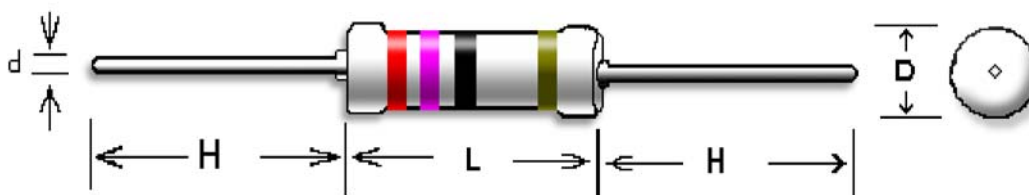


# SSR- Surge Safety Resistor

## Features

Designed to replace carbon composition resistor, SSR series is applied in high-surge applications such as fuel ignition systems, power charging/discharging circuits, TV sets, etc, to absorb harmful surge energy, so to prevent hazard of fire and circuit damage caused by surge energy with a flame-proof coating,



## Dimensions:

Type	Body Length (L , mm)	Body Diameter (D , mm)	Lead Wire Length (H , mm)	Lead Wire Diameter (d , mm)	Net Weight Per 1000Pcs
SSR16	3.20 ±1.0	1.9 ±0.2	28 ±3.0	0.45 ±0.02	145 Grams
SSR25	6.50 ±1.0	2.6 ±0.3	26 ±3.0	0.55 ±0.02	300 Grams
SSR51	8.80 ±1.0	3.2 ±0.2	26 ±3.0	0.60 ±0.03	340 Grams
SSR100	10.5 ±1.0	3.5 ±0.5	28 ±3.0	0.70 ±0.03	500 Grams
SSR200	13.5 ±1.0	5.0 ±0.5	30 ±3.0	0.80 ±0.03	1050 Grams
SSR300	15.5 ±1.0	5.5 ±0.5	30 ±3.0	0.80 ±0.03	1200 Grams

## General Specifications:

Type	Power Rating At 70°C	Max. Working Voltage	Max. Permissible Surge Voltage	Min. Resistance	Max. Resistance	Resistance Tolerance	Standard Resistance Values
SSR16	1/6W	250V	7.5KV	10Ω	180KΩ	±5%	E-24
SSR25	1/4W	250V	10KV	10Ω	180KΩ	±5%	E-24
SSR51	1/2W	300V	15KV	10Ω	220KΩ	±5%	E-24
SSR100	1W	350V	20KV	10Ω	220KΩ	±5%	E-24
SSR200	2W	400V	22.5KV	10Ω	240KΩ	±5%	E-24
SSR300	3W	400V	25KV	10Ω	240KΩ	±5%	E-24

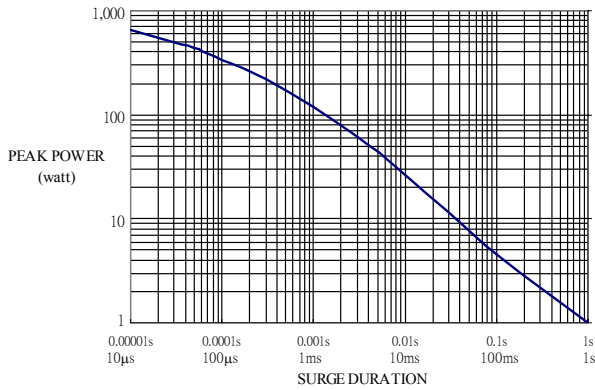
*Special sizes, values, and specifications not listed available on special order.*

May. 26, 2000

# SSR- Surge Safety Resistor

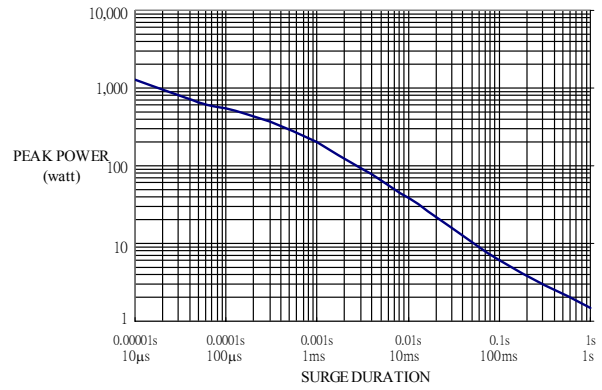
SSR16

SURGE PERFORMANCE



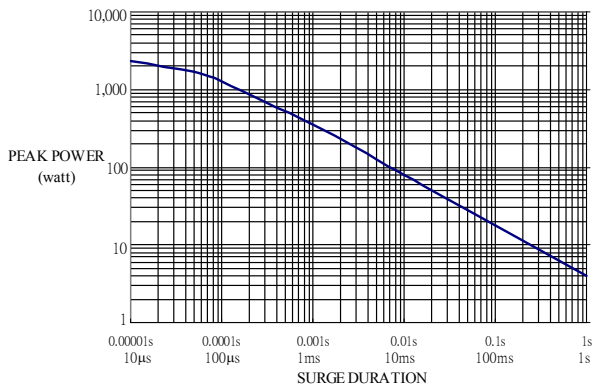
SSR25

SURGE PERFORMANCE



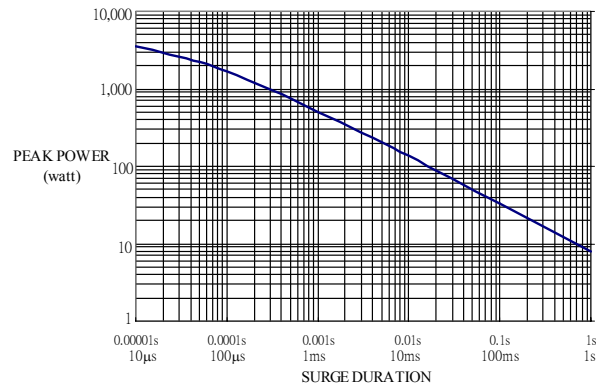
SSR51

SURGE PERFORMANCE



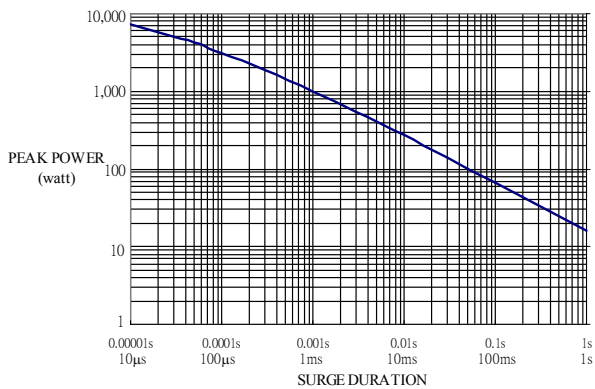
SSR100

SURGE PERFORMANCE



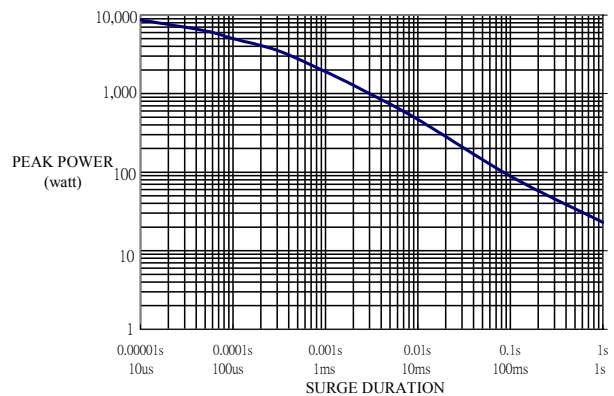
SSR200

SURGE PERFORMANCE



SSR300

SURGE PERFORMANCE



May. 26, 2000

# SSR- Surge Safety Resistor

## Technical Specifications:

Characteristics	Limits
Power Derating, Linear	100% @<+70°C, 0%@+150°C
Dielectric Withstanding Voltage, VAC or DC	SSR16: 300 SSR25 /51 /100: 600 SSR200: 700 SSR300: 800
Temperature Coefficient, PPM / °C	SSR16 /25 /100 /200 /300: ±600 SSR51: ±750
Operating Temperature Range, °C	-55~+150
Insulation Resistance, MΩ	10 <sup>4</sup>
Voltage Coefficient, PPM / V	25

## Performance Specifications:

Tests Characteristics	Test Conditions	Limit
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%
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%
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	1/6W&1/4W 95%
		1/2W to 3W 90%
Vibration	MIL-STD-202 Method 204 Six hours in each parallel and axial direction w/ a simple harmonic motion having an amplitude of 1.52mm and 10 to 20,000 Hz.	±(1%+0.05R)
Terminal Endurance	IEC 60115-1 4.25.3 1000 hours at 150°C without load	±(1%+0.05R)
Thermal Shock	IEC 60115-1 4.19 -55°C 30minutes, +150°C 30minutes, 5 cycles	±(2%+0.05R)
Surge Test	Surge voltage = $\sqrt{(6000 \times P \times R)}$ DC <i>P is power rating, R is resistance value, surge voltage is not more than listed at right.</i> Surge spec = 1.2/50µs Period = 1 sec Number of surges = 3000	SSR16: 7.5KV SSR25: 10 KV SSR51: 15 KV SSR100: 20 KV SSR200: 22.5 KV SSR300: 25 KV 5%

## Ordering Information

Type	Tolerance	Resistance Value	Packaging	Special Request (Optional)
SSR100 SSR200	J (5%)	10K	TB (Tape/Box)	LV (Low value)

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