



CUMING MICROWAVE

C-SHIELD 277

RoHS
Compliant

TECHNICAL BULLETIN 240-4

FLEXIBLE CONDUCTIVE SHEET FOR EM/RFI GASKETS

C-SHIELD 277 is an electrically conductive elastomer made by combining silicone rubber with silver-plated copper powder. The resulting material is highly conductive, yet flexible and compliant, making it ideal for gasket applications requiring both a hermetic seal and EMI/RFI/EMP protection. Uses include gaskets and seals on electronic equipment cases, waveguides, access panels, and communication systems.

TYPICAL PROPERTIES

Color:	Grey
Density, g/cm ³ :	3.0
Durometer, Shore A:	60
Volume Resistivity, ohm-cm:	0.005
Maximum Use Temp., °F:	250
Shielding Effectiveness, 10 GHz:	>100 dB

For maximum shielding effectiveness, C-SHIELD 277 gaskets must be in intimate conductive contact with both metal mating surfaces. In most cases, bonding the gasket in place is not required. However, a conductive silicone adhesive such as C-BOND 217 (see Technical Bulletin 217) may be used if necessary. Other useful Cuming Corporation conductive materials include C-BOND 272 conductive epoxy adhesive and C-SHIELD 280 conductive caulking compound.

AVAILABILITY

The standard form of C-SHIELD 277 is flat sheets 12 in x 12 in thicknesses of 0.020 in, 0.030 in, and 0.040 in. Typical thickness tolerance is ± 0.005 in. The sheets can be easily cut to make custom gaskets. It is also possible to cast or extrude special shapes. Cuming Corporation will quote on the fabrication of custom gaskets and shielded assemblies.

The information in this Technical Bulletin, Although believed to be accurate, is not to be taken as a warranty for which Cuming Microwave assumes legal responsibility nor as permission or recommendation to practice any patented invention without license; it is offered for verification by the customer, who must make the final judgment of suitability for any application.

Document Control No.: N-13-000-0082-2
06/04/07 Page 1 of 1