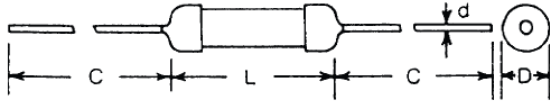


■ **FEATURES**

- Operating Temperature: -40~+200°C
- High surge capability
- Enhanced performance in high voltage applications
- Flame proof coating meets UL-94V-0



■ **DIMENSIONS**

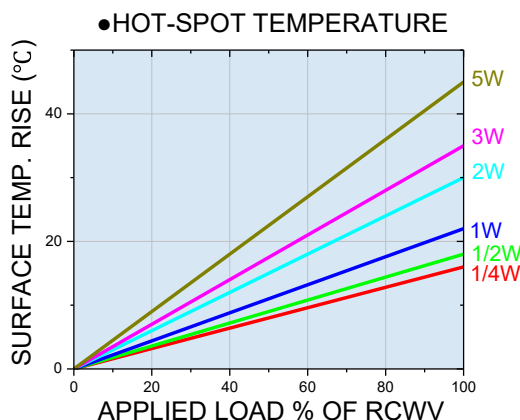
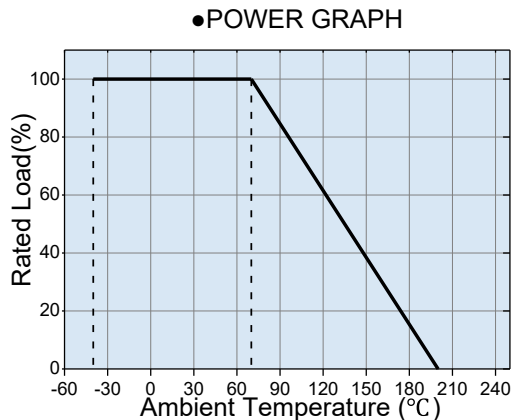
series		Dimensions (mm)				Resistance Range
		L	D	C	d	
SUR25	SUR50S	6.3±0.5	2.3±0.3	28±3.0	0.55±0.03	3.0Ω ~ 9.9Ω (+/-20% tolerance) 10Ω ~ 10KΩ (+/-5% or +/-10% tolerance)
SUR50	SUR100S	9.0±0.5	3.2±0.5	26±3.0	0.65±0.03	
SUR100	SUR200S	11.5±1.0	4.5±0.5	35±3.0	0.78±0.03	
SUR200	SUR300S	15.5±1.0	5.0±0.5	32±3.0	0.78±0.03	
SUR300	SUR500S	17.5±1.0	6.0±0.5	35±3.0	0.78±0.03	
SUR500	SUR700S	24.5±1.0	8.0±0.5	35±3.0	0.78±0.03	

■ **MAXIMUM RATINGS** (Operating Temperature is -40°C through +200°C)

series		Max Working Voltage	Max Overload Voltage	Dielectric Voltage	Max Surge Voltage
SUR25	SUR50S	200V	300V	300V	1,000V
SUR50	SUR100S	200V	300V	500V	3,000V
SUR100	SUR200S	200V	400V	500V	3Ω ~6.2Ω = 10,000V
					6.8Ω ~ 10Ω = 7,000V
					11Ω ~10KΩ = 5,000V
SUR200	SUR300S	300V	600V	500V	10,000V
SUR300	SUR500S	400V	800V	500V	10,000V
SUR500	SUR700S	500V	1000V	500V	12,000V

■ **CHARACTERISTICS (TYPICAL)**

Rated continuous Working Voltage (RCWV) =  $\sqrt{\text{POWER RATING} * \text{RESISTANCE VALUE}}$



■ **PART NUMBER EXAMPLE**

SUR 100 A - 100R - K  
 Series wattage A =Tape/box Resistance J = 5%  
 Size B = Bulk 3R3=3.3Ω K = 10%  
 10R=10Ω M = 20%  
 C = Cut & form 10K=10KΩ

TEST ITEMS	Test Methods	SPECIFICATIONS
Short time overload	Rated Voltage X 2.5 or Max. overload Vol., whichever is lower, for 5sec.	± (1.0%+0.05Ω)
TEMPERATURE COEFFICIENT(T.C.)	Resistance value at room Temperature & room Temperature +100 °C	±300ppm
Anti-Surge characteristics	Discharge Test: Max Anti Surge 1000pf capacitor Discharge Pulse 50 time (1 pulse / 5sec. max) 	1/4W 1/2WS=1KV 1/2W 1WS =3KV 1W 2WS 3Ω~6Ω=10KV 1W 2WS 7Ω~10Ω=7KV 1W 2WS 11Ω~10KΩ=5K 2W 3WS= 10KV 3W 5WS = 10KV 5W 7WS = 12KV ± (20% + 0.05Ω)
Resistance to soldering heat	260°C±5°C, 10s ±1s or 350°C±10°C, 3.5s±0.5s	± (1.0%+0.05Ω)
Moisture resistance	40°C±2°C, 90%~95%RH, 1000h; 90 min 【ON】 30 min 【OFF】	± (5.0%+0.05Ω)
Terminal strength	Direct load for 10 sec. In the direction off the terminal leads.	Tensile: ≥2.5kg
Load Life	1000hours at rated voltage, 40 °C; 90 min 【ON】 30 min 【OFF】	± (5.0%+0.05Ω)

Reference Standards IEC 60 -1115  
 Recommended Storage Temperature is 23 +/-3°C  
 Recommended Storage Humidity is <80% RH  
 Resistance marking is by EIA standard color bands

Resistor body Color:  
 ¼ watt through 3 watt small size is Brown or Gray  
 3 watt through 7watt small size is gray