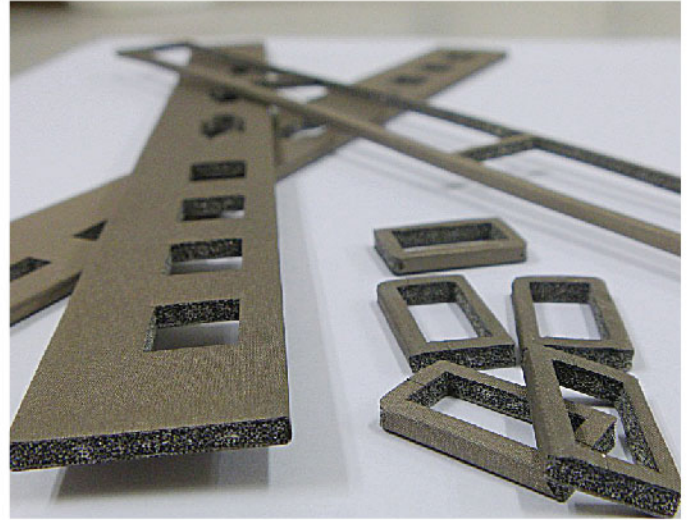


THE RIGHT SHIELDING PRODUCT FOR DIE-CUT I/O APPLICATIONS

Information Technology Equipment and other electronic devices must comply with various international radiated emissions and susceptibility requirements. Under specific conditions, FCC part 15 (US) requires such equipment to pass stringent regulations up to 40 GHz. Most unintentionally-radiated emissions are from field leakage at various chassis external interfaces, or from unbalanced differential signals; containment of both require shielding materials to provide a low impedance path despite the broadband and/or high frequency operation of such devices. Simultaneously, these electronic devices are sensitive to various susceptibility requirements, including electrostatic discharge (ESD, e.g., IEC 61000-4-2), and, in some cases, must resist to applied voltages as high as 15 kV. In this instance, the same shielding materials must also feature a very low impedance/resistance at very low frequencies to ensure a harmless discharge path exists to allow the charge to flow from the I/O connectors to the exterior of the chassis, and then safely away from the devices.

Schlegel Electronic Materials (SEM) introduces ORS-II, a new series of gaskets specially designed for broadband applications. By combining its famous nickel copper plated conductive foam and its high-end nickel copper C12 flexible fabric cladding, ORS-II offers minimal surface resistance to achieve superior grounding and shielding results at low frequencies. By offering excellent Z-conductivity to close the cavities in the chassis openings, ORS-II also ensures substantial shielding performance at high frequencies.



ORS-II is available in a variety of thicknesses, which are die-cut to customer specifications, for a durable highly conductive product in all X-Y-Z axes. In addition, shielding efficiency is achieved with less sensitivity to compression variances than other traditional shielding products. ORS-II is available with a UL94-V0 flammability rating and complies with RoHS 2.0 European Directive and SVHC Policy (REACH).

All these features combined in one product makes ORS-II a great engineering solution when addressing all types of shielding challenges which are present in broadband and high-speed applications.

ORS-II is available in a multitude of geometries and in varying thicknesses. ORS-II is recommended for all combinations of I/O connectors, is particularly effective when broadband emissions and/or susceptibility are of concern, and is far more effective than standard conductive foam when superior grounding is important.

schlegelemi.com

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interference
shielding products

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TECHNICAL SPECIFICATIONS

Shielding Effectiveness 0.1-40 GHz	See Graph	Stripline method (IEEE std 1302)
Operation Temperature	-40°F +156°F (-40°C +70°C)	
Flammability	UL94 V0	UL94
Surface Resistivity	<0.02 Ohm/sq. : NiCu-C12 <0.08 Ohm/sq. : NiCu-C22	SEM LP 3004
Contact Resistance (@1Kg load)	<0.11 Ohm-inch: NiCu-C12 <0.20 Ohm-inch: NiCu-C22	SEM LP 3001
Abrasion Resistance	1.000.000 cycles	ASTM D3886
Thicknesses (mm)	1.00,1.50,2.30,3.40,5.00	

ORS-II Part Number Guideline: CC3EXXXX - ORS II

CC3E: Die-cut according to customer drawing

XXXX: Sequence number

Shielding effectiveness of ORS-II versus current shielding materials

