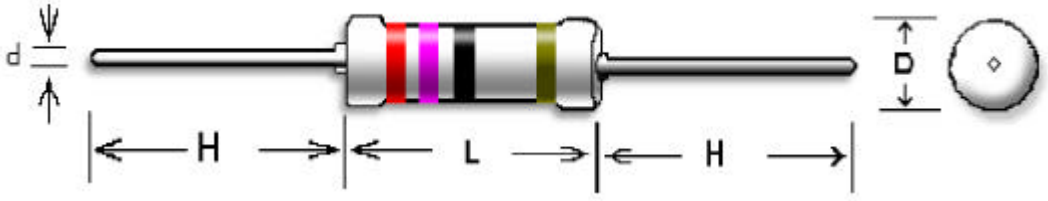
PPR - Pulse Protective Resistor High Power

Features

Applied in high-frequency, sharp-impulse circuits, such as missile detonators, triac switching circuits, etc, to protect active components, this series is capable of completely replacing carbon composition resistor. And comparing to carbon composition resistor, this series offers every better aspect of performance, specially without "sintering effect" caused by high surge impacts on carbon composition resistor showing a greatly decreased resistance value.



Dimensions:

Type	Body Length (L , mm)	Body Diameter (D , mm)	Lead Wire Length (H , mm)	Lead Wire Diameter (d , mm)	Net Weight Per 1000Pcs
PPR300	15.5±1.0	5.5±0.5	30±3.0	0.8±0.03	1200 Grams
PPR400	19.0±1.0	6.0±0.5	30±3.0	0.8±0.03	1600 Grams
PPR500	24.0±1.0	8.0±0.5	30±3.0	0.8±0.03	3700 Grams

General Specifications:

Type	Power Rating At 70°C	Max. Working Voltage	Max. Overload Voltage	Max. Permissible Surge Voltage at 1.2/10μs	Min. Resistance	Max. Resistance	Resistance Tolerance	Standard Resistance Values
PPR300	3W	350V	700V	20KV	1Ω	4.7MΩ	±5%	E-24
PPR400	4W	450V	800V	25KV	1Ω	4.7MΩ	±5%	E-24
PPR500	5W	550V	1100V	30KV	1Ω	4.7MΩ	±5%	E-24

Special sizes, values, and specifications not listed available on special order.

May 8, 2008

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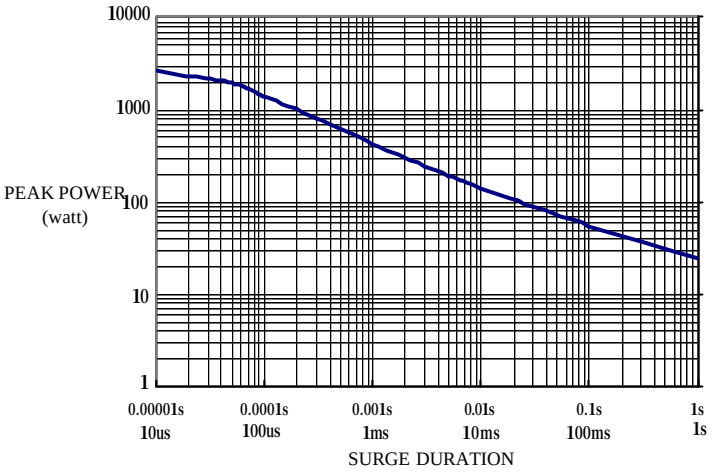
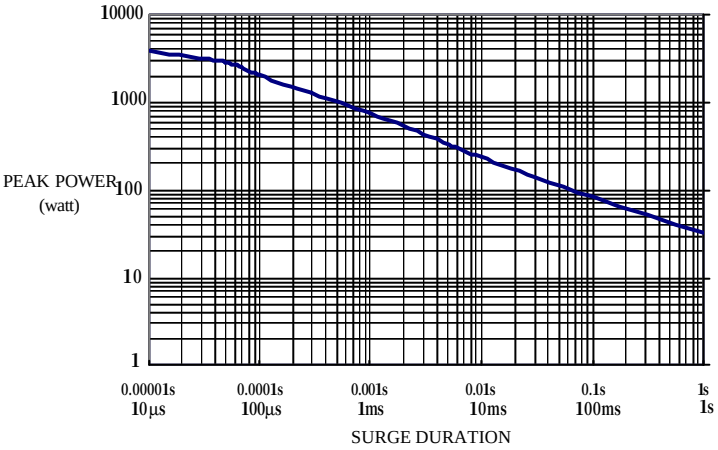
PPR300

SURGE PERFORMANCE



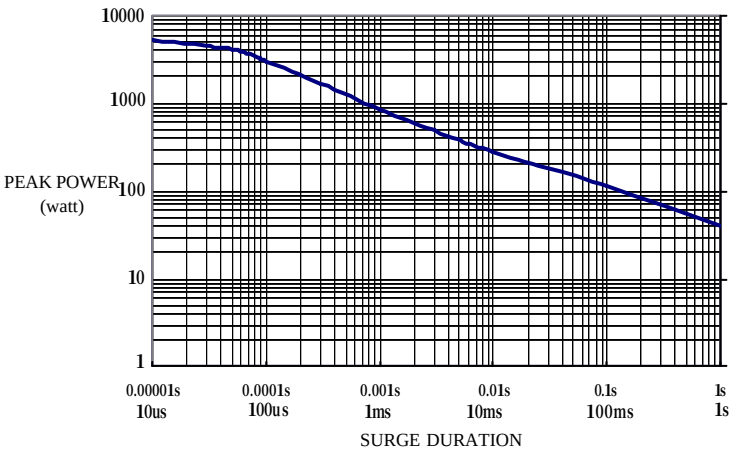
PPR400

SURGE PERFORMANCE



PPR500

SURGE PERFORMANCE



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Performance Summary:

Characteristics	Limits	
Power Derating, Linear	100% @ <+70°C, 0% @ +155°C	
Dielectric Withstanding Voltage, VAC or DC	1000	
Temperature Coefficient, PPM / °C	1Ω~360KΩ	±750
	390KΩ~4.7MΩ	±1200
Operating Temperature Range, °C	-55 ~ +155	
Insulation Resistance, MΩ	$>10^4$	

Technical Specifications:

Tests Characteristics	Test Conditions	Limits		
Short Time Over Load	IEC 60115-1 4.13 5 seconds 2.5x rated voltage (not over max. overload voltage)	±(1%+0.05R)		
Load Life In Humidity	IEC 60115-1 4.24 56 days at 40°C and 93% relative humidity	±(5%+0.05R)		
Load Life 1,000 hours	IEC 60115-1 4.25.1 Rated load 1.5 hours ON, 0.5 hours OFF, at 70°C	±(5%+0.05R)		
Resistance To Soldering Heat	IEC 60115-1 4.18 10 seconds at 260°C solder bath temperature	±(1%+0.05R)		
Solderability	MIL-STD-202 Method 208 Solder area covered after 230±5°C/5±0.5 seconds w/ flux applied	90% Min.		
Vibration	IEC 60115-1 4.22 Six hours in each parallel and axial direction w/ a simple harmonic motion having an amplitude of 0.75mm and 10 to 500 Hz.	±(1%+0.05R)		
Thermal Endurance	IEC 60115-1 4.25.3 1000 hours at 155°C without load	±(1%+0.05R)		
Thermal Shock	IEC 60115-1 4.19 -55°C 30minutes, +155°C 30minutes, 5 cycles	±(2%+0.05R)		
Surge Test	Surge voltage = √(2400 x P x R) DC *P is power rating, R is resistance value, surge voltage is not more than listed at right.* Surge spec = 1.2/50μs Period = 1 sec Number of surges = 50	PPR300:	20KV	5%
		PPR400:	25KV	
		PPR500:	30KV	

Ordering Information

Type	Tolerance	Resistance Value	Packaging	Special Request (Optional)
PPR300 PPR400 PPR500	J (5%)	10K	TB (Tape/Box)	LV (Low value)

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