

## Applications

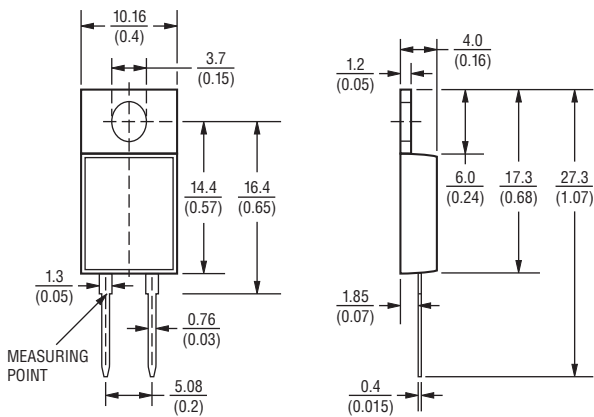
- Power supplies
- Motor drives
- Test and measurement
- Welding

## PWR220/PWR221 F Series Power Resistors

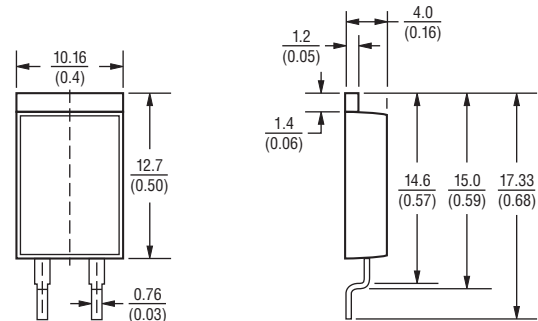
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### Product Dimensions

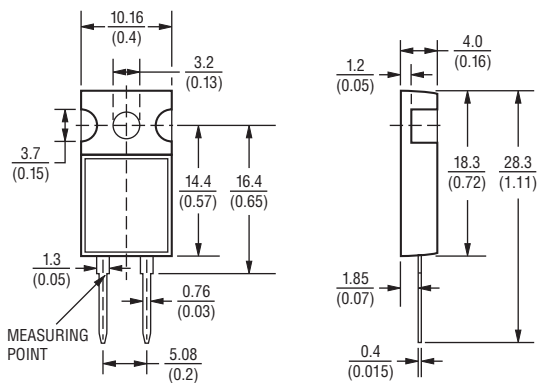
TO220 Housing: 2-Pin



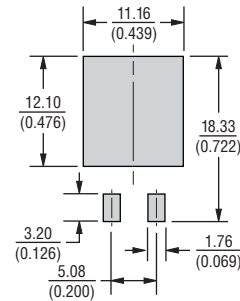
TO220 Casing: 2-Pin (Surface Mount)



TO221 Casing: 2-Pin



### Recommended Pad Layout



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

### How to Order

**PWR 220 - 2 F B R040 J E**

Model \_\_\_\_\_  
PWR = Power Resistor

Package \_\_\_\_\_  
220 = TO220  
221 = TO221

Number of Pins \_\_\_\_\_  
2 = 2

Function \_\_\_\_\_  
F = Thick Film

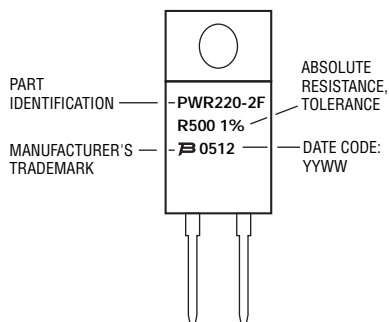
Version \_\_\_\_\_  
A = TO221 Housing, Surface Mount, 30 W (w/Heat Sink)  
C = TO220 Housing/TO221 Housing, Through-Hole, 50 W (w/Heat Sink)  
D = TO220 Housing, Surface Mount, 50 W (w/Heat Sink)

Resistor Value for all Tolerances \_\_\_\_\_  
<100 ohms ..... "R" represents decimal point  
(examples: 7R50 = 7.5 ohms; R040 = 0.040 ohms)  
≥100 ohms ..... First three digits are significant, fourth digit represents number of zeros to follow  
(examples: 2000 = 200 ohms; 2002 = 20K ohms)

Absolute Tolerance \_\_\_\_\_  
J = 5 %    G = 2 %    F = 1 %

Packaging \_\_\_\_\_  
E = Tape & Reel (Available only for Versions A and D)  
\_\_\_ = Tubes

### Typical Part Marking



Specifications are subject to change without notice.

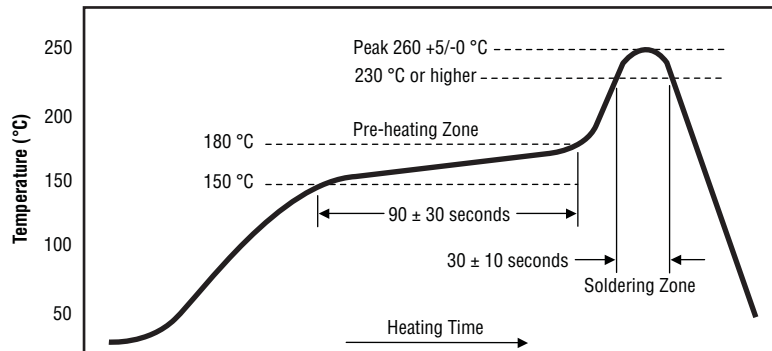
Users should verify actual device performance in their specific applications.

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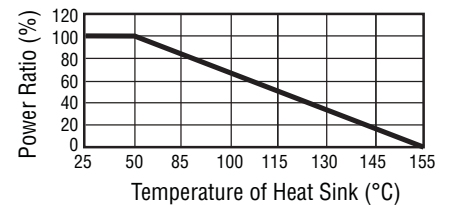
## PWR220/PWR221 F Series Power Resistors

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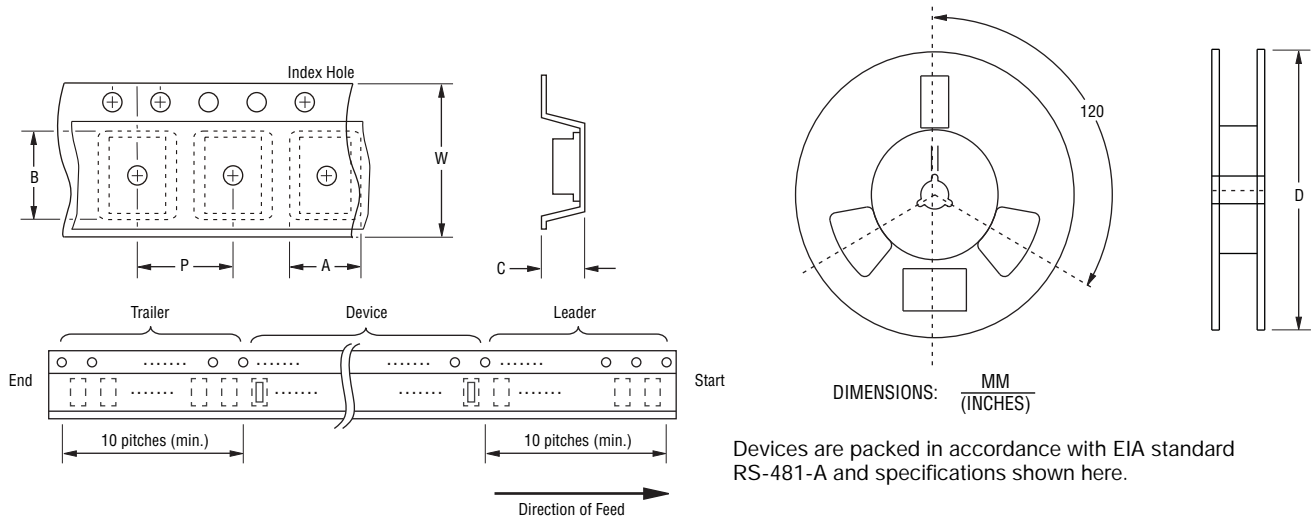
### Soldering Profile (Surface Mount Version Only)



### Derating Curve



### Packaging Dimensions



Item	Symbol	Dimensions
Carrier Width	A	$\frac{10.4}{(0.409)}$
Carrier Length	B	$\frac{18.4}{(0.724)}$
Carrier Depth	C	$\frac{4.4}{(0.173)}$
Reel Outside Diameter	D	$\frac{330}{(12.992)}$
Punch Hole Pitch	P	$\frac{16.00}{(0.630)}$
Tape Width	W	$\frac{32}{(1.260)}$
Quantity per Reel	—	500

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