

SSR – ‘SURE’ SILICON COATED RADIAL TERMINAL TYPE WIRE WOUND RESISTOR

FEATURES



- High Power to size ratio
- Close Tolerance up to $\pm 0.25\%$
- High temperature silicone coating with flame proof property.
- Standard / Non-Inductive type
- Robust - Welded Construction
- Exceptional Stability
- Reliability against severity of environmental abuses
- Instant Solderability
- Resistant to Solvent and Alcohol
- ERTL type tested as per IS 8909
- Customization available

QUICK REFERENCE DATA

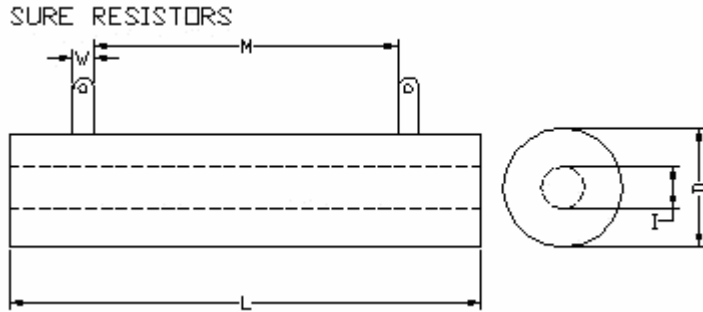
The Ratings are based on following parameter:

Parameter	Values
De-rating	Nil
Duty Cycle	100 %
Ambient Temp	70 °C
Cooling	Natural
Surface Temp	180 °C
Max. Peak surge volt	3 x rated volt up to limiting voltage.

TECHNOLOGY

SSR: Resistor is made by fully welded construction using superior material and processed in the controlled atmosphere so as to give very high value addition in the form of reliability and long life. The solder dipped terminal and clear marking make the use of resistor comfortable.

MECHANICAL DATA

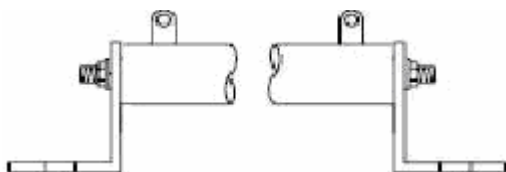


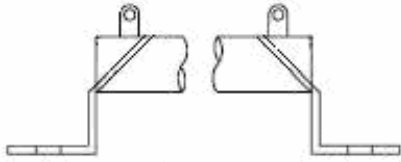
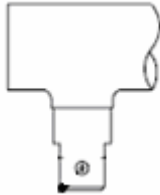
SURE TYPE	WATT	OHMIC RANGE	L ± 2 mm	D ± 1 mm	I	W	M	
SSR	5	0E01 - 80K	30	10	4.5	5	14	
SSR	15	0E01 - 225K	50	12	6.0	5	41	
SSR	20	0E01 - 300K	63	18	9.5	6	43	
SSR	25	0E01 - 400K	76	18	9.5	6	55	
SSR	40	0E03 - 525K	100	18	9.5	6	80	
SSR	50	0E03 - 600K	100	22	12.5	6	80	
SSR	75	0E03 - 800K	125	22	12.5	6	105	
SSR	100	0E05 - 1M	155	32	20.0	8	125	
SSR	150	0E05 - 1M5	200	32	20.0	8	175	
SSR	200	0E05 - 2M	252	32	20.0	8	225	
SSR	250	0E05 - 3M	305	32	20.0	8	275	
SSR	500	0E1 - 3M	300	52	38.0	15	250	
SSR	600	0E1 - 3M	350	52	38.0	15	300	
SSR	650	0E1 - 3M	375	52	38.0	15	300	
SSR	750	0E1 - 3M	450	52	38.0	15	350	
SSR	1000	0E5 - 3M	450	77	58.0	18	380	
SSR	1500	1E - 3M	600	77	58.0	18	530	
SSR	2000	1E - 3M	750	77	58.0	18	680	
SSR	3000	0E5 - 9M	Parallel configuration of 3 x 1000 W as per drawing					
SSR	3000	0E5 - 6M	Parallel configuration of 2 x 1500 W as per drawing					
SSR	4500	0E5 - 6M	Parallel configuration of 3 x 1500 W as per drawing					
SSR	6000	0E5 - 9M	Parallel configuration of 3 x 2000 W as per drawing					

Please note: Mounting Brackets are also available for horizontal and vertical mounting.

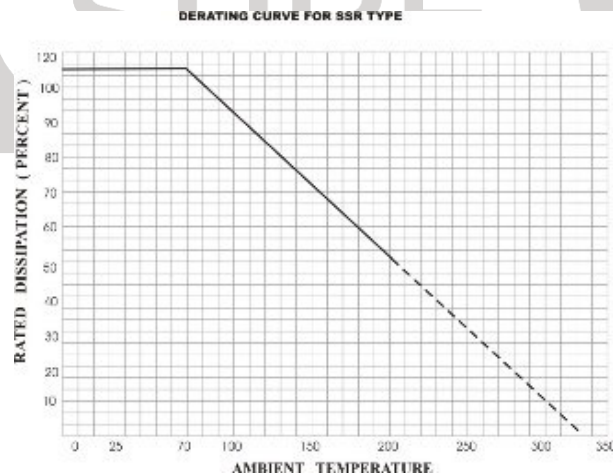
MOUNTING OPTIONS:

TYPE 1



TYPE 2**TERMINAL OPTIONS:****ELECTRICAL CHARACTERISTICS****DERATING**

The power that the resistor can dissipate depends on the operating temperature:

**APPLICATION INFORMATION**

These types of resistors are typically used for the following applications:

- 1) Discharge resistors
- 2) RC Circuits
- 3) DC stage of power supplies to absorb the braking energy of trains
- 4) Braking systems of AC Drives for elevators / lifts / cranes / trains

TESTS AND REQUIREMENTS

Essentially all tests are carried out in accordance to the schedule of IEC publications 60115-1, category 40/200/56 (rated temperature range -40 to +200 °C; damp heat, long term, 56 days and along the lines of IEC publications 60068-2); "Recommended basic climatic and mechanical robustness testing procedure for electronic components" and under standard atmosphere conditions according to IEC 60068-1 subclause 5.3, unless otherwise specified.

In some instances deviations from IEC applications were necessary for our method specified.

Table 8. Test and requirements

TEST	PROCEDURE	REQUIREMENTS
Temperature coefficient	Between - 40 °C and + 200 °C: R < 10 Ω R ≥ 10 Ω	0 to 600 ppm/°C - 80 to +140 ppm / °C
Short time overload	Room temperature; dissipation 10 x Pn; 5 s (voltage not more than 1000 V / 25 mm)	ΔR/Rmax ±2% +0.1
Robustness of terminations: Tensile all samples Bending half number of samples Torsion other half number of samples	Load 10 N; 10 s Load 5 N; 4 x 90° 2 x 180° in opposite directions	No visual damage ΔR/Rmax ±0.5% +0.05
Solderability (after ageing)	16 h at 155 °C; leads immersed in flux 600, leads immersed 2 mm for 2 ± 0.5 s in a solder bath at 235 ±5 °C	Good tinning; (≥95% covered) No Visible Damage
Resistance to soldering heat	Thermal shock: 3 s; 10 °C; 2.5 mm from body	ΔR/Rmax ±0.5% + 0.05
Rapid change of temperature	30 minutes at - 40°C and 30 minutes at + 200°C; 5 cycle	No visible damage ΔR/Rmax ±1% + 0.05
Vibration	Frequency 10 to 500 Hz (1 to 7W) and 10 to 55 Hz (10 to 20W), displacement 0.75 mm or acceleration 10 g, three directions; total 6 h (3x2 h)	No visible damage ΔR/Rmax ±0.5% + 0.05