

# WRF1JB5R10 Datasheet



DiGi Electronics Part Number	WRF1JB5R10-DG
Manufacturer	<a href="#">Stackpole Electronics Inc</a>
Manufacturer Product Number	WRF1JB5R10
Description	RES 5.1 OHM 5% 1W AXIAL
Detailed Description	5.1 Ohms ±5% 1W Through Hole Resistor Axial Flame Proof, Moisture Resistant, Safety Wirewound

<https://www.DiGi-Electronics.com>

This model WRF1JB5R10 is available at DiGi Electronics.

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## Purchase and inquiry

Manufacturer Product Number:

WRF1JB5R10

Series:

WRF

Resistance:

5.1 Ohms

Power (Watts):

1W

Features:

Flame Proof, Moisture Resistant, Safety

Operating Temperature:

-55°C ~ 200°C

Supplier Device Package:

Axial

Height - Seated (Max):

-

Failure Rate:

-

Manufacturer:

Stackpole Electronics Inc

Product Status:

Obsolete

Tolerance:

±5%

Composition:

Wirewound

Temperature Coefficient:

-80/ +900ppm/°C

Package / Case:

Axial

Size / Dimension:

0.197" Dia x 0.433" L (5.00mm x 11.00mm)

Number of Terminations:

2

## Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8533.21.0080

Moisture Sensitivity Level (MSL):

Not Applicable

ECCN:

EAR99

# WRF Series

## Conformal Coated Wirewound Resistor

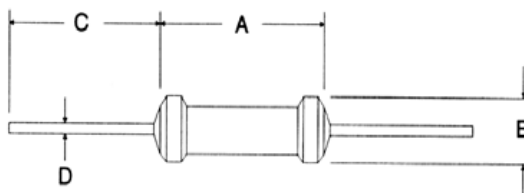
Stackpole Electronics, Inc.  
Resistive Product Solutions

- Features:
- Conformal coating
  - Flameproof construction
  - Cut and formed product is available on select sizes  
Contact factory for details
  - RoHS compliant / lead-free



### Electrical Specifications

Type / Code	Power Rating (Watts) @ 25°C	Maximum Working Voltage	Dielectric Withstanding Voltage (RMS)	Resistance Temperature Coefficient	Ohmic Range ( $\Omega$ ) and Tolerance
					5%
WRF1	1W	$\sqrt{PR}$	700V	-80ppm/°C ~ +900ppm/°C	0.1 - 33
WRF2	2W	$\sqrt{PR}$	700V	-80ppm/°C ~ +900ppm/°C	0.1 - 220
WRF3	3W	$\sqrt{PR}$	700V	-80ppm/°C ~ +900ppm/°C	0.1 - 220



### Mechanical Specifications

Type / Code	A Body Length	B Body Width	C Lead Length (Bulk)(1)	D Lead Diameter	Unit
WRF1	0.433 max	0.197 max	1.102 $\pm$ 0.118	0.031 $\pm$ 0.002	inches
	11.00 max	5.00 max	28.00 $\pm$ 3.00	0.78 $\pm$ 0.05	mm
WRF2	0.630 max	0.197 max	1.102 $\pm$ 0.118	0.031 $\pm$ 0.002	inches
	16.00 max	5.00 max	28.00 $\pm$ 3.00	0.78 $\pm$ 0.05	mm
WRF3	0.630 max	0.197 max	1.102 $\pm$ 0.118	0.031 $\pm$ 0.002	inches
	16.00 max	5.00 max	28.00 $\pm$ 3.00	0.78 $\pm$ 0.05	mm

(1) See "Resistor Packaging Specification Document" for lead length dimension for tape and reel packaged product.

### Performance Characteristics

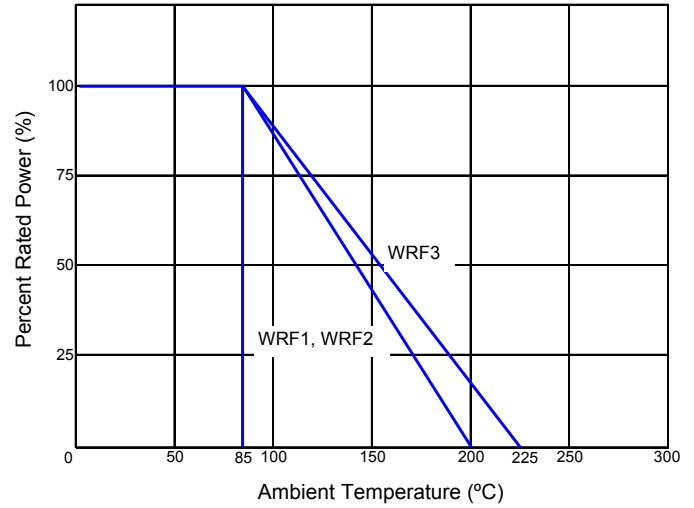
Test	Test Results
Rated Ambient Temperature	85°C
Overload 15 Times the Rated Wattage	Open circuit within 2 minutes
Short Time Overload	$\pm 3\% + 0.05\Omega$
Effective Soldering	$\pm 2\% + 0.05\Omega$
Insulation Resistance	$>10^4$ M $\Omega$
Dielectric Withstanding Volt	$\pm 2\% + 0.05\Omega$
Load Life @ 70°C - 1,000 hrs.	$\pm 5\% + 0.05\Omega$
Moisture Resistance	$\pm 5\% + 0.05\Omega$
Shock and Vibration	$\pm 1\% + 0.05\Omega$
Solderability	90% tin covered min.
Temperature Coefficient	-80ppm/°C ~ +900ppm/°C

Operating Temperature Range: -55°C to +200°C (WRF 1, 2)  
-55°C to +225°C (WRF 3)

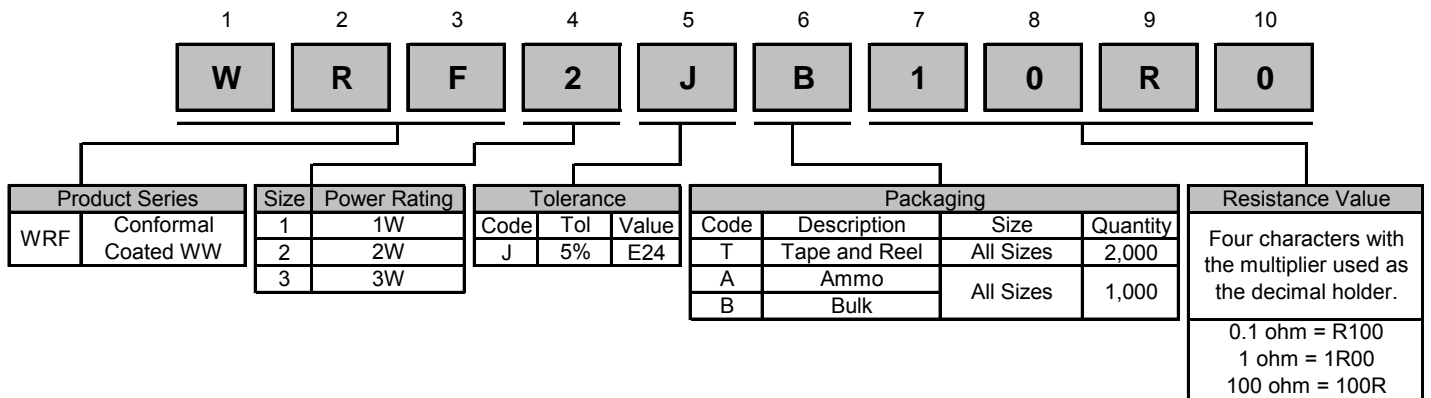
**WRF Series**  
Conformal Coated Wirewound Resistor

**Stackpole Electronics, Inc.**  
Resistive Product Solutions

Power Derating Curve:



**How to Order**



Legacy Part Number (before January 3, 2011):

SEI Type		Code	Nominal Resistance	Tolerance	Packaging					
<b>WRF</b>		<b>2</b>	<b>10R</b>	<b>5%</b>	<b>A</b>					
Type	Description	Code			Tol	Values	Type	Pkg Qty	Description	Code
WRF	Conformal Coated WW	1			5%	E24	All	1,000	Bulk	A
		2					All	2,000	Tape and Reel	R
		3					All	1,000	Ammo	T

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