

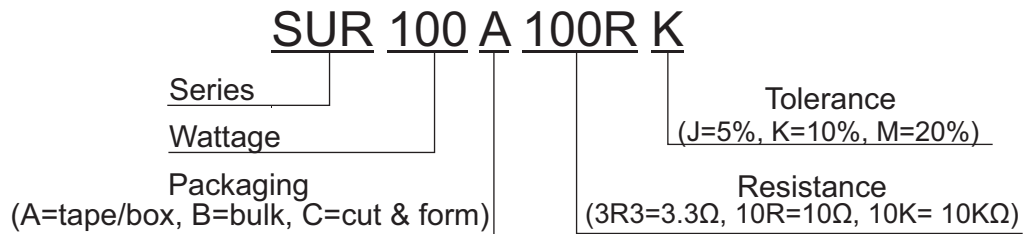
■ **FEATURES**

- Operating Temperature : -40°C to +200°C
- Power Range : 0.5W ~ 7W
- Resistance Range : 3.3Ω ~ 10KΩ
- UL94V-0 Flame proof coating
- High surge capability

■ **POWER RATING & DIMENSIONS (mm)**

Series	Power Rating	Dimensions (mm)				Resistance Range (Ω)
		L	D ±0.5	H ±3	d ±0.03	
SUR50	1/2W	9.0 ± 0.5	3.2	26	0.65	3.3Ω ~ 9.9Ω (±20% Tolerance) =====
SUR100S	1Ws	9.0 ± 0.5	3.2	26	0.65	
SUR100	1W	11.5 ± 1.0	4.5	35	0.78	
SUR200S	2Ws	11.5 ± 1.0	4.5	35	0.78	
SUR200	2W	15.5 ± 1.0	5.0	32	0.78	
SUR300S	3Ws	15.5 ± 1.0	5.0	32	0.78	
SUR300	3W	17.5 ± 1.0	6.0	35	0.78	
SUR500S	5Ws	17.5 ± 1.0	6.0	35	0.78	
SUR500	5W	24.5 ± 1.0	8.0	35	0.78	
SUR700S	7Ws	24.5 ± 1.0	8.0	35	0.78	
						10Ω ~ 10KΩ (±5% or ±10% Tolerance)

■ **PART NUMBER EXAMPLE**



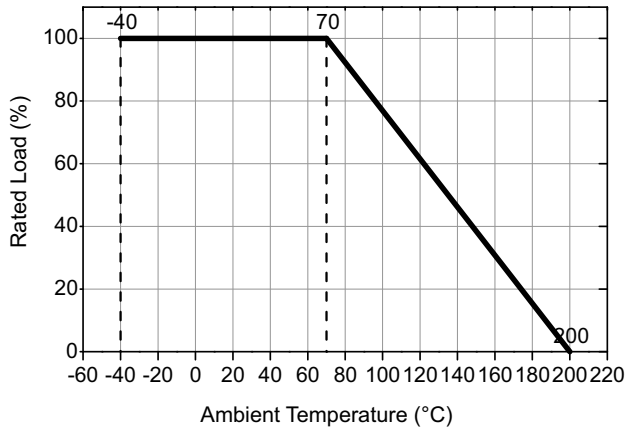
■ **ELECTRICAL CHARACTERISTICS** (Operating Temperature is -40°C ~ +200°C)

Series		Max. Working Voltage	Max. Overload Voltage	Dielectric Voltage	Max. Surge Voltage
SUR50	SUR100S	200V	300V	500V	3KV
SUR100	SUR200S	200V	400V	500V	3.3Ω ~ 6.2Ω = 10KV 6.8Ω ~ 10Ω = 7KV 11Ω ~ 10KΩ = 5KV
SUR200	SUR300S	300V	600V	500V	10KV
SUR300	SUR500S	400V	800V	500V	10KV
SUR500	SUR700S	500V	1000V	500V	12KV

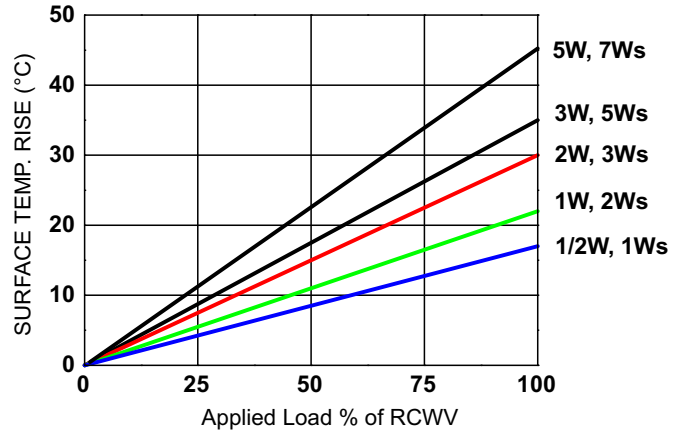
- Rated continuous Working Voltage (RCWV) = $\sqrt{\text{POWER.RATING} \cdot \text{RESISTANCE.VALUE}}$
- Storage Temperature : 25 ± 3°C; Humidity < 80% RH

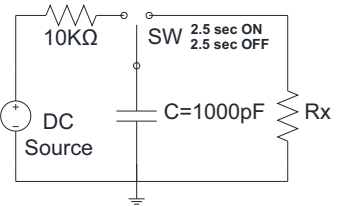
ELECTRICAL CHARACTERISTICS (CONTINUE)

DERATING CURVE



HOT-SPOT TEMPERATURE



ITEMS	TEST METHODS	SPECIFICATION
Short Time Overload	Rated Voltage x 2.5 or maximum overload volume, whichever is lower, for 5 seconds.	± (1.0% +0.05Ω)
Temperature Coefficient (T.C.R.)	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/5 sec. max) 	± (20% +0.05Ω) 1/4W 1/2Ws = 1KV 1/2W 1Ws = 3KV 1W 2Ws : 3.3Ω~6.2Ω = 10KV 7Ω~10Ω = 7KV 11Ω~10KΩ = 5KV 2W 3Ws = 10KV 3W 5Ws = 10KV 5W 7Ws = 12KV
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 ± 2°C, 90% ~ 95% RH, 1000hrs, 90 minutes [ON], 30 minutes [OFF]	± (5.0% +0.05Ω)
Terminal Strength	Direct load for 10 seconds in the direction off the terminal leads	Tensile: ≥ 2.5Kg
Load Life	1000 hours at rated voltage, 40°C 90 minutes [ON], 30 minutes [OFF]	± (5.0% +0.05Ω)

- Reference Standards : IEC60115-1
- Resistance marking is by EIA standard color bands