



TECHNICAL DATA SHEET

SHIELDING SOLUTIONS IWG-FSA001 INFILLED ALUMINIUM WIRE MESH IN FLUOROSILICONE ELASTOMER GASKET MATERIAL

Product overview

IWG-FSA001 is an EMI gasket material comprising of a woven aluminium cloth infilled or 'over' moulded with a fluorosilicone elastomer. A high level of EMI shielding performance is reliably achieved by virtue of the array of aluminium mesh contact points exposed at the surface. The fluorosilicone elastomer provides a high level of environmental sealing and has excellent resistance against contact with oils and fuels. A watertight or pressure seal can be achieved where the sealing faces have a flatness tolerance of $>0.05\text{mm}$. This material also has the advantage that the woven mesh layer acts as an internal compression limit allowing relatively small area gaskets to be designed in without the requirement for additional mechanical compression stops.

Key features

- Fluorosilicone elastomer to MIL-R-25988 provides excellent resistance to UV light, ozone, fuels, oils etc
- Low impedance contact provides a high level of EMI shielding over a wide frequency range
- Aluminium mesh to AMS 4182
- Excellent resistance to extremes of temperature / ageing
- Additional compression limits/control not normally required
- Ideally suited for applications such as connector and waveguide gaskets
- Available in continuous lengths up to 300mm in width or pre-cut gaskets



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Material Properties

Thickness	0.5mm +/- 0.1mm
Aluminium mesh count	24 opi
Elastomer colour	Blue
Elastomer hardness	50 IRHD
Shielding performance (attenuation) to MIL-STD 285 -	
- 100kHz H field	>60 dB
- 100MHz E field	>100 dB
- 1GHz Plane wave	>75 dB
Recommended closure pressure	520 kPa (75 psi)
Gasket resistance	<10 mΩcm ²
Service temperature range	-55°C to 160°C



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