

# PRM

## Small Surge Resistor



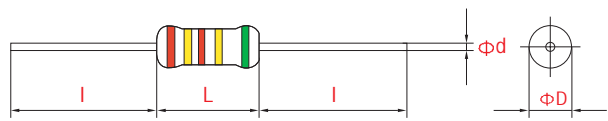
### Features

- Small type surge resistor
- Excellent Anti-Surge characteristics
- Highly stable against environmental conditions and overload
- Broad range of resistance value
- Available discharge path value

### Introduction

Automated production system of our company enables us to produce high quality products with competitive price

### Dimension



Type	Dimension (mm)			
	L	$\phi D$	I	$\phi d$
PRM 94	$3.2 \pm 1.0$	$1.9 \pm 0.2$	$28 \pm 3$	0.45
PRM 92	$6.5 \pm 0.5$	$2.3 \pm 0.2$	$27 \pm 3$	0.6
PRM 01	$9.0 \pm 0.5$	$3.0 \pm 0.5$	$26 \pm 3$	0.7
PRM 02	$12.0 \pm 1.0$	$4.0 \pm 0.5$	$28 \pm 3$	0.8
PRM 03	$15.0 \pm 1.0$	$5.5 \pm 0.5$	$28 \pm 3$	0.8

### Explanation of Part Numbers

PRM	92	T1	4M70	J
Product Code	Power Rating	Style	Normal Resistance	Resistance Tolerance
Surge Resistor (small type)	94 : 0.25W 92 : 0.5W 01 : 1W 02 : 2W	T1 T3 T4	470R:470 $\Omega$ 470K:470K $\Omega$ 4M70:4.7M $\Omega$	G: $\pm 2\%$ J: $\pm 5\%$ K: $\pm 10\%$

### Ratings

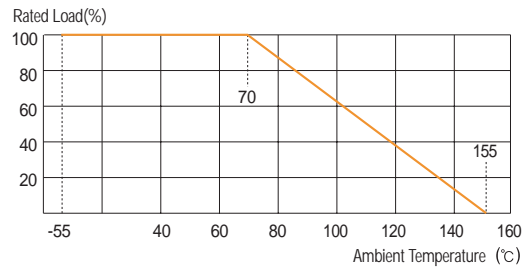
Product Code	Power Rating	Max. Working Voltage	Max. Overload Voltage	Operating Temp. Range	Resistance Range	Resistance Tolerance
PRM 94	0.25 W	300V	500V	-55 °C~ 155 °C	100 $\Omega$ ~ 33M $\Omega$	G, J, K
PRM 92	0.5 W	700V	1000V		3.3 $\Omega$ ~ 33M $\Omega$	
PRM 01	1W	1000V	1500V		3.3 $\Omega$ ~ 33M $\Omega$	
PRM 02	2W	1200V	1500V		47K $\Omega$ ~ 33M $\Omega$	
PRM 03	3W	1000V	1500V		100K $\Omega$ ~ 33M $\Omega$	



## Performance Specifications

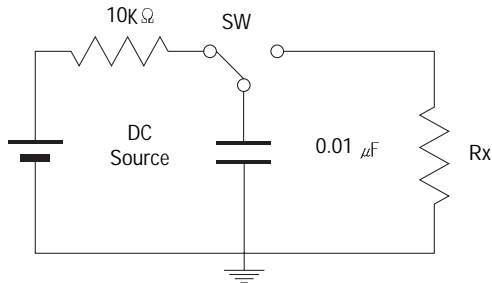
Characteristics	Specifications
Temperature coefficient	3.3-10K $\Omega$ -1000ppm/°C
	11K $\Omega$ $\uparrow$ $\pm$ 350ppm/°C
Short time overload	$\pm$ ( 1% + 0.05 $\Omega$ )
Insulation resistor	10000M $\Omega$ , min
Load life in moisture	$\pm$ ( 5% + 0.1 $\Omega$ )
Load life in temperature	$\pm$ ( 5% + 0.1 $\Omega$ )

## Derating Curve



## Anti-Surge Test

### 1. Test Circuit



### 2. Applied Voltage

Resistance	Pulse Voltage	Requirement	Applied Time
3.3 $\Omega$ - 6.2 $\Omega$	10KV	Within 10%	2.5 sec ON 2.5 sec OFF 5 cycle
6.8 $\Omega$ - 10 $\Omega$	7KV		
11 $\Omega$ - 9.1K $\Omega$	5KV		
10K $\Omega$ - 91K $\Omega$	7KV		
100K $\Omega$ - 33M $\Omega$	10KV		

