



TECHNICAL DATA SHEET

SHIELDING SOLUTIONS MCF-NCP001 METALLISED CONDUCTIVE FOAM MATERIAL

Product overview

MCF-NCP001 is an EMI gasket material comprising of a nickel over copper-plated polyurethane foam. In standard form the material is supplied with a nickel over copper-plated non-woven conductive fabric on both faces that provides reinforcement and abrasion resistance. The surface can be further reinforced by replacing the non-woven fabric with woven / rip-stop variants. In applications where no reinforcement is required the foam can be supplied without fabric cladding, but is treated with a conductive polyurethane resin binder.

This material offers a combination of good conductivity in three axes with low compression force. It is ideally suited to static or low cycling applications such as I/O shielding (grounding).

It is normally supplied with a conductive acrylic pressure sensitive adhesive on one face although it can also be supplied with adhesive on both faces.

Key features

- Good X, Y, Z conductivity
- Low compression force required – very conformable
- Long-term / stable conductivity
- External compression limits/control not normally required
- Ideally suited for applications such as multiple I/O port shielding
- Available in sheet or pre-cut to drawing
- RoHS compliant
- Easily punched / cut and installed



TECHNICAL DATA SHEET

SHIELDING SOLUTIONS MCF-NCP001 METALLISED CONDUCTIVE FOAM MATERIAL

Material Properties	
Thicknesses available (mm)	0.5, 1.5, 2.0, 3.0, 4.0, 5.0, 6.0
Thickness tolerance	+0.3mm
Resistivity (5N/cm ² compressive force)	<0.2Ω/□
PSA peel strength 180° / 25mm test width / 304 S/Steel	>8N
Shielding performance (attenuation) to MIL-STD 285 -	
- 100MHz E field	>100 dB
- 500MHz E field	>100 dB
- 1GHz Plane wave	>80 dB
Service temperature range	-10°C to +60°C



Shielding Solutions Ltd
Unit 30-33
46 Springwood Drive
Braintree
Essex
CM7 2YN

Tel: 01376 330033

Fax: 01376 339163

Web: www.shielding-solutions.com