

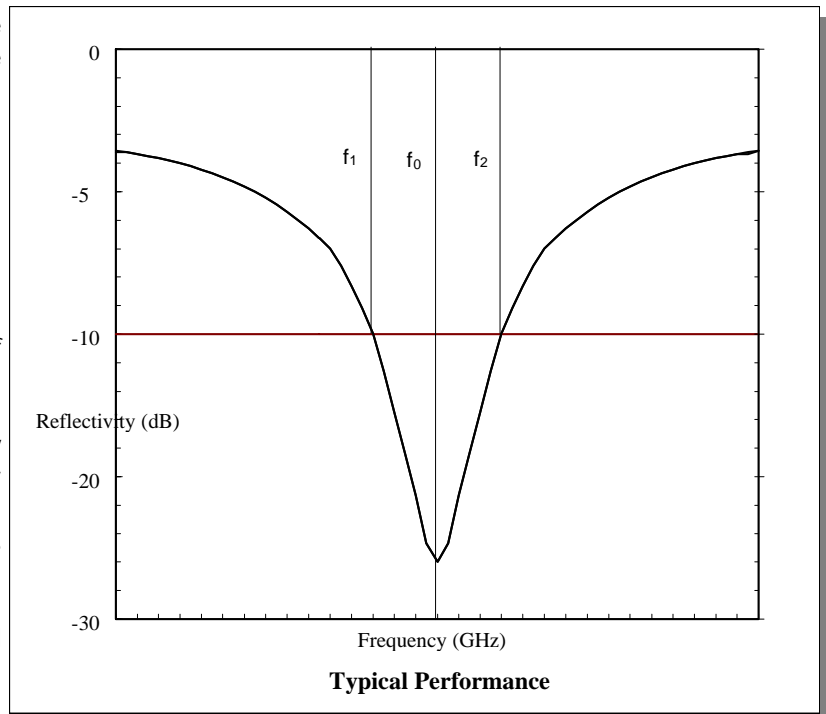


ECCOSORB[®] SF used in Thermal Vacuum Chambers for Ground Based Satellite Testing

When Aerospace engineers are designing high performance test chambers for multi-million dollar satellites only the best materials will do. That's why engineers look to Emerson & Cuming Microwave Products' ECCOSORB[®] SF product line.

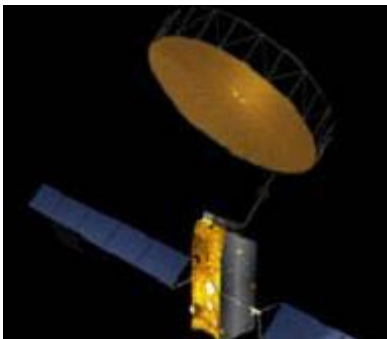
This silicone based microwave absorber was designed to reduce reflections from a metal surface and can be tuned to your desired frequency. When installed against a metal surface ECCOSORB[®] SF will offer at least -20 dB of reflection loss or better within a 5% bandwidth. (see graph at right)

Able to withstand temperatures of 325 °F, handle 0.2 W/cm² power, and pass outgas testing per ASTM E-595-90, it's no wonder why ECCOSORB[®] SF is the first and only choice for ground based, vacuum test chambers. Upon request this absorber can also be supplied with an adhesive backing, designated SS6M, which also passes ASTM E-595-90 outgas testing.



The performance of ECCOSORB[®] SF is defined by reflectivity at a single frequency. A generalized performance curve is shown above. The design frequency f_0 , has a $\pm 5\%$ bandwidth, designated as f_1 and f_2 .

Although performance degrades with increased incidence angle, at incident angles out to 45°, reflectivity of -16dB has been demonstrated.



ECCOSORB[®] SF has been used successfully in the following applications

- Inmarsat IV Satellite, ECCOSORB[®] SF-2.2
- Japanese GPS Satellite, ECCOSORB[®] SF-1.2/SS6M (SS6M = adhesive backed)
- Several US Satellites ECCOSORB[®] SF-1.5
- Argentinean-Italian Earth Resource Satellites, ECCOSORB[®] SF-1.275

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