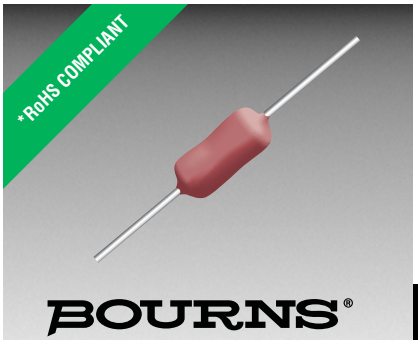


Features

- Fuses safely at 220/240 mains voltage
- Resistance values as high as 2.2K ohms
- Flame-proof silicone coating
- Low TCR
- RoHS compliant*
- Agency approval:

Applications

- White goods
- Inverters
- Lighting
- Metering

PWR4522 Fusible Power Resistors

General Introduction

The PWR4522A Series of axial leaded wirewound resistors in a flameproof silicone coating are designed to fuse under abnormal conditions such as sudden surges in voltage or circuit malfunctions. The resistor will fuse instantly upon the application of 220/240 mains voltage without flame or incandescent particles.

Electrical Characteristics

Characteristic	Model PWR4522
Power	3 W
Resistance Range	8.2 ohms to 2.2K ohms (E12)
Tolerance	5 %
Temperature Coefficient	±90 PPM/°C
Operating Temperature Range	-55 °C to +350 °C
Maximum Voltage	√P*R
Fusing Point	16X Rated Power
Fusing Time	45 Seconds Max.**

** The resistor will fuse safely if 220/240 mains voltage is applied. The time to fuse depends on the resistance value.

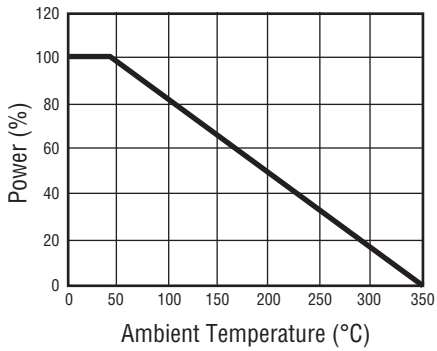
Agency Approval

Description	
UL	File Number: E349323 UL Approved at 120 Vac

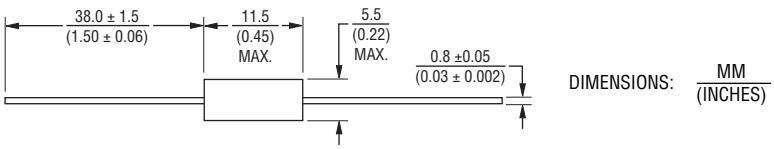
Materials

Resistor ..... Wirewound around a ceramic core
Lead Frame .....Tinned copper
Housing ..... Flameproof thermocoat

Power Derating Curve



Product Dimensions



For Standard Values Used in Capacitors, Inductors, and Resistors, click here.

How to Order

PWR 4522 A S 8R20 J A

Model
PWR = Power Resistor

Package
4522 = Size (0.45 x 0.22 inches)

Pin Style
A = Axial Through-hole

Version
S = Safety Version (Fuses without flames or explosion when 220/240 mains voltage is applied)

Resistance Value
R<100 ohms "R" represents decimal point
R≥100 ohms First three digits are significant, fourth digit represents number of zeros to follow

Resistance Tolerance
J = ±5 %

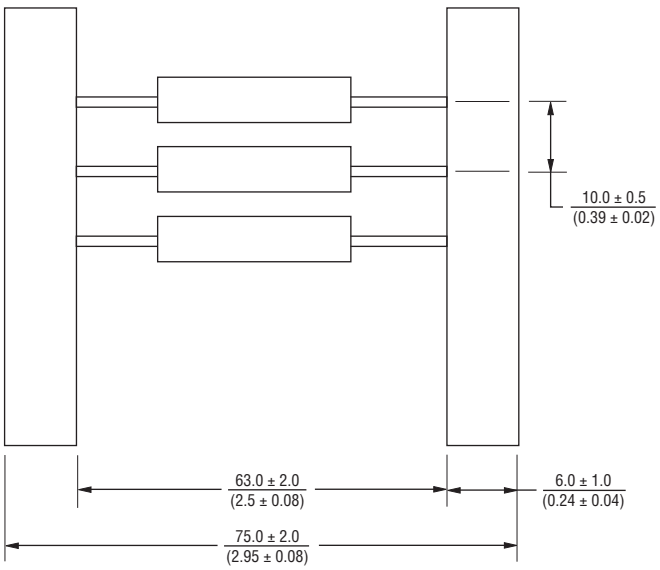
Packaging
A = Ammo Pack (750 pcs. per pack)

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

Environmental Characteristics

Test	Description	Specification
Dielectric Withstanding Voltage	Based on limiting voltage x 2 for 60 seconds	ΔR ± (1 % +0.05 Ω) - No flashover, mechanical damage, arcing or insulation breakdown
Thermal Shock	-55 °C +0 °C/-3 °C to room temperature to +200 °C +3 °C/-0 °C, 5 cycles, with minimum 15 minutes at each cycle	±(2.0 % +0.05 Ω)
Short Time Overload	Five times rated power for 5 seconds	±(2.0 % +0.05 Ω)
Solderability	As per IEC 60068 – 2 -20	Must meet all requirements
Resistance to Solder Heat	Immersion in solder +260 °C to +270 °C for 10 ±0.5 seconds	±(0.5 % +0.05 Ω)
Dielectric Strength	Test voltage >2X maximum voltage for greater than 1 minute	±(2.0 % +0.05 Ω)
Insulation Resistance	Test voltage greater than 500 V rms for one minute	>1000 GΩ
Humidity	+40 °C at 93 % RH for 1000 hours no load +5 °C	±(5.0 % +0.05 Ω)
Load Life	Rated continuous voltage for 1000 hours 1 hour on and 0.5 hours off at a test temperature of +70 °C ±2 °C	±(5.0 % +0.05 Ω)

Packaging Specifications



Ammo Pack Box	Master Box	Quantity	
		Ammo Pack	Master Box
275 x 100 x 110 (10.8 x 3.94 x 4.33)	450 x 290 x 330 (17.72 x 11.42 x 12.99)	750	6000

DIMENSIONS: MM / (INCHES)

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