 N = Wirewound Non-Inductive
 (Not available for PWR1913)

Resistor Value for all Tolerances _____
 <100 ohms ... "R" represents decimal point (examples: 7R50 = 7.5 Ω; R050 = 0.050 Ω)
 ≥100 ohms ... 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.