

# Series SHP

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

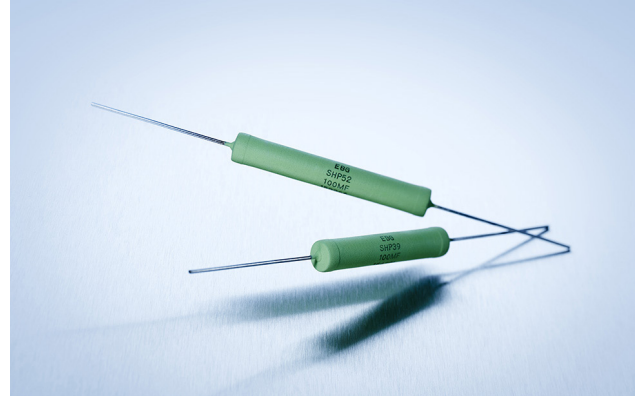
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We developed new material combinations and processing methods which make it possible to achieve a TCR (thermal coefficient of resistance) of up to  $\pm 5$  ppm while maintaining the minimal VCR (voltage coefficient of resistance).

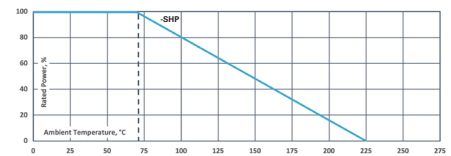
## Features

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



## Technical Specifications

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



## How to make a request

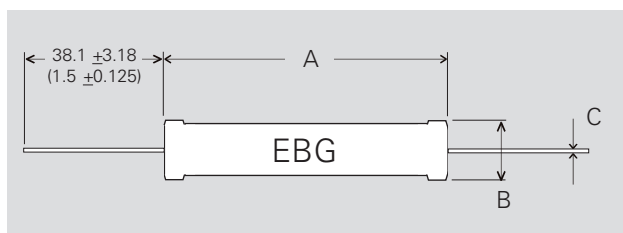
Model no. \_Ohmic value\_ Tolerance

For example:  
SHP-52 150M 1%

## Model Specifications

Model no.	Wattage	Max. kV	Resistance values		Dimensions in millimeters (inches)		
			Min. $\Omega$	Max. $\Omega$	A $\pm 0.50$ $\pm 0.02$	B $\pm 0.50$ $\pm 0.02$	C $\pm 0.05$ $\pm 0.002$
SHP-39	0.6	8	100 M	250 M	39.50 (1.555)	8.20 (0.323)	1.00 (0.040)
SHP-52	1	10	100 M	250 M	52.10 (2.051)	8.20 (0.323)	1.00 (0.040)
SHP-78	2.25	15	100 M	250 M	77.60 (3.055)	8.20 (0.323)	1.00 (0.040)

## 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.

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