

CF CONDUCTIVE FOAM

Schlegel Electronic Materials (SEM) introduces NEW CF Conductive Foam. SEM CF foam, a highly resilient Nickel-Copper plated polyurethane foam, is sandwiched between SEM's knitted and non-woven conductive fabrics to form industry leading substrate for die-cut gaskets. CF material is ideal for applications that require surface conformity with excellent cavity-to-cavity EMI shielding, superior conductivity under low compression forces and better shielding effectiveness at very high frequencies. CF foam-based gaskets are precision die-cut with a back-layer of either conductive or non-conductive pressure-sensitive-adhesive (PSA).

Schlegel's manufacturing and metal plating processes enhance the material integrity of the SEM Conductive Foam and ensure excellent galvanic compatibility even for large surface applications like I/O gaskets. The through-conductivity achieved with Schlegel CF increases the shielding effectiveness at high frequencies by shortening the return current path between the flanges.



The "New" Schlegel Electronic Materials

As the originator of the fabric-over-foam EMI Shielding Technology, Schlegel Electronic Materials is the industry's most trusted name. SEM continues to set the standard for quality and innovation, designing advanced solutions for a wide range of applications. And our worldwide locations ensure that you get what you need –when and where you need it. From concept to production, the SEM complete portfolio of Shielding products combines highly conductive materials with flexible foams and coatings to provide the latest in EMI containment solutions. **Schlegel Electronic Materials** objective is to ensure that its customers have a competitive edge –by offering the highest quality and most cost-effective products conveyed with the highest level of customer service.

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Conductive fabrics over Nickel-Copper plated polyurethane foam				
Dimensions	Maximum Width: 22" (560mm) Thicknesses: 0.02",0.04", 0.06", 0.09", 0.13", 0.20" (0.45 mm,1.00mm, 1.5mm, 2.3mm, 3.4mm, 5.0mm) Other thicknesses may be available. Please contact your SEM Representative.			
Operating Temperatures	-40°F - 156°F (-40°C - +70°C) in accordance with ASTM D3374 (Standard test methods for flexible cellular materials)			
Surface Resistivity	<0.08 Ohm/sq			
Compression set	< 15 % (compressed at 50 % during 22 Hrs. @ 70°C)			
Tensile Strength	15 kg/inch (CF-78-30FR)			
Flammability	UL94-V0 / V1 - See details at www.UL.com (SEM FE-Plastic component QMFZ2.E313523)			
Aging	No change in surface resistivity after exposure to 60°C - 90%RH - 300 hrs			
Shielding Effectiveness	>90 dB AVG. 10-1000 MHz (Tem-T Cells –Method described in IEEE Std 1302)			
Compliance	2011/65/EU (RoHS 2.0) compliant			

Thickness	Tolerance	UL Fire Rated	Part #
0.45mm	± 0.2mm	-	CF 78-05NR
1.00mm	± 0.2mm	UL94-V0	CF-78-10FR
1.50mm	± 0.2mm	UL94-V0	CF-78-14FR
1.50mm	± 0.2mm	-	CF-78-14NR
2.30mm	± 0.3mm	UL94-V0	CF-78-20FR
2.30mm	± 0.3mm	-	CF-78-20NR
3.40mm	± 0.3mm	UL94-V1	CF-78-30FR
3.40mm	± 0.3mm	-	CF-78-30NR
5.00mm	± 0.5mm	-	CF-78-50NR



www.schlegelemi.com

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Fabric-Over-Foam Gaskets . Extruded Foam Gaskets . Environmental EMI Gaskets I/O Shielding Gaskets . Conductive Foam . Conductive Tapes . Conductive Elastomers BeCu Fingerstocks . Shielded Windows . Honeycomb Vent Panels . Thermal Interface Materials Dynashear Gaskets . Dynagreen Gaskets . Greenshield