KV-OHM

PROTOS ELECTROMECH PvT. LTd.

AN ISO 9001:2015 CERTIFIED COMPANY

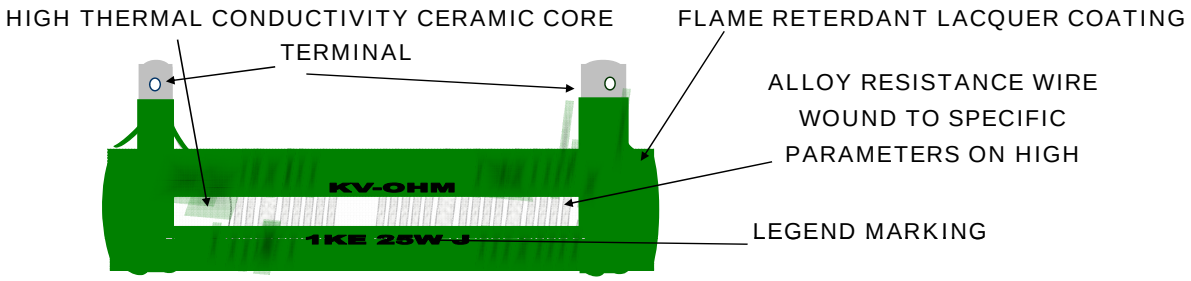
POWER RADIAL TYPE WIREWOUND RESISTORS

Series : SR

Features:

- Widest range in the industry.
- High performance for low cost.
- High-temperature flame proof silicon coating.
- Tolerance to ± 5, ±10%.
- Better tolerance available on request.
- Custom sizes and terminations available.
- Low Tolerance upto ±0.25% on request can be provided
- RoHS Compliant directive 2002/95/EC
- Lead (Pb)-free solder contacts.

Construction :

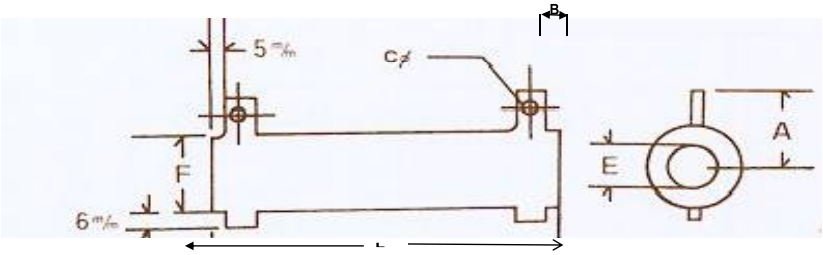


Technical specification:

DESCRIPTION	SERIES
	SR3 ~ SR2000
Resistance tolerance*	±1% ~ ±10%
Temperature coefficient	≤ 200 ppm/°C
Maximum dissipation	3W ~ 2000W
Maximum permissible voltag	$\sqrt{P \times R}$
Operating temperature range	-55° ~ 350°C
Stability, R max.	
Load	△R±(5.0% +0.10Ω)
Climatic test	△R±(5.0% +0.10Ω)
Soldering	△R±(1.0% +0.05Ω)
Short time overload	△R±(2.0% +0.10Ω)

*Note : Lower resistance tolerance other than specified above are available on request

Dimensions :



Physical Data:

1.0 GENERAL SPECIFICATION :

TYPE	WATT. @ 25°C	TOL.	TCR PPM/°C	D TYPE DIMENSIONS (mm) L	F- od	E id	A	B	RESISTANCE RANGE
SR5	5W	±1% ~ ±10%	≤ ±200	**27**	**10**	**5**	**20**	**4**	**0E01~500E**
SR10	10W	±1% ~ ±10%	≤ ±200	42	13.0	5	21	4	0E1~1K
SR15	15W	±1% ~ ±10%	≤ ±200	47	14.0	9	21	4	0E1~2K
SR20	20W	±1% ~ ±10%	≤ ±200	52	17.0	9	22	4	0E1~20K
SR25	25W	±1% ~ ±10%	≤ ±200	67	17.0	9	22	6	0E1~20K
SR30	30W	±1% ~ ±10%	≤ ±200	67	23.0	12	22	5	0E1~20K
SR40	40W	±1% ~ ±10%	≤ ±200	77	22.0	12	25	5	0E1~20K
SR50	50W	±1% ~ ±10%	≤ ±200	100	22.0	12	25	6	0E1~30K
SR60	60W	±1% ~ ±10%	≤ ±200	125	27.0	12	28	6	0E1~30K
SR75	75W	±1% ~ ±10%	≤ ±200	150	27.0	12	28	6	0E1~30K
SR75A	75W	±1% ~ ±10%	≤ ±200	100	32.0	20	28	6	0E1~30K
SR100	100W	±1% ~ ±10%	≤ ±200	150	32.0	20	32	8	0E1~50K
SR120	120W	±1% ~ ±10%	≤ ±200	165	32.0	20	32	8	0E1~50K
SR150	150W	±1% ~ ±10%	≤ ±200	200	32.0	20	32	8	0E1~50K
SR200	200W	±1% ~ ±10%	≤ ±200	250	32.0	20	32	8	0E1~100K
SR250	250W	±1% ~ ±10%	≤ ±200	270	32.0	20	32	8	0E1~100K
SR250A	250W	±1% ~ ±10%	≤ ±200	210	42.0	25	38	8	0E1~100K
SR300	300W	±1% ~ ±10%	≤ ±200	250	42.0	25	38	8	0E1~100K
SR300A	300W	±1% ~ ±10%	≤ ±200	300	32.0	20	38	8	0E1~100K
SR400	400W	±1% ~ ±10%	≤ ±200	300	42.0	35	38	12	0E1~100K
SR500	500W	±1% ~ ±10%	≤ ±200	310	55.0	40	50	12	0E1~200K
SR600	600W	±1% ~ ±10%	≤ ±200	315	55.0	40	50	12	1E~500K
SR750	750W	±1% ~ ±10%	≤ ±200	350	55.0	40	50	12	1E~500K
SR1000	1000W	±1% ~ ±10%	≤ ±200	400	55.0	40	60	12	1E~500K
SR1200	1200W	±1% ~ ±10%	≤ ±200	450	55.0	40	60	12	1E~500K
SR1500	1500W	±1% ~ ±10%	≤ ±200	500	55.0	40	60	12	1E~500K
SR2000	2000W	±1% ~ ±10%	≤ ±200	400	80	60	65	12	1E~500K
SR2500	2500W	±1% ~ ±10%	≤ ±201	450	80	60	65	12	1E~500K
SR3000	3000W	±1% ~ ±10%	≤ ±202	500	80	60	65	12	1E~500K

Note : Working voltage is $\sqrt{P \times R}$ where P is power & R is resistance in Ohms

Flammability:

The resistor coating will not burn or emit incandesent particles under any condition of applied temperature or power overload.

Marking:

The SR type the nominal resistance & tolerance are marked on the resistor body using LEGENT marking; for e.g : KV-OHM

0E1 5W J

Part Numbering Information:

Part Number : Type number, power rating, resistance value, tolerance, tcr.

SR200	200W	20 Ohm	±5%	200 ppm/°C
Type	Power rating	Resistance value	Tolerance	TCR

Examples: PART NO. : SR200, 200W, 20 Ohm, ±5%, 200ppm/°C

Performance Data (Procedure & Requirements):

TEST	PROCEDURE	REQUIREMENTS
Short Time Overload	10 X Rated power for 5 sec.	△ R/R max.: ±(2.0 +0.05 Ω)
Dielectric Withstanding Voltage	1000 VAC, from terminal to mounting hardware	No flash over or breakdown should observed
Endurance @ 25°C	1000 hrs. load with Pn (power nominal) 1.5 hr. ON & 0.5 hr. OFF	No visual damage △ R/R max.: ±(5.0% +0.1 Ω)
Endurance @ Upper Category Temperature	1000 hrs. at 350°C with no load	No visual damage △R/R max.: ±(5.0% +0.1 Ω)
Temperature Rise Test	Horizontally mounted, loaded with Pn	Hot spot temperature less than maximum body temperature
Temperature Coefficient	At 25/-55/25 °C & 25/150/25 °C	Within specified limits
Insulation Resistance	V- Block method for 1 minute duration At 500 V dc	> 10^3 MΩ

Derating Curve: