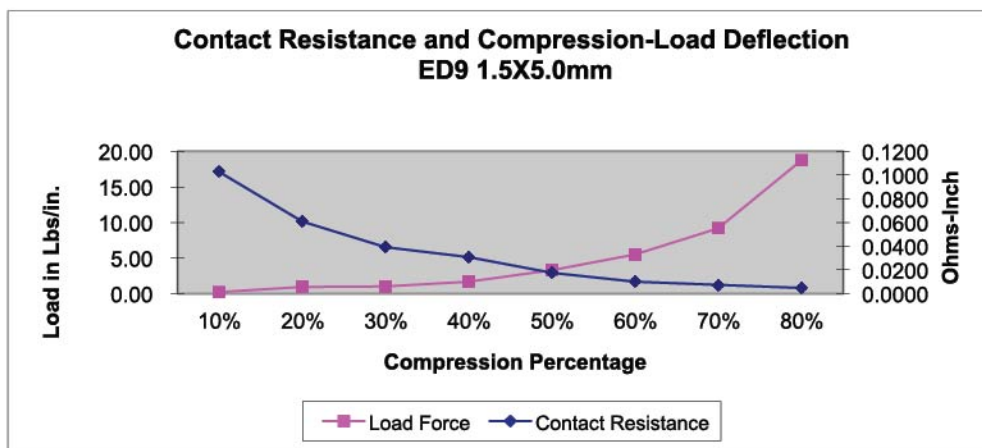


## Fabric over Silicone EMI Gasket

**Schlegel Electronic Materials(SEM)**, a well-respected leader in the EMI Shielding industry, introduces Fabric over Silicone EMI Gaskets (FoS) for high temperature applications. FoS has been developed with a new flame retardant formulation providing EMI shielding gaskets with UL94-V0 grade (Underwriters Laboratories Inc.) and Halogen Free according to IEC 61249-2-21 ( $\leq 900$  ppm chlorine,  $\leq 900$  ppm bromine and 1500 ppm max. halogens). Fabric over Silicone EMI gaskets provide low compression forces, low compression set and an operating temperature that can be up to 125 °C (257 °F). Combined with Highly flexible SEM fabrics NiCu-C12 or NiCu-C70, Fabric over Silicone gaskets still feature over 70 dB attenuation at 40 GHz (SEM Stripline method) making this product ideal for on-board shielding or high temperature environment. Fabric over Silicone is currently available for all the SEM rectangular profiles.



**Fig 1. Contact Resistance and Compression Load Deflection Testing result of ED9 (1.5 x 5.0 mm) Gasket**



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## TECHNICAL SPECIFICATIONS

CHARACTERISTICS	SPECIFICATIONS	TEST METHODS
Shielding Effectiveness	96 dB average (20MHz-10GHz) : NiCu-C70 97.4 dB average (20MHz-10GHz): NiCu-C12	MIL DTL 83528 C
Compression Force	1.70 lbs/inch @ 40%*	SEM LP-3001
Contact Resistance	0.031 ohms-inch @ 40%*	SEM LP-3001
Compression Set	5 % (compressed 50% for 22 hrs at 70 °C) **	ASTM D 3574
Compression Range	30 – 70 %	
Surface Resistance	<=0.066 Ohms/sq. : NiCu-C70 <=0.028 Ohms/sq. : NiCu-C12	ASTM F390
Contact Resistance at 1Kg load	< 0.11 ohms-in < 0.08 ohms-in	SEM LP-3001
Operating Temperature	-40°C , +125°C	ASTM D3574
Abrasion resistance	>= 800,000 cycles: NiCu-C70 >=1,000,000 cycles: NiCu-C12	ASTM D3886
Flame Retardant	UL94 V0	UL94 (Underwriters Laboratories, Inc)
Compliance	2002/95/EC (RoHS) Compliant REACH 151 SVHC Compliance	
Halogen Content	<=900 ppm chlorine & <=900 ppm bromine & 1500 ppm max for both	IEC 61249-2-21 /EN 14852 B

\* Result is measured on the ED9 Resulted measured => Result was measured ED9 (1.5 x 5.0 mm) profiles

\*\*Result measured on the 5 mm x 25.4 mm x 25.4 mm silicone foam

The technical specification data is based on SEM tests and analysis that we believe to be reliable. However, in no event, shall SEM be liable for the inaccuracies or omissions contained therein. In all cases, details and values should be verified by the customer.

**Part/Number Guideline**

**EXXSNMXXXXHF**

**EXX** : SEM profile

**S** : Silicone foam

**N** : 3: NiCu-C70 Ripstop Fabric  
4: NiCu-C12 Plain Weave Fabric

**M** : Finishing/Attachment system (refer to SEM Profile Selection Guide)

**XXXXX**: Length in inches XXX.XX"

Please consult Schlegel Electronic Materials Representatives to confirm availability of products

[www.schlegelemi.com](http://www.schlegelemi.com)