# RCD

### PULSE RESISTORS, SURFACE MOUNT **PRM SERIES**

### FEATURES

Surface-mount version of RCD's popular PR Series

- Cost effective
- High voltage pulse capability
- Insensitive to moisture
- □ Available on exclusive *SWIFT*<sup>™</sup> delivery program

#### **OPTIONS**

- $\Box$  X = Non-inductive design
- □ ER = Group A Screening per MIL-R-39008 (RCR)



## RCD's PRM Series Pulse Resistant resistors are designed to replace carbon composition styles in numerous applications. The PRM Series feature a core composition of ceramic and heavy duty wound element. The construction enables surge performance similar to or

tion of ceramic and heavy duty wound element. The construction enables surge performance similar to or better than carbon composition resistors (depending on resistance value) and significantly improved environmental stability (see comparison chart). Elements are protected by high-temp molded case for excellent environmental performance and 500V minimum dielectric strength. PRM resistors are cost effective in a wide variety of pulse applications including telecom line feed resistors which must withstand lightning surges, snubber circuits, in-rush currents, capacitor charging and discharge circuits, etc.

### SPECIFICATIONS

RCD Type	Wattage @ 70° C	Resistance Range	Working Voltage	Peak Pulse*	А	В	С	D	E
PRM1/8	1/8W	0.1Ω to 2K	150V	3KV	.260±.02 [6.6±.5]	.110±.015 [2.8±.38]	.150±.015 [3.8±.38]	.040 Min.[1.0]	.060±.015 [1.5±.38]
PRM1/4	1/4W	0.1Ω to 8.2K	250V	5KV	.260±.02 [6.6±.5]	.110±.015 [2.8±.38]	.150±.015 [3.8±.38]	.040 Min. [1.0]	.060±.015 [1.5±.38]
PRM1/2	1/2W	0.1Ω to 24K	350V	7KV	.445±.032 [11.3±.8]	.180±.020 [4.6±.5]	.225±.015 [5.7±.38]	.080 Min. [2.0]	.060±.015 [1.5±.38]
PRM1	1W	0.1Ω to 100K	500V	12KV	.811±.018 [20.6±.46]	.275±.010 [7.0±.25]	.273±.010 [6.9±.25]	.085±.02 [2.15]	.110±.02 [2.79±2.15]

\*Peak pulse voltage is highly dependent on pulse waveform and resistance value. Voltage levels given indicate the maximum levels for the series. These levels are not attainable for all values and plse waveforms. Contact factory for application assistance.

### PERFORMANCE COMPARISON CHART

	RCD PRM SERIES	CARBON COMP	
Insulation Resistance	10,000MW Min	10,000MW Min	
Voltage Coefficient	.005%/V Max	.007%03%/V	
Load Life	0.5% Max	6% Max	
Short Time Overload	0.5% Max	1%-2.5% Max	
Terminal Strength	0.2% Max	1% Max	
Effect of Solder Heat	0.2% Max	2%-3% Max	
Vibration	0.2% Max	1% Max	
Shock	0.2% Max	2% Max	
Humidity Resistance	1% Max	11% Max	
Low Temp. Operation	0.5% Max	2% Max	
Temperature Cycling	0.5% Max	2% Max	
Temp. Coefficient	±.012%/°C Max	046 to +.12%/°C	
Operating Temp.	-65°C to +155°C	-65°C to +150°C	
Wattage Derating	1.176%/°C>70°C	1.25%/°C>70°C	

#### AVAILABLE SURGE STANDARDS

Depending on resistance value, RCD's PRM Series can satisfy surge requirements of the following standards:

UL1971	ANSI/IEEE C62.41
UL217	Bellcore TR-NWT-001089
UL268	Bellcore TR-TSY-000057
UL294	IEEE587
UL497A	Canadian Doc. CS-03
UL508	CCITT (Rec. K17)
UL913	CSA C22.2 No.225
UL943	IEC 664 & 801.5
UL991	FCC Part 68
UL1459	REA (PE60)

### P/N DESIGNATION: PRM1/2 - 1001 - J T RCD Type \_\_\_\_\_\_ Options: X, ER, (leave blank if standard) 4-Digit Res. Code: 3 sig. digits & multiplier. R100=0.1 $\Omega$ , 1R00=1 $\Omega$ , 1000=100 $\Omega$ , 1001=1K $\Omega$ Tolerance Code: K=10%, J=5%, H=3%, G=2%, F=1% \_\_\_\_\_ Packaging: B = is bulk, T = Tape & Reel \_\_\_\_\_

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