

3M™ EMI Absorber AB7000 Series

Product Description

3M™ EMI Absorber AB7000 Series consists of a flexible polymer resin loaded with soft metal flakes. An acrylic pressure-sensitive adhesive allows for easy application.

Features and Benefits

- Flexible, high permeability magnetic sheets
- One-sided acrylic pressure-sensitive adhesive
- Easily die cut into complex shapes

Applications

3M absorber AB7000 series is typically used for applications requiring EMI control and signal integrity improvement in the 50MHz to 10 GHz range. It is a broadband EMI absorber designed to work in near-field applications inside and around electronic devices and assemblies. Common applications include reduction of noise and crosstalk inside mobile electronics, reduction of crosstalk and EMI on ribbon cables and flex cables, reduction of radiated IC noise (applying absorber directly to the noisy IC), damping of radiation and oscillations inside shields and cavities, and increasing signal integrity on high speed data lines through crosstalk reduction.

Attenuation and Power Loss

Many factors determine the true attenuation of an electromagnetic interference absorbing material, including shape and thickness, intimacy of substrate contact, smoothness of application surface, strength and frequency of the EMI signal, etc. Since 3M absorber AB7000 series is a near field absorber, attenuation characteristics tend to be very application specific. Power loss characteristics are measured using a 5cm x 5cm square of 3M absorber AB7000 series placed on a 50Ω microstrip line. The attenuation and noise dampening attained generally increases as the thickness of the material increases.

3M™ EMI Absorber AB7000 Series Typical Physical Properties

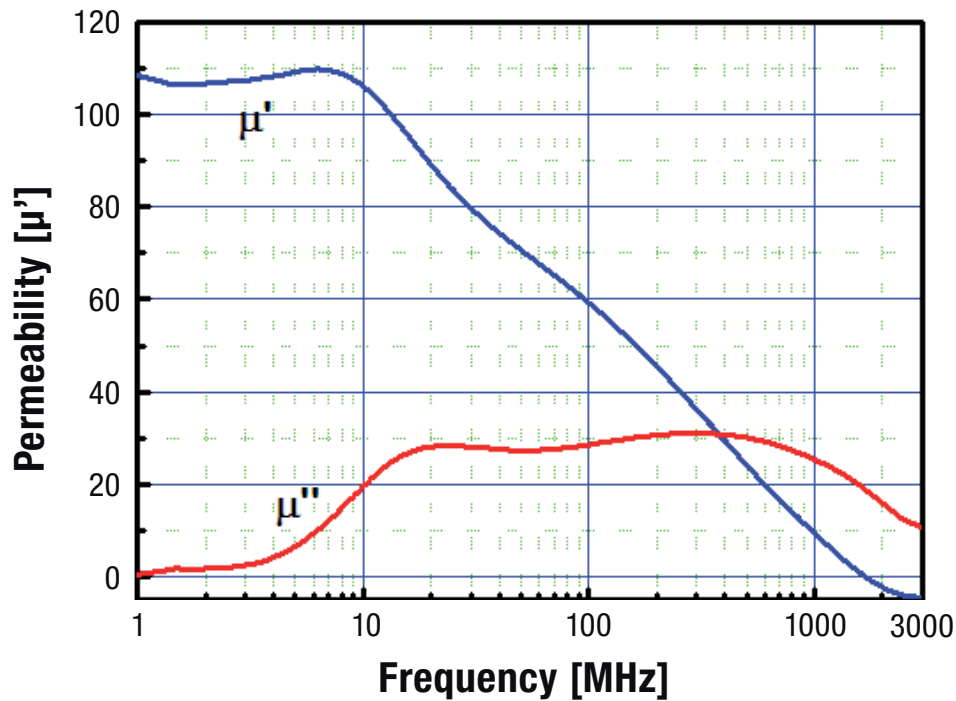
Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Property (Test Method)	Typical Value			
Adhesive	Acrylic non-conductive pressure-sensitive adhesive (PSA)			
Type of Backing	Polymer resin with magnetic metal flake filler			
Product Number	AB7010	AB7020	AB7030	AB7050
Backing Thickness	0.10mm	0.20mm	0.30mm	0.50mm
Adhesive Thickness	0.03mm	0.05mm	0.05mm	0.05mm
Standard Packaging	210mm x 297mm			
Temperature Range	-25 ~ 85°C			
Surface Resistivity (ASTM-257)	1 x 10 ⁶ Ω (min)			
Initial Permeability ¹	110			
Typical Performance ²	Refer to S ₁₁ attenuation and power loss graphs			

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

²Attenuation is measured by 7mm coaxial verification kit under short fixed condition. Power loss is measured by a 50Ω microstrip line method. 3M™ K-RD-EMC-AB-01.

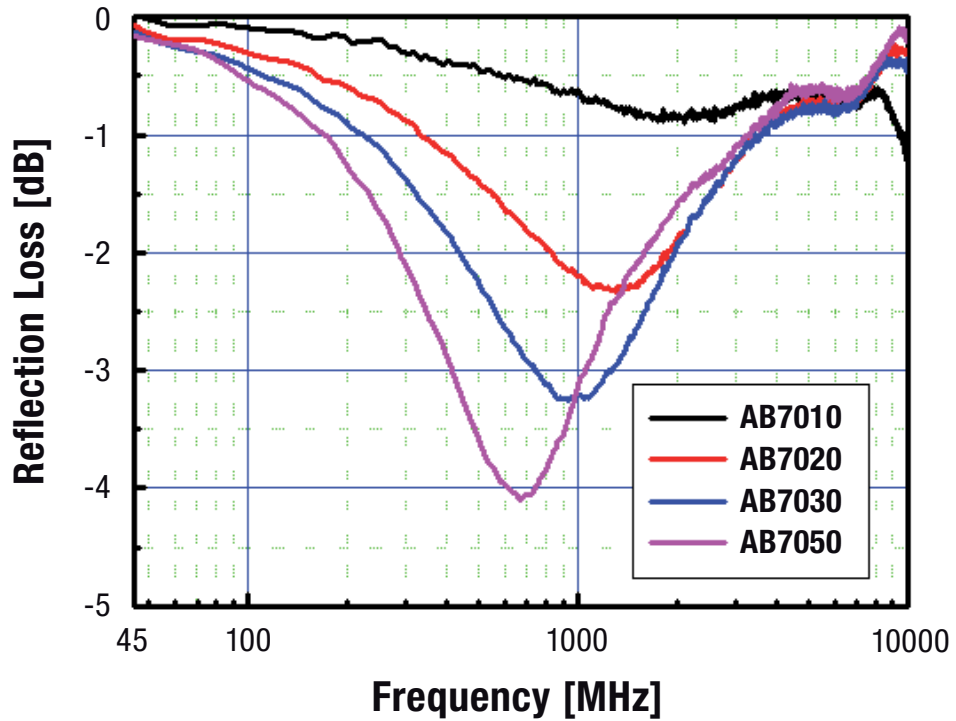
- **Permeability**



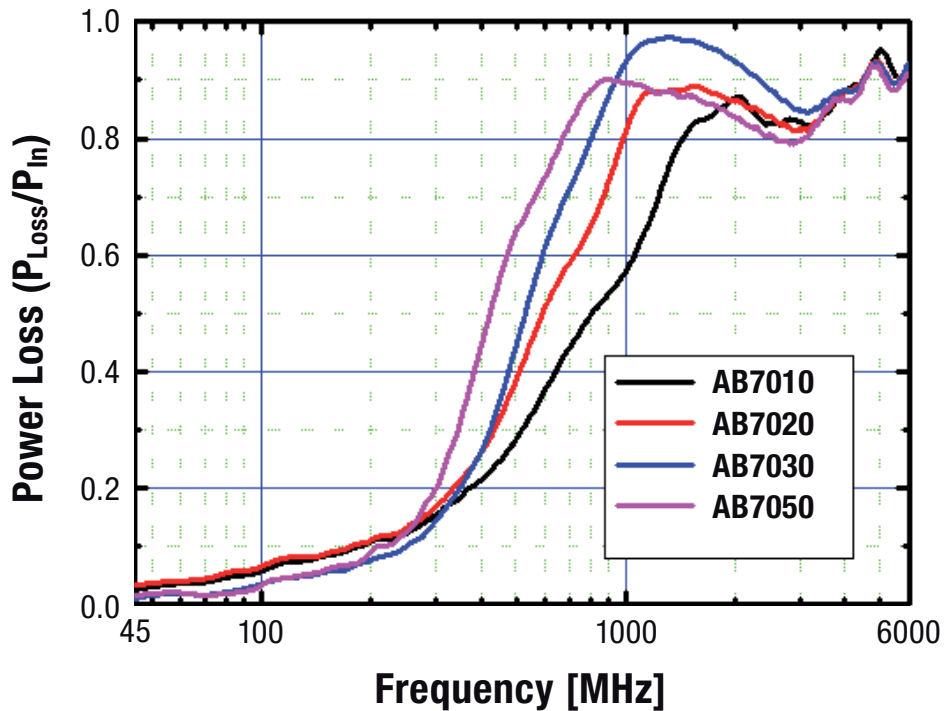
3M™ EMI Absorber AB7000 Series Typical Properties (continued)

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

- **Reflection Loss**



- **Power Loss**



Storage and Shelf Life Conditions

The shelf life of 3M™ EMI Absorber AB7000 Series is 24 months from the date of manufacture when stored in original cartons at 21°C (70°F) and 50% relative humidity.

Safety Data Sheet

Please consult Safety Data Sheet prior to 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.

Warranty, Limited Remedy, and Disclaimer

Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability

Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.



Electronics Materials Solutions Division

3M Center, Building 225-3S-06
St. Paul, MN 55144-1000
1-800-251-8634 phone
651-778-4244 fax
www.3M.com/electronics

3M is a trademark of 3M Company.
Please recycle.
© 3M 2014. All rights reserved.
78-8127-8758-4





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.