

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

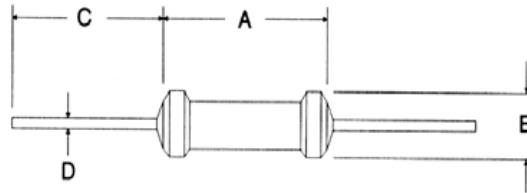
Email & Skype: [info@chipsmall.com](mailto:info@chipsmall.com) Web: [www.chipsmall.com](http://www.chipsmall.com)

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

- 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 (Ω) and Tolerance
					5%
WRF1	1W	√PR	700V	-80ppm/°C ~ +900ppm/°C	0.1 - 33
WRF2	2W	√PR	700V	-80ppm/°C ~ +900ppm/°C	0.1 - 220
WRF3	3W	√PR	700V	-80ppm/°C ~ +900ppm/°C	0.1 - 220



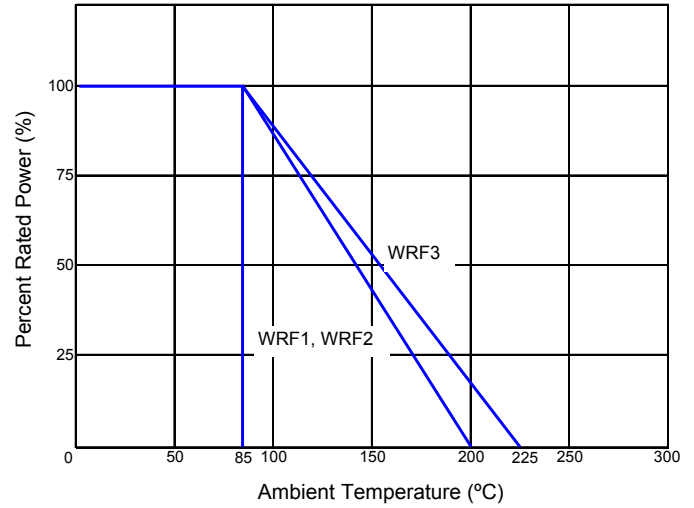
Mechanical Specifications					
Type / Code	A Body Length	B Body Width	C Lead Length (Bulk)(1)	D Lead Diameter	Unit
WRF1	0.433 max	0.197 max	1.102 ± 0.118	0.031 ± 0.002	inches
	11.00 max	5.00 max	28.00 ± 3.00	0.78 ± 0.05	mm
WRF2	0.630 max	0.197 max	1.102 ± 0.118	0.031 ± 0.002	inches
	16.00 max	5.00 max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

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

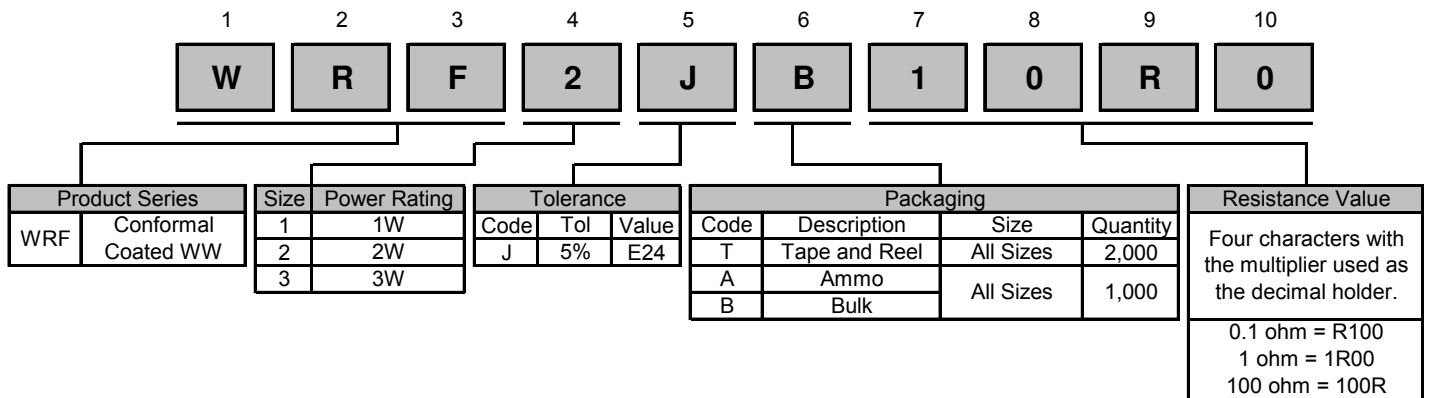
Performance Characteristics	
Test	Test Results
Rated Ambient Temperature	85°C
Overload 15 Times the Rated Wattage	Open circuit within 2 minutes
Short Time Overload	± 3% + 0.05Ω
Effective Soldering	± 2% + 0.05Ω
Insulation Resistance	>10 <sup>4</sup> MΩ
Dielectric Withstanding Volt	± 2% + 0.05Ω
Load Life @ 70°C - 1,000 hrs.	± 5% + 0.05Ω
Moisture Resistance	± 5% + 0.05Ω
Shock and Vibration	± 1% + 0.05Ω
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)

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