



**Product
Bulletin**

400-01

MICROSORB MDS
High-Loss, Flexible Suppression Absorber

GENERAL DESCRIPTION

MICROSORB MDS is a flexible, high-loss silicone rubber sheet which is used for the suppression of microwave surface currents. **MDS** can be applied to antenna elements, microwave dishes, electronic assembly housings/cavities or waveguides for isolation or to modify antenna radiation patterns. The Radar Cross Section of an object can be greatly reduced by application of **MDS** if the RCS is affected by surface current flow or “wrapped around” waves. **MDS** is not intended for use as a specular absorber though it will reduce specular reflections by a few dB.

MICROSORB MDS's silicone elastomer chemistry enables it to be subjected to outdoor exposure with no adverse effects. It can be used continuously at temperatures up to 350°F (177°C) and can withstand short exposures at higher temperatures.

MICROSORB MDS can be easily cut to shape with a sharp blade or by die-cutting. It can be effectively used as a gasket in microwave devices, providing a microwave and hermetic seal.

APPLICATION

- MICROSORB Technologies** offers the addition of
- ❖ Pressure Sensitive Transfer Adhesive on the back surface, for ease of application.
 - ❖ EMI Metal Foil on the back surface to provide a ground plane.
 - ❖ Fabrication of material into shapes to your specific drawing requirements. We offer die-cutting, water-jet, slitting or spraying services.
 - ❖ Molding of **MICROSORB MDS** to lids and housings.

SPECIFICATIONS

Weight, lbs/ft ² (kg/m ²)	0.4 (2)
Hardness, Shore A	60
Thermal Conductivity:	
(BTU)(in)/(hr)(ft ²)(°F)	0.002
(cal)(cm)/(sec)(cm ²)(°C)	6.0
Water Absorption, % 24 Hours	< 0.1
Dielectric Strength, v/mil (kv)/mm)	300 (11.8)
Volume Resistivity, ohm-cm	> 10 ¹⁰
Service Temperature, °F (°C)	-40 to 500 (260)

SIZES

MICROSORB MDS is available in sheet
12" x 12" x 0.030"

- ❖ Microsorb offers custom sizes. Please contact your **MICROSORB** Customer Service Department to discuss your specific requirements.