

Ultra-High Precision Resistor

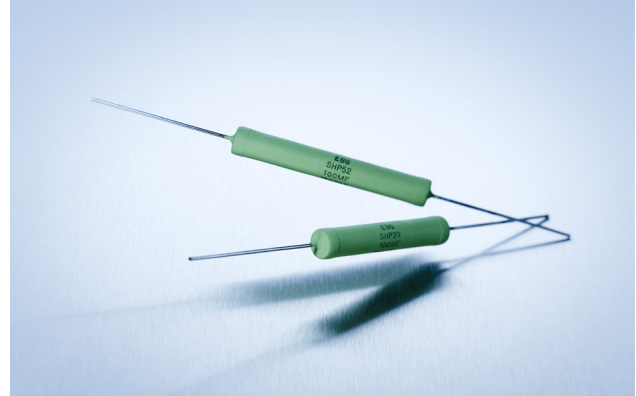
Series SHP

Overall stability ± 5 ppm/ $^{\circ}\text{C}$ from $+25^{\circ}\text{C}$ to $+65^{\circ}\text{C}$ (incl. VCR & TCR)

We developed new material combinations and processing methods which make it possible to achieve a TCR (thermal coefficient of resistance) of up to ± 5 ppm while maintaining the minimal VCR (voltage coefficient of resistance).

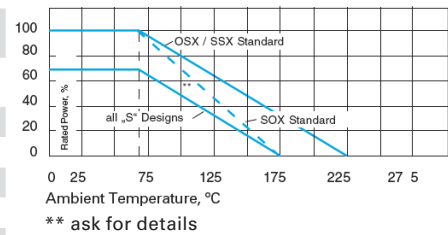
Features

- up to 10 kV operating voltage
- Non-Inductive design
- ROHS compliant



Technical Specifications

Resistance value	100 M Ω \leq 250 M Ω (other values on special request)
Resistance tolerance	± 1 % standard (lower on special request for limited ohmic values)
Temperature coefficient	± 5 ppm/ $^{\circ}\text{C}$ from $+25^{\circ}\text{C}$ to $+65^{\circ}\text{C}$ in 10 degree steps (incl. VCR & TCR) referenced to 25°C
Maximum working voltage	10 kV DC
Dielectric strength	1,000 V DC based on the coating
Insulation resistance	10 G Ω min. at 1,000 V DC
Power rating	up to 1 W
Load life	1,000 hours at rated power at 70°C , ΔR 0.20 % max.
Load life stability	0.20 % per 1,000 hours at 70°C
Moisture resistance	MILStd-202, method 106, ΔR 0.4 % max.
Thermal shock	MILStd-202, method 107, Cond. A, ΔR 0.20 % max.
Encapsulation	standard coating: silicone conformal we recommend 2xpolyimide coating for use in oil and potted applications (ask for details)
Lead material	OFHC copper, tin-plated
Weight	depending on model no. (ask for details)



How to make a request

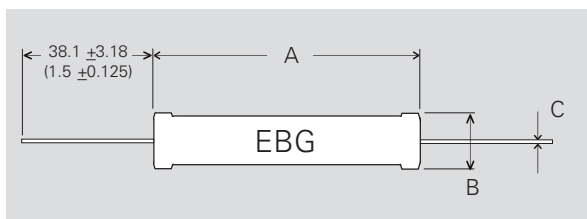
Model no._Ohmic value_Tolerance

For example:
SHP-52 150M 1%

Model Specifications

Model no.	Wattage	Max. kV	Resistance values		Dimensions in millimeters (inches)		
			Min. Ω	Max. Ω	A ± 0.50 ± 0.02	B ± 0.50 ± 0.02	C ± 0.50 ± 0.02
SHP-52	1 W	10	100 M	250 M	52.10 (2.051)	8.20 (0.323)	1.00 (0.040)
SHP-39	0.6 W	8	100 M	250 M	39.50 (1.555)	8.20 (0.323)	1.00 (0.040)
SHP-78 on special request (ask for details)							

Dimensions in mm [inches]



The above spec. sheet features our standard products. For further options please contact our local EBG representative or contact us directly.