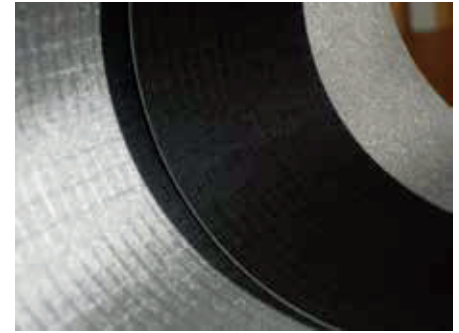


Schlegel Electronic Materials (SEM) invented the first fabric-over-foam gasket in 1987. At that time the very first conductive cladding used was the, now very famous, blackened silver Ripstop fabric AgRs-C2. A silver plated nylon 6/6 fiber woven in a Ripstop fabric with a urethane based anti-corrosion top coating with Schlegel Electronic Materials proprietary fillers formulated to improve abrasion resistance and galvanic compatibility. AgRs-C2 did serve later on as a reference to the all shielding market. This highly flexible conductive fabric is still available today because of its unique characteristics linked to the silver such as high conductivity of silver oxides, anti-bacterial properties for medical applications, and good adhesion properties on PA 6.6.



Schlegel Electronic Materials is pro-actively proposing a Halogen Free (IEC61249-2-21) EMI shielding range of products as we believe that these substances will be considered for inclusion in future RoHS legislation .

Schlegel Electronic Materials is also in compliance with the 4 new restricted substances which should be added in annex II of the Directive before 2018 (Flame retardant HBCDD and phthalates DEHP, BBP and DBP).

Technical Specifications

Silver plated woven Nylon 6/6, 30 denier Light Ripstop fabric.

Nominal fabric thickness: 0.003 in.

Top coat: urethane based anti-corrosion coating with Schlegel Electronic Materials, Inc. proprietary fillers.

Nominal thickness of C2 coating is .25 oz/yd²

Material Specifications:

Cladding: Silver C2 (PA66, Ripstop)

Surface Resistivity: $\leq 0.5 \text{ ohm/}\blacksquare$ and $CpK \geq 2.0$

Shielding Effectiveness:

Shielding performance of gasket per MIL DTL 83528C in frequencies of 20 MHz to 10 GHz: 95 dB avg.

– See graph here below

Note: Gasket geometry and application determine actual shielding effectiveness

Contact Resistance (SEM LP-3001): $< 1.0 \text{ ohms-inch}$ at 1 Kg load/inch

Abrasion Resistance (ASTM D3886): No change in surface resistivity: 800 cycles

Compliance: 2015/863/EU (RoHS 2.0)

Foam Specifications

All C2 products are constructed with SEM's unsurpassed, industry leading polyurethane foam core technology.

Within the C2 cladding you can select from the following options:

- Standard, highly resilient UL 94-HB recognized foam

- UL 94-V0 recognized foams

Compression Set:

The core of SEM shielding gaskets is open-celled polyether polyurethane foam in a high-resiliency (HB) formula. Compression set of foam that is encapsulated is 1% at ambient temperature, and $< 5\%$ at 70°C (158°F) when compressed 50% for 22 hours.

