

ECCOSHIELD® SVR

Conductive Silicone Rubber Sheet

Material Characteristics

- ECCOSHIELD® SVR is a highly conductive silver filled sheet material based on silicone rubber
- It has high temperature and compression set characteristics
- ECCOSHIELD® SVR increases in resistivity as tension is applied. However, when relieved it returns to its original value
- ECCOSHIELD® SVR will provide high levels of insertion loss as a flat gasket between mating metal surfaces, *see Insertion Loss table at right*
- Extreme low temperature flexibility is excellent

Applications

- ECCOSHIELD® SVR is used as a gasket material where both RF and hermetic sealing are required
- ECCOSHIELD® SVR can act as a substitute for metals in a variety of applications including current carrying devices
- ECCOSHIELD® SVR has been used at a current density of 1097 amperes/in² (170 amperes/cm²) after being conditioned by gradually raising the current density. Compression set of sheet stock, at clamping pressures in excess of 70 kg/cm² at room temperature for long periods of time, is negligible

Shipping & Availability

- ECCOSHIELD® SVR is available in two standard sheet sizes of 6" x 12" (15.25 cm x 30.5 cm) and 12" x 12" (30.5 cm x 30.5 cm)
- Sheets are available in thicknesses of .020", .030", .040", .050" & .060" (0.51, 0.76, 1.02, 1.27 & 1.52mm)
- For pre-form die cut gaskets, please consult our Applications Engineering Group
- The recommended adhesive for ECCOSHIELD® SVR is our conductive ECCOSHIELD® RVS adhesive

Typical Properties

Color	Silver-tan
Continuous Service Temperature	392°F (200°C)
Short Time Service Temperature	446°F (230°C)
Density	3.58 g/cc
Hardness, Shore A	>60
Elongation at Rupture	>50%
Volume Resistivity	1 x 10 ⁻³ ohm-cm
Compressive Strength	~260 lb/in ²
Tensile Strength at Rupture	121 psi, (8.5 kg/cm ²)
Thermal Conductivity (cal-cm)/(sec-cm ² -°C)	0.01

Insertion Loss, dB

	200kHz	1 MHz	400 MHz	10 GHz
Magnetic	Electric	Electric	Plane	Plane
70	100	100	100	100

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