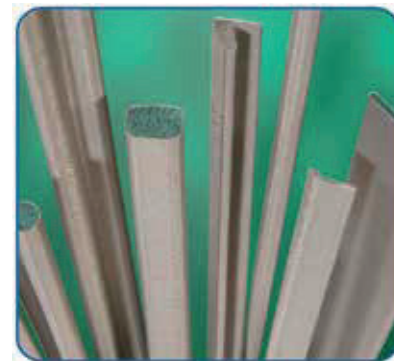


**Schlegel Electronic Materials (SEM)** C12 EMI gaskets provide premium performance for demanding telecommunication, optical, mainframe, and supercomputer applications. SEM C12 gaskets are designed with Nickel-Copper cladding. SEM C12 cladding resists fracturing, thus providing reliable high-frequency shielding performance. SEM C12 gaskets are designed for high temperature applications and offer superior current-carrying performance for improved ESD and EMP protection.



## Specifications - Nickel-Copper C12

### Nickel-Copper C12 Specifications

SEM's uniquely designed NiCu C12 gaskets are designed to provide maximum shielding effectiveness, environmental durability, and abrasion resistance. C12 cladding is ideal for high-frequency shielding, due to its unique design: copper topped by nickel, plated to a polyester woven substrate. Because they experience significantly less fracturing than other nickel-plated gaskets, SEM C12 gaskets maintain high-frequency performance in situations where shielding above 97 dB is required. The exclusive acrylic-based C12 coating provides improved galvanic compatibility with a wide range of materials.

### Material Specifications:

Cladding: Nickel/Copper C12 (polyester plain weave)

Surface Resistivity:  $\leq 0.024 \text{ ohm/}\square$  and  $\text{CpK} \geq 2.0$

### Shielding Effectiveness:

Shielding performance of gasket per SAE ARP 6248 in frequencies of 1 GHz to 40 GHz.

Note: Gasket geometry and application determine actual shielding effectiveness

**Contact Resistance (SEM LP-3001):** 0.08 ohm-inch at 1 kg load/inch

**Abrasion Resistance (ASTM D3884):** No change in surface resistivity: 1,000 cycles

**Compliance:** 2015/863/EU (RoHS 2.0)

### Foam Specifications

All C12 products are constructed with SEM's unsurpassed, industry leading polyurethane foam core technology. Within the C12 cladding you can select from the following options:

-Standard, highly resilient UL 94-HB recognized foam

-Bromine-free flame retardant UL 94-V0 recognized foam

### 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  $70^\circ\text{C}$  ( $158^\circ\text{F}$ ) when compressed 50% for 22 hours.

