

# Precision High-Voltage Resistors

## Precision High-Voltage Resistor Series OSX/SSX/SOX

Power- and Precision High-Voltage Resistors, TC of 100 ppm/°C and wide ohmic range (300 Ω-10 GΩ)

The low-cost OSX/SSX/SOX series meets a general set of requirements. These products are available with a silicone or epoxy coating and feature a wide range of tolerances and temperature coefficients of resistance.

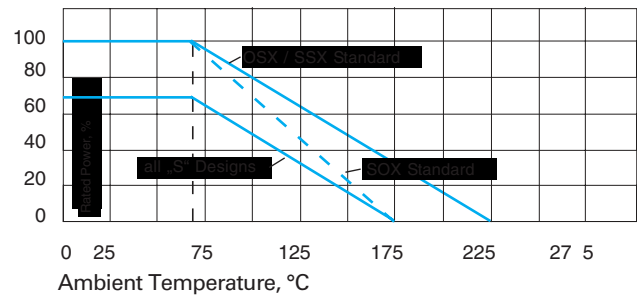
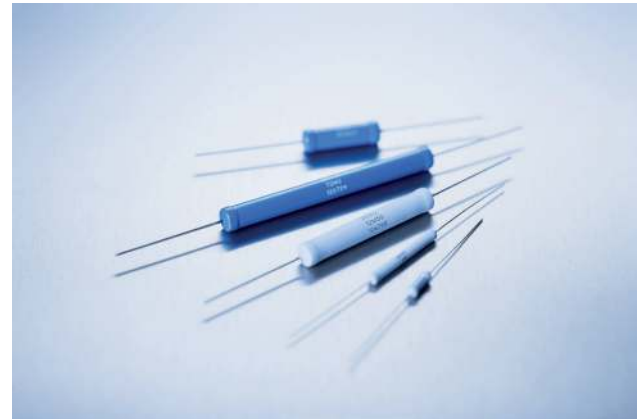
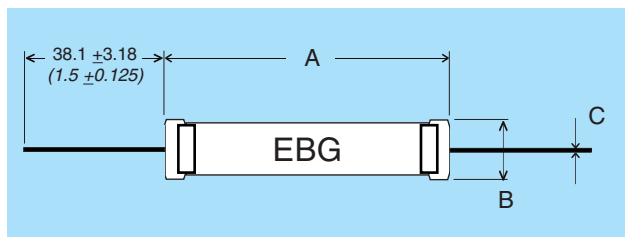
### General Characteristics

- Silicone coating for ambient temperatures up to 225°C
- Epoxy coating for excellent humidity protection available under the label SOX
- Resistance tolerances: from ±0.1% to ±10%
- Standard temperature coefficient: ±100 ppm/°C
- Power ratings: up to 19.4 W
- 16 models with voltage ratings: from 5 kV to 60 kV
- Load life stability: 0.20% per 1,000 hours at 70°C
- Resistance range: from 300 Ω to 10 GΩ
- Full encapsulation over the entire resistor length.

All SSX types are also available with **M4** or **6/32** screw end caps.

### Specifications

- Resistance tolerance: ±1%, ±2%, ±5%, or ±10% (tolerance to ±0.1%, ±0.25%, ±0.5% upon special request \*)
- Temperature coefficient: standard: 100 ppm/°C referenced to 25°C, ΔR taken at 0°C and +70°C, other TCR upon request.
- Load life: 1,000 hours at rated power at 70°C, ΔR 0.20% max.
- Thermal shock: MIL-Std-202, Method 107, Cond. A, ΔR 0.20% max.
- Moisture resistance: MIL-Std-202, Method 106, ΔR 0.40% max.
- Encapsulation: silicone or epoxy coating
- Lead material: OFHC copper, tin-plated



Model no.	Wattage at 70°C	Max. cont. oper. KV	Max. KV „S“ **	Resistance		Dimensions in millimeters Dimensions in inches		
				Min. Ω	Max. Ω	A ±0.50 ±0.02	B ±0.50 ±0.02	C ±0.50 ±0.002
OSX 10	0.80	1.5	1.9	100	1G	10.80 0.425	4.00 0.157	0.60 0.024
OSX 13	1.00	1.5	1.9	100	5G	13.40 0.528	4.00 0.157	0.60 0.024
OSX 20	1.50	3.0	3.7	100	10G	19.70 0.776	4.00 0.157	0.60 0.024
OSX 26	1.95	4.0	5.0	100	10G	26.00 1.024	4.00 0.157	0.60 0.024
OSX 30	2.30	6.0	7.5	100	10G	32.40 1.276	4.00 0.157	0.60 0.024
OSX 39	3.10	6.0	7.5	100	10G	39.40 1.551	4.00 0.157	0.60 0.024

SOX 20	1.20	5.0	6.2	300	10G	21.30 0.839	8.60 0.339	1.00 0.040
SOX 26	1.60	7.5	9.4	450	10G	27.50 1.083	8.60 0.339	1.00 0.040
SOX 39	2.50	11.0	13.8	500	10G	40.20 1.583	8.60 0.339	1.00 0.040
SOX 52	3.40	16.0	20.0	400	10G	52.50 2.067	8.60 0.339	1.00 0.040
SOX 78	5.00	24.0	30.0	600	10G	78.70 3.098	8.60 0.339	1.00 0.040
SOX 103	6.50	32.0	40.0	800	10G	104.10 4.098	8.60 0.339	1.00 0.040
SOX 124	8.20	40.0	50.0	1M	10G	124.20 4.890	8.60 0.339	1.00 0.040
SOX 154	10.60	48.0	60.0	1M	10G	154.50 6.083	8.60 0.339	1.00 0.040
SOX 154	10.60	48.0	60.0	1M	10G	154.50 6.083	8.60 0.339	1.00 0.040

SSX 20	2.30	5.0	6.2	600	10G	20.20 0.795	8.20 0.323	1.00 0.040
SSX 26	3.90	7.5	9.4	600	10G	27.20 1.071	8.20 0.323	1.00 0.040
SSX 32	4.20	8.5	11.0	550	10G	33.00 1.299	8.20 0.323	1.00 0.040
SSX 39	4.60	11.0	13.8	500	10G	39.50 1.555	8.20 0.323	1.00 0.040
SSX 52	7.80	16.0	20.0	400	10G	52.00 2.047	8.20 0.323	1.00 0.040
SSX 78	11.70	24.0	30.0	600	10G	77.60 3.055	8.20 0.323	1.00 0.040
SSX 103	12.50	32.0	40.0	800	10G	103.20 4.063	8.20 0.323	1.00 0.040
SSX 124	15.50	40.0	50.0	1M	10G	123.70 4.870	8.20 0.323	1.00 0.040
SSX 154	19.40	48.0	60.0	1M	10G	153.70 6.051	8.20 0.323	1.00 0.040

\* In case you need very tight tolerances (±0.1% to ±0.5%), we suggest not to use the full power rating, but rather the next larger size to achieve ultimate stability. For details, please contact your nearest EBG representative.

\*\* Our resistors are designed for operation in air and non-aggressive atmospheres. For special applications (i.e., oil, casting, molding, SF<sub>6</sub>, etc.) please contact your nearest EBG representative.

The above spec. sheet features our standard products. For further options, please contact our local EBG representative or contact us directly. For updated information, please visit our website!