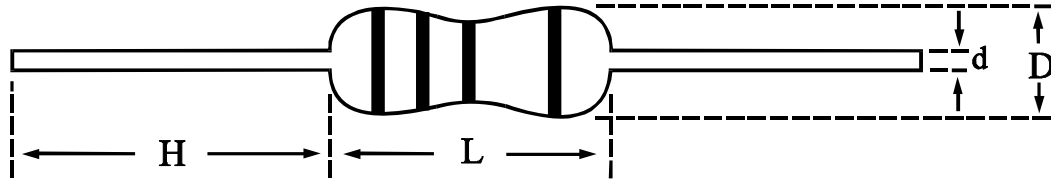


COAT-INSULATED FIXED ANTI-SURGE RESISTORS (RoHS)

DIMENSIONS



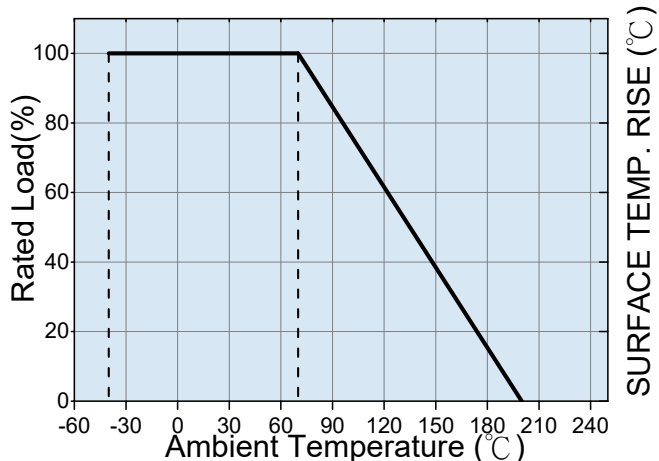
STYLE		DIMENSION(mm)				RESISTANCE RANGE
Normal	Miniature	L	D	H	d	
1/4W	1/2WS	6.3±0.5	2.3±0.3	28±3.0	0.55±0.03	10Ω~10KΩ (±5%)、(±10%) 3Ω3~9Ω9 (±20%)
1/2W	1WS	9.0±0.5	3.2±0.5	26±3.0	0.65±0.03	
1W	2WS	11.5±1.0	4.5±0.5	35±3.0	0.78±0.03	
2W	3WS	15.5±1.0	5.0±0.5	32±3.0	0.78±0.03	
3W	5WS	17.5±1.0	6.0±0.5	35±3.0	0.78±0.03	
5W	7WS	24.5±1.0	8.0±0.5	35±3.0	0.78±0.03	

RATING

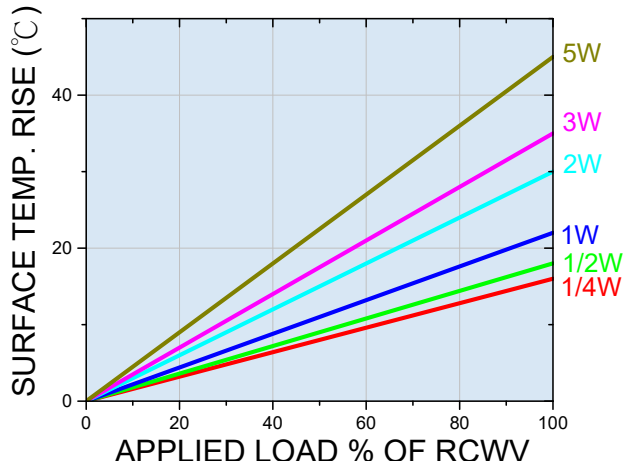
TYPE		Max Working Voltage..	Max Overload Voltage.	Dielectric Withstanding voltage.	Max Anti Surge	Operating Temp. Range
Normal	Miniature					
1/4W	1/2WS	200V	300V	300V	1KV	-40°C to +200°C
1/2W	1WS	200V	300V	500V	3KV	
1W	2WS	200V	400V	500V	3Ω~6.2Ω=10KV 6.8Ω~10Ω=7KV 11Ω~10KΩ=5KV	
2W	3WS	300V	600V	500V	10KV	
3W	5WS	400V	800V	500V	10KV	
5W	7WS	500V	1000V	500V	12KV	

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

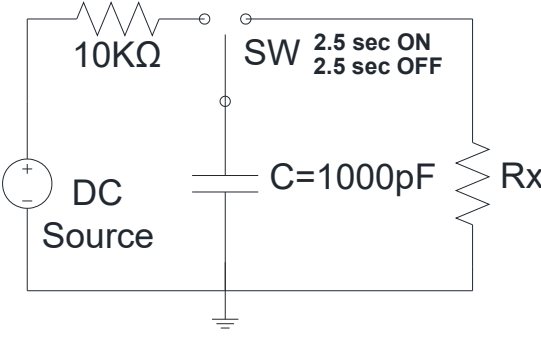
●POWER GRAPH



●HOT-SPOT TEMPERATURE



PERFORMANCE SPECIFICATIONS

TEST ITEMS	Test Methods	SPECIFICATIONS
Short time overload	Rated Voltage X 2.5 or Max. overload Vol., whichever is lower, for 5sec.	$\pm (1.0\% + 0.05 \Omega)$
TEMPERATURE COEFFICIENT(T.C.R.)	Resistance value at room Temperature and room Temperature+100°C	$\pm 300\text{ppm}$
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 7Ω~10Ω=7KV 11Ω~10KΩ=5KV 2W 3WS= 10KV 3W 5WS = 10KV 5W 7WS = 12KV $\pm (20\% + 0.05 \Omega)$
Resistance to soldering hest	260°C±5°C, 10s±1s or 350°C±10°C, 3.5s±0.5s	$\pm (1.0\% + 0.05 \Omega)$
Moisture resistance	40°C±2°C, 90%~95%RH, 1000h 90 min 【ON】 30 min 【OFF】	$\pm (5.0\% + 0.05 \Omega)$
Terminal strength	Direct load for 10 sec. In the direction off the terminal leads.	Tensile: $\geq 2.5\text{kg}$
Load Life	1000hours at rated voltage, 40°C90 min 【ON】 30 min 【OFF】	$\pm (5.0\% + 0.05 \Omega)$

Reference Standards: IEC 60115-1

Storage Temperature: 25±3°C; Humidity < 80%RH

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

The SURC series parts are Non-inductive

● Resistor body color

1/4W TO 3WS ----- Brown

3W TO 7WS ----- Grey

● PART NUMBER:

SURC	1/2W	3K	J	TB
↓	↓	↓	↓	↓
Type	Power Rating	Resistance	Tolerance	Packaging
Flame Proof	1/4W	3R3 3.3Ω	J ± 5%	TB Taping Box
Surge	1/2WS	10R 10Ω	K ± 10%	TR Taping Reel
Carbon Film	M ± 20%	BU Bulk
Fixed Resistors	5W	560R 560Ω		F F-TYPE
	7WS	1K 1KΩ		M M-TYPE