



## 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			

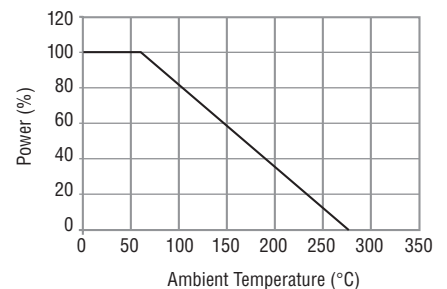
#### Environmental Characteristics

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

Flammability .....Conforms to UL94V-0  
 Lead Frame Material .....Copper, tin-plated  
 Body Material .....Epoxy resin

#### Characteristic Curve



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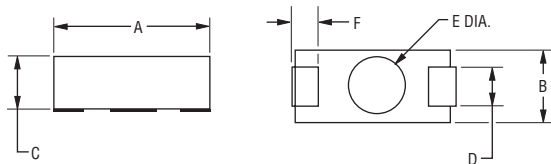
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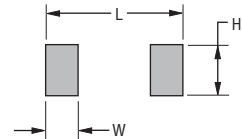
\*RoHS Directive 2002/95/EC Jan 27, 2003 including Annex.  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

**Product Dimensions**



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

**Recommended Pad Layout**

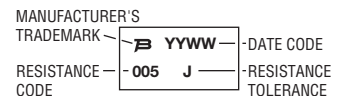


Model	A $\pm 0.4$ ( $\pm 0.015$ )	B $\pm 0.4$ ( $\pm 0.015$ )	C $\pm 0.4$ ( $\pm 0.015$ )	D $\pm 0.4$ ( $\pm 0.015$ )	F $\pm 0.4$ ( $\pm 0.015$ )	Lead Thickness $\pm 0.05$ ( $\pm 0.002$ )	E $\pm 0.4$ ( $\pm 0.015$ )	Height $\pm 0.13$ ( $\pm 0.005$ )	W $\pm 0.4$ ( $\pm 0.015$ )	H $\pm 0.4$ ( $\pm 0.015$ )	L $\pm 0.4$ ( $\pm 0.015$ )
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**

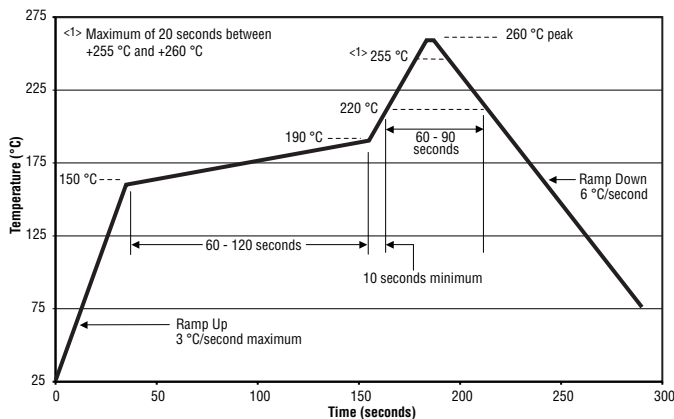
Model	Tape	Pieces per Reel	Bulk Pkg. Quantity
PWR1913	12 mm / Embossed Plastic	3000	250 pcs.
PWR2615	16 mm / Embossed Plastic	2000	250 pcs.
PWR4525	24 mm / Embossed Plastic	1000	250 pcs.
PWR6327	28 mm / Embossed Plastic	700	250 pcs.

**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 \_\_\_\_\_  
 <math>\lt; 100\text{ ohms}</math> ... "R" represents decimal point (examples: 7R50 = 7.5  $\Omega$ ; R050 = 0.050  $\Omega$ )  
 $\geq 100\text{ ohms}</math> ... First three digits are significant, fourth digit represents number of zeros to follow (examples: 2000 = 200  $\Omega$ ; 2002 = 20K  $\Omega$ )$

Absolute Tolerance\* \_\_\_\_\_  
 J =  $\pm 5\%$  F =  $\pm 1\%$

Packaging \_\_\_\_\_  
 E = Tape & Reel \_\_\_\_\_ = Bulk

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