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**Product
Bulletin**

300-07

**MICROSORB FFS
HIGH LOSS ABSORBER FOR UHF AND
MICROWAVE FREQUENCIES, SILICONE
SHEET**

GENERAL DESCRIPTION

MICROSORB FFS is a thin, ferrite filled, silicone rubber sheet absorber which has high magnetic loss at UHF and microwave frequencies up to 10 GHz. It is applied to metal and non-metallic surfaces to attenuate RF surface currents. It can be used to modify antenna patterns, lower the Q of a cavity, act as a transmission line attenuator, and modify the radar cross section of targets.

MICROSORB FFS is thin and flexible, so it will conform to curvatures of the substrate. It is readily die-cut or cut with a sharp blade. Being based on a silicone rubber, it will withstand wide temperature ranges, and survive outdoor exposure.

APPLICATION

The normal method of applying **MICROSORB FFS** to a substrate is with a silicone RTV adhesive. For best results, the substrate should be scuffed with sandpaper, wiped with alcohol to remove dust and grease, and with a silicone primer. The silicone adhesive can be brushed or rolled onto the substrate, and then the part is bonded to the substrate. An overnight cure is generally required, and a modest temperature cycle, such as a few hours at 150°F will strengthen the bond.

- **MICROSORB Technologies** offers the addition of Pressure Sensitive Transfer Adhesive on the back surface, for ease of application.

SPECIFICATIONS

Hardness, Shore A	80
Flammability:	non-flammable
Thermal Conductivity (BTU)(in)/(hr)(ft ²)(°F) (cal)(cm)/(sec)(cm ²)(°C)	6.0 0.002
Water Absorption, % 24 Hours	<0.1
Dielectric Strength, v/mil (kv)/mm	250 (10)
Volume Resistivity, ohm-cm	10 ¹²
Service Temperature, °F (°C)	-65 to +400 -(50 to +200)

Thickness and weight (2 grades):
1.0mm (.040")--- 3.2kg/m² (0.65 lb/ft²)
2.0 mm (.080")--- 6.3 kg/m² (1.30 lb/ft²)

SIZES

MICROSORB FFS is available in sheet 12" x 12".

Standard thicknesses available are:

0.030"
0.040"
0.060"
0.080"
0.125"

- Microsorb offers custom thicknesses. Please contact your **MICROSORB** Customer Service Department to discuss your specific requirements.
- Fabrication of material into shapes to your specific drawing requirements. We offer die-cutting services. Please contact Microsorb Customer Service for assistance.

Warranty: This information is, to the best of Microsorb Technologies knowledge, accurate as of the date indicated. This information relates only to the specific materials designated herein and is not intended for the application or use of the materials with any other materials or in any process. The information is intended as a general guide only and does not constitute a warranty or representation whatsoever and **MICROSORB TECHNOLOGIES HEREBY DISCLAIMS ALL EXPRESS AND IMPLIED WARRANTIES ARISING FROM THE USER'S RELIANCE ON OR USE OF THIS INFORMATION.**
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