



**Product
Bulletin**

400-04

MICROSORB MT-E
High-Loss Magnetic Absorber, Epoxy

GENERAL DESCRIPTION

MICROSORB MT-E is a series of high loss magnetically loaded epoxy material suitable for use as terminations, loads, attenuators and in the suppression of unwanted microwave energy.

MICROSORB MT-E is formulated with an epoxy polymer for its mechanical properties. Parts can be machined into specific complex shapes. Microsorb offers custom casting of parts, a cost-effective process for large quantities. Contact Microsorb Technical Service for more information and assistance.

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.
- ❖ Machining of MT-E into shapes according to Customers' drawings.
- ❖ Custom Casting of MT-E into shapes according to Customers' prints.
- ❖ MT-E is available in sheets, rods and bar stock.

SPECIFICATIONS

Density, g/cm ³	1.5 – 5.0
Hardness, Shore A	85
Thermal Conductivity (BTU)(in)/(hr)(ft ²)(°F)	10.0
(cal)(cm)/(sec)(cm ²)(°C)	0.0031
Thermal Expansion, per °C	30 x 10 ⁻⁶
Water Absorption, % 24 Hours	< 0.3
Dielectric Strength, v/mil (kv)/mm)	25 (1)
Volume Resistivity, ohm-cm	> 10 ¹¹
Service Temperature, °F (°C)	350 (180)

TYPICAL ELECTRICAL PROPERTIES

MICROSORB MT-S Grade	Approx. Relative Impedance, Z/Z ₀	Attenuation, dB/cm (GHz)		
		1.5	3.0	8.6
- 112	0.5	0.2	0.7	2.5
- 114	0.5	0.8	1.9	9.5
-116	0.4	1.6	5.8	19.0
- 117	0.4	2.9	11.0	46.0
-124	0.4	5.6	20.0	63.0

Standard dimensions are:

Sheets: 12" x 12"

Thickness – 0.125", 0.25", 0.375", 0.50", 0.75", 1.00".

Other thicknesses are available upon request.

Rods: 12" in Length

Diameter: 0.125", 0.25", 0.375", 0.50", 0.75", 1.00".

Other diameters are available upon request.

Bar Stock: 12" in Length

Square bar stock, dimensions of 0.125", 0.25", 0.375", 0.50", 0.75", 1.00".

Other dimensions are available upon request.

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 2 042407