

Cylindrical Power Resistors

## A Miba Group Company

## Series SSP/OSP

Power- and High-Voltage Resistors with high maximum temperature operation, TC of 50 ppm/°C

The SSP series meets the requirements of power ratings of up to 40 W while at the same time offering voltage ratings of up to 6,000 V.

These Power Film Resistors cover a wide resistance range and operate at up to 275°C in axial lead construction.

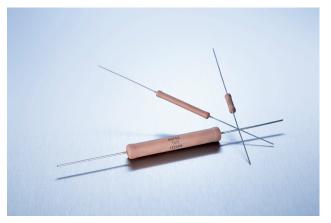
## **General Characteristics**

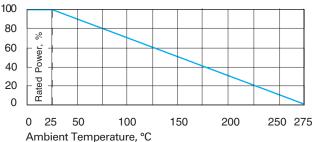
- Non-Inductive Performance (EBG's patented process)
- Full power and voltage ratings (derating not required)
- Very high resistance values (see table) up to 30  $M\Omega$

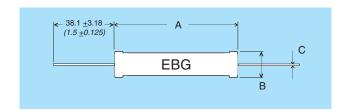
To accomplish this objective of high stability, high value, high voltage and high power in the SSP series, EBG employs a special variation of its METOXFILM formulations. These films are annealed on special ceramic bodies at temperatures above 1,400°F/800°C and become an inherent part of the ceramic surface, which brings about their unusual performance characteristics. As a result of EBG's unique Non-Inductive patented process, these resistors are ideally suited for high-frequency applications and result in less "ringing" with minimum distortion of the signals and faster settling times.

## **Specifications**

- Resistance tolerance: standard: ±1% to ±10%\*\*
- Temperature coefficient: for 10 Ω and above 50 ppm/°C. TC referenced to 25°C, ΔR taken at –15°C and +105°C.
- Dielectric strength: 1,000 VDC
- Insulation resistance: 10 GΩ min.
- Overload/overvoltage: 5 times rated power with applied voltage not to exceed 1.5 times maximum continuous operating voltage for 5 seconds. ΔR 0.5% max. or 0.5 Ω max., whichever is greater (not applicable to SSP 148!)
- Load life: 1,000 hours at rated power,  $\Delta R$  0.5% max. or 0.5  $\Omega$  max., whichever is greater.
- Thermal shock: MIL-Std-202, Method 107, Cond. C,  $\Delta$ R 0.5% max. or 0.5  $\Omega$  max., whichever is greater.
- Max. operating temperature: +275°C
- Encapsulation: silicone conformal
- Lead material: OFHC copper, tin-plated







| Model no. | Wattage | Max.<br>voltage | Resistance |        | Dimensions in millimeters<br>Dimensions in inches |                      |                      |
|-----------|---------|-----------------|------------|--------|---|----------------------|----------------------|
|           |         | voltago         | Min. Ω     | Max. Ω | A ±0.50<br>±0.02                                  | B ±0.50<br>±0.02     | C ±0.50<br>±0.002    |
| OSP 10    | 2.00    | 1,000           | 0.1        | 10M    | 10.90<br><i>0.429</i>                             | 4.20<br><i>0.165</i> | 0.60<br><i>0.024</i> |
| OSP 13    | 2.40    | 1,000           | 0.1        | 12M    | 13.70<br><i>0.539</i>                             | 4.20<br><i>0.165</i> | 0.60<br><i>0.024</i> |
| OSP 20    | 3.00    | 1,000           | 0.1        | 15M    | 19.70<br><i>0.776</i>                             | 4.20<br><i>0.165</i> | 0.60<br><i>0.024</i> |
| SSP 20    | 4.00    | 800             | 0.1        | 15M    | 20.20<br><i>0.795</i>                             | 8.20<br><i>0.323</i> | 1.00<br><i>0.040</i> |
| SSP 26    | 6.00    | 2,000           | 0.1        | 15M    | 26.90<br>1.059                                    | 8.20<br><i>0.323</i> | 1.00<br><i>0.040</i> |
| SSP 32    | 8.00    | 4,500           | 0.1        | 20M    | 33.00<br>1.3                                      | 8.20<br><i>0.323</i> | 1.00<br><i>0.040</i> |
| SSP 32 F* | 10.00   | 4,500           | 1          | 10M    | 33.00<br>1.3                                      | 8.20<br><i>0.323</i> | 1.00<br><i>0.040</i> |
| SSP 39    | 10.00   | 4,500           | 0.1        | 20M    | 39.50<br>1.555                                    | 8.20<br><i>0.323</i> | 1.00<br><i>0.040</i> |
| SSP 52    | 12.50   | 6,000           | 0.1        | 30M    | 52.10<br>2.051                                    | 8.20<br><i>0.323</i> | 1.00<br><i>0.040</i> |
| SSP 52 F* | 15.00   | 6,000           | 1          | 30M    | 52.10<br>2.051                                    | 8.20<br><i>0.323</i> | 1.00<br><i>0.040</i> |
| SSP 148   | 40.00   | 6,000           | 1          | 100K   | 148.00<br>5.83                                    | 16.00<br><i>0.63</i> | M4                   |

F\*: enforced cooling

- Resistor in open air position, air flow >1.5 m/sec. at ≤25°C ambient temperature
- Resistor in case, air flow >2m/sec. at ≤25°C ambient temperature

Resistance tolerances down to  $\pm 0.5\%$  or  $\pm 0.1\%$ , lower max. power (like SGP Series)

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!

<sup>\*\*</sup>Version L: