

3M™ EMI Absorber AB7000HF Series (Halogen Free)

Product Description

3M™ EMI Absorber AB7000HF Series (Halogen Free)* consists of flexible soft metal flakes filler loaded polymer resin and acrylic pressure sensitive adhesive.

3M absorber AB7000HF series are available in sheet type.

Features and Benefits

- High permeability magnetic film
- Acrylic pressure sensitive adhesive
- Supplied on a removable liner for easy handling and die-cutting

Applications

3M absorber AB7000HF series are an excellent choice for reducing EMI noise within electronic equipment, cable or circuit (including any portion covered by a shielded can) or reducing EMI susceptibility of any sensitive components (RFID or Hall device). They have been used to reduce conducted emissions from multi-conductor cables. 3M absorber AB7000HF series are particularly well suited for preventing EMI from internal sources around digital display devices such as mobile handhelds (MHH), digital still cameras (DSC), notebook computers, camcorders, hard disk drives (HDD), automotive electronics, cable harnesses, etc.

Attenuation and Power Loss

Many factors determine the true attenuation of an electromagnetic absorbing material, including shape and thickness, intimacy of substrate contact, smoothness of application surface, strength and frequency of the EMI signal, etc. However, using standard tests and fixtures, it is possible to determine a value for the signal attenuation.

3M absorber AB7000HF series' typical attenuation range is dependent on thickness.

*** Halogen Free is defined as having maximum 900 ppm bromine, maximum 900 ppm chlorine, and/or maximum 1500 ppm total bromine and chlorine, per IEC 61249-2-21.**



Typical Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Properties	Typical Value			
Type of Backing	Polymeric resin with magnetic metal flake filler			
Type of Adhesive	Acrylic non-conductive pressure sensitive adhesive (PSA)			
Product Number	AB7010HF	AB7020HF	AB7030HF	AB7050HF
Thickness Backing	0.10 mm	0.20 mm	0.30 mm	0.50 mm
Thickness (Adhesive)	0.03 mm	0.05 mm	0.05 mm	0.05 mm
Standard Packaging	210 mm x 297 mm			
Temperature Range	-25 ~ 85°C			
Surface Resistivity ¹	$1 \times 10^6 \Omega$ (min)			
Initial Permeability ²	110			
Typical Performance	Refer S_{11} attenuation and power loss chart			

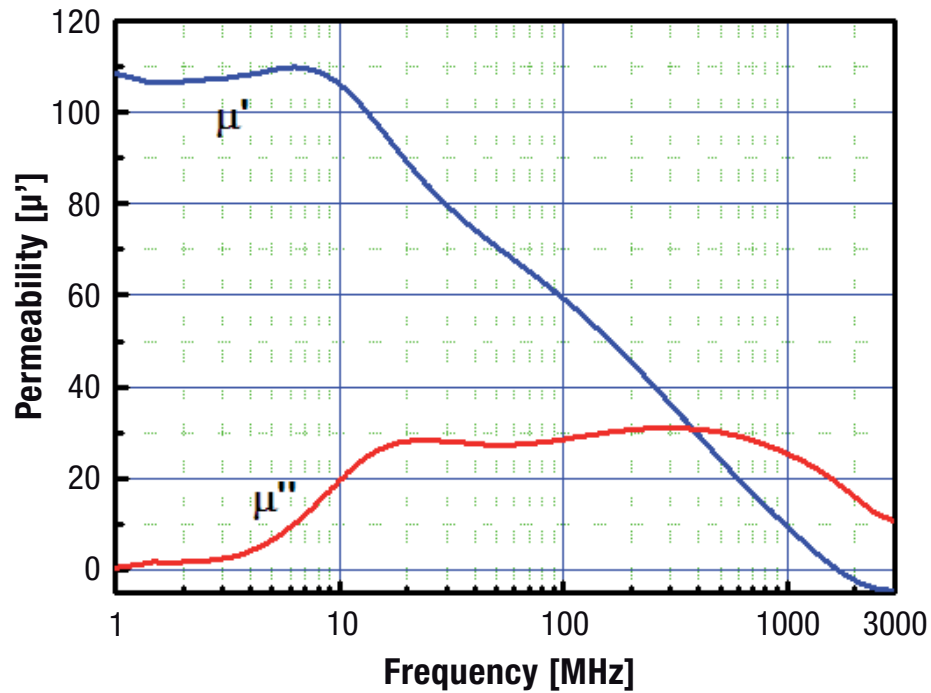
¹Test method: ASTM D257.

²This value measured at 1MHz 3M TM K RD-EMC-AB-02.

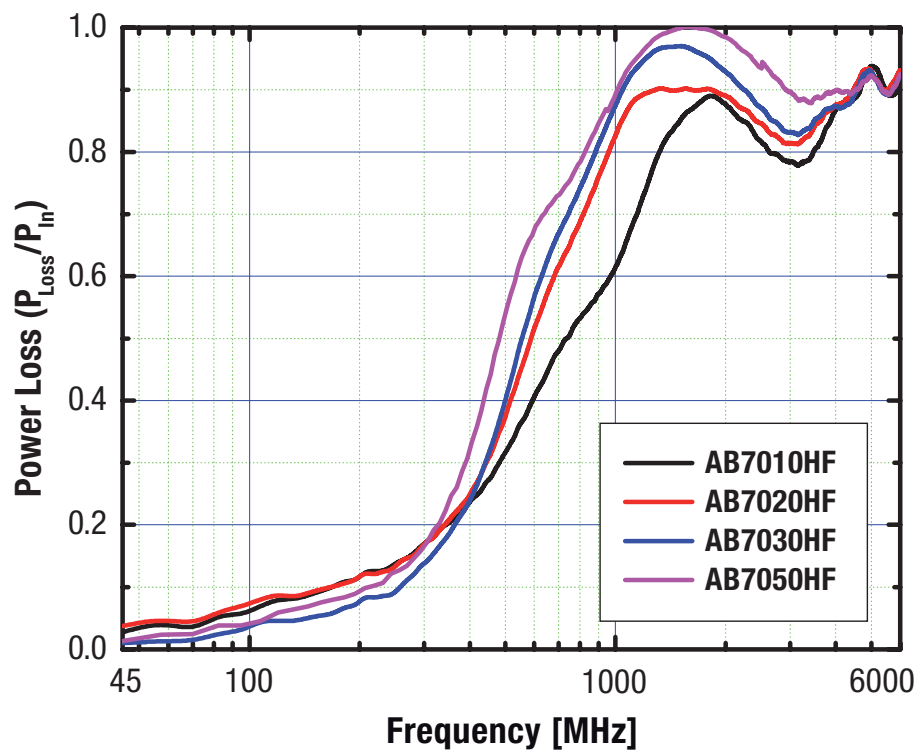
Typical Properties (continued)

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Permeability



Power Loss



Storage and Shelf Life

The shelf life of 3M™ EMI Absorber AB7000HF Series is 12 months from the shipment date from the manufacturing location when stored in original packaging at 21°C (70°F) and 50% relative humidity.

Safety Data Sheet

Please consult the product Safety Data Sheet before use.

Regulatory

For regulatory information about this product, contact your 3M representative.

Technical Information

The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use

Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

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