# **3M**

# EMI Absorbers AB-2000 Series

## **Data Sheet**

#### **Product Description**

3M<sup>TM</sup> EMI Absorbers AB-2000 Series consist of a thin, flexible backing made of silicone rubber and magnetic materials, with an acrylic pressuresensitive adhesive.

- Silicone rubber with magnetic filler
- Acrylic pressure-sensitive adhesive
- Supplied on a removable liner for easy handling and die cutting

3M EMI Absorbers AB-2000 Series are available in standard sizes and custom widths and lengths. Standard size is 300mm x 210mm sheet

#### **Applications**

3M EMI Absorbers AB-2000 Series are typically used for applications requiring electromagnetic

absorbing. These absorbers can sufficiently suppress radiated noise from electrical devices in the broadband frequency range common in such products as mobile equipment, cellular phones, amplifiers, etc.

#### **Attenuation (S11 Reflection Loss)**

Many factors determine the true attenuation of a electromagnetic absorbing and shielding material, including type and thickness of the conductive layers, adhesive strength, degree of contact, smoothness of application surface, frequency of the EMI signal, etc. 3M EMI Absorbers AB-2000 Series typical attenuation ranges are shown in the chart below.

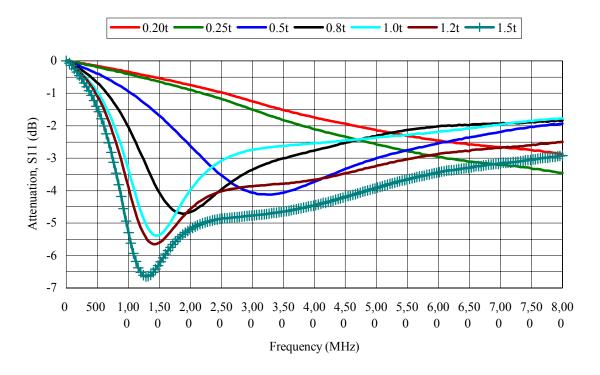
### **Typical Values**

Properties	Typical Value		
Type of Backing	Silicone rubber with magnetic filler		
Type of Adhesive	Acrylic adhesive (0.1 mm)		
Thickness			
	Total Thickness	Backing Thickness	
- AB-2020	0.27 mm	0.20 mm	
- AB-2025	0.32 mm	0.25 mm	
- AB-2050	0.58 mm	0.50 mm	
- AB-2080	0.88 mm	0.80 mm	
- AB-2100	1.08 mm	1.0 mm	
- AB-2120	1.28 mm	1.2 mm	
- AB-2150	1.58 mm	1.5 mm	
Breaking strength <sup>1</sup>	6 kg <sub>f</sub> /25mm (15 lb/in)		
Adhesion strength <sup>1</sup>	1000 g <sub>f</sub> /25mm (35 oz/in)		
Attenuation (S11 Reflection Loss) <sup>2</sup>	Refer to attached chart		

Foot notes:

- 1. ASTM-D-1000 Test Method.
- 2. 3M/S Test Method.

#### **Attenuation Characteristics**



3M is a trademark of 3M Company.

#### **Important Notice**

Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use.

Warranty; Limited Remedy; Limited Liability. This product will be free from defects in material and manufacture as of the date of purchase. 3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, 3M will not be liable for any loss or damage arising from this 3M product, whether direct, Indirect, special, Incidental or consequential regardless of the legal theory asserted.



Electrical Markets Division 6801 River Place Blvd. Austin, TX 78726-9000 www.3M.com/electrical/oem

Litho in USA © 3M 2004 78-8126-6604-4-A

## **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

<u>3M</u>:

AB2020