



32 Mechanic Avenue Unit 211 • Woonsocket RI 02895

Tel.401-767-2255

Fax 401-767-2255

www.microsorbtech.com

E-mail: info@microsorbtech.com

**Product
Bulletin**

200-05

MICROSORB MTLF
Lightweight, Flexible Lossy Absorber

GENERAL DESCRIPTION

MICROSORB MTLF is a series of lightweight, flexible, lossy sheet materials which absorb microwave energy over a broad band of frequencies.

MICROSORB MTLF can be used to suppress surface currents on a radiating element. It can also be used to isolate antenna elements or devices or provide a precision insertion loss barrier. Its flexibility and composition enable **MTLF** to be easily cut and formed to fit virtually any surface or application.

MICROSORB MTLF consists of a foam material with tightly controlled dielectric (conductive) loss. It is available in a variety of thicknesses and loading. The proper **MTLF** type for a given application is dependent on configuration. Talk to one of our engineers to find the best match for your application.

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.

SPECIFICATIONS

MICROSORB MTLF's electrical specifications are in terms of insertion loss which is the dB reduction in microwave energy caused by the insertion of the material. The insertion loss of a material is dependent on a variety of factors including dielectric constant, loss tangent, and material thickness. The amount of loss you see is dependent upon your application.

MICROSORB MTLF is not recommended to be used to reduce specular reflections. While it would provide some absorption in such a configuration, the performance would be inherently narrowbanded.

SIZES

MICROSORB MTLF is available in a standard sheet size of 24"x24" with thicknesses of 1/8", 1/4", 3/8", and 3/4". Other sizes or custom parts are available upon request.

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

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.

Rev 1 071106



32 Mechanic Avenue Unit 211 • Woonsocket RI 02895

Tel.401-767-2255

Fax 401-767-2255

www.microsorbtech.com

E-mail: info@microsorbtech.com

**TYPICAL ELECTRICAL PROPERTIES:
MICROSORB MTLF SERIES**

GRADE	Attenuation (dB/cm)		Relative Impedance ($ Z /Z_0$)	
	3 GHz	10 GHz	3 GHz	10 GHz
-14	1.0	1.7	0.83	0.89
-16	1.5	2.3	0.78	0.87
-18	3.2	4.7	0.69	0.82
-20	4.2	7.0	0.61	0.78
-22	7.4	15	0.55	0.74
-24	11	24	0.25	0.44
-26	16	34	0.18	0.31
-28	20	40	0.16	0.27
-30	24	46	0.13	0.22

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.

Rev 1 071106