



Features

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



These series are currently available but not recommended for new designs.

Applications

- Power supplies
- Motor drives
- Electricity metering

PWR1913/PWR6327 Surface Mount Wirewound Power Resistors

General Information

The PWR1913/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	PWR6327
Resistance Range	0.01 to 400 ohms	0.01 to 25K ohms
Resistance Range (Non-Inductive Version)	Not Available	0.01 to 12.5K ohms
Power Rating @ 70 °C	0.5 W	3 W
Maximum Working Voltage	33 V	273 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	

** Two standard series of test temperatures:

First Series: 25 °C, 0 °C, -15 °C and -55 °C

Second Series: 25 °C, 50 °C, 75 °C, 125 °C and 150 °C

Environmental Characteristics

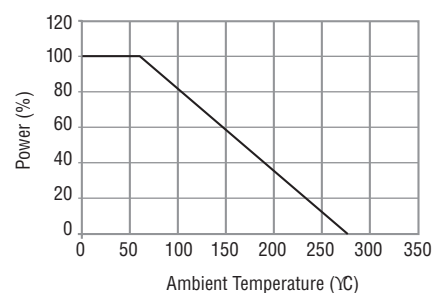
Tests per MIL-STD-202	ΔR Max.
Short Time Overload	0.5 % ±0.5 mΩ
Load Life	2.0 % ±0.5 mΩ
Moisture Resistance	1.0 % ±0.5 mΩ
Thermal Shock	1.0 % ±0.5 mΩ
Resistance to Solder Heat	0.5 % ±0.5 mΩ
Shock	0.5 % ±0.5 mΩ
Vibration	—

Physical Characteristics

FlammabilityConforms to UL94V-0
Lead Frame Material

.....Copper, tin-plated
Body Material Epoxy resin

Characteristic Curve



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

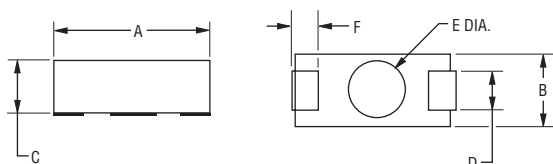
Specifications are subject to change without notice.

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.

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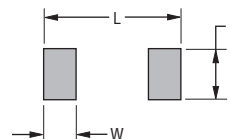
BOURNS®

Product Dimensions



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

Recommended Pad Layout

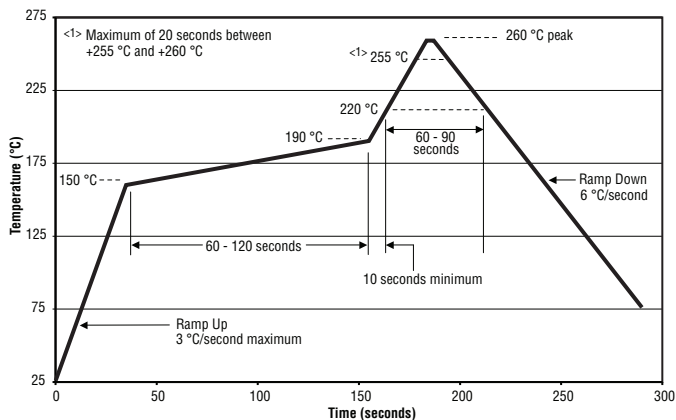


Model	A $\frac{\pm 0.4}{(\pm 0.015)}$	B $\frac{\pm 0.4}{(\pm 0.015)}$	C $\frac{\pm 0.4}{(\pm 0.015)}$	D $\frac{\pm 0.4}{(\pm 0.015)}$	F $\frac{\pm 0.4}{(\pm 0.015)}$	Lead Thickness $\frac{\pm 0.05}{(\pm 0.002)}$	E $\frac{\pm 0.4}{(\pm 0.015)}$	Height $\frac{\pm 0.13}{(\pm 0.005)}$	W $\frac{\pm 0.4}{(\pm 0.015)}$	H $\frac{\pm 0.4}{(\pm 0.015)}$	L $\frac{\pm 0.4}{(\pm 0.015)}$
PWR1913	$\frac{4.8}{(0.190)}$	$\frac{3.3}{(0.130)}$	$\frac{2.8}{(0.110)}$	$\frac{1.5}{(0.060)}$	$\frac{1.0}{(0.040)}$	$\frac{0.15}{(0.006)}$	$\frac{2.5}{(0.100)}$	$\frac{0.13}{(0.005)}$	$\frac{1.6}{(0.062)}$	$\frac{2.5}{(0.100)}$	$\frac{6.4}{(0.250)}$
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.
PWR6327	28 mm / Embossed Plastic	700	250 pcs.

Soldering Profile



Typical Part Marking

MANUFACTURER'S TRADEMARK  YYWW — DATE CODE
RESISTANCE CODE — 005 J — RESISTANCE TOLERANCE

Note: PWR1913 will contain only the Resistance Code on the top line and the Resistance Tolerance on the bottom line.

How to Order

PWR1913 W 7R50 J E

Model _____
PWR1913
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 = $\pm 5\%$ F = $\pm 1\%$

Packaging _____
E = Tape & Reel _____ = Bulk

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

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