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## AB 5000

### EMI Absorber

#### Product Description

3M™ AB 5000 EMI absorber consists of flexible soft metal flakes filler loaded polymer resin and acrylic pressure sensitive adhesive.

- Polymer resin and metal flakes filler
- Acrylic pressure sensitive adhesive
- Supplied on a removable liner for easy handling and die-cutting

3M™ AB 5000 EMI absorber is available in standard A4 size and 210mm (width) X 15 meters (length) in roll.

#### Applications

3M™ AB 5000 EMI absorber is typically used for applications requiring electromagnetic absorbing performance. 3M™ AB5000 EMI Absorber

Suppresses radiated noise from electrical devices for broadband radio frequency range.

Common uses include mobile phone (SAR reduction), computer, digital still camera, RF block, military equipments for radar avoidance and stealth performance.

#### 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.

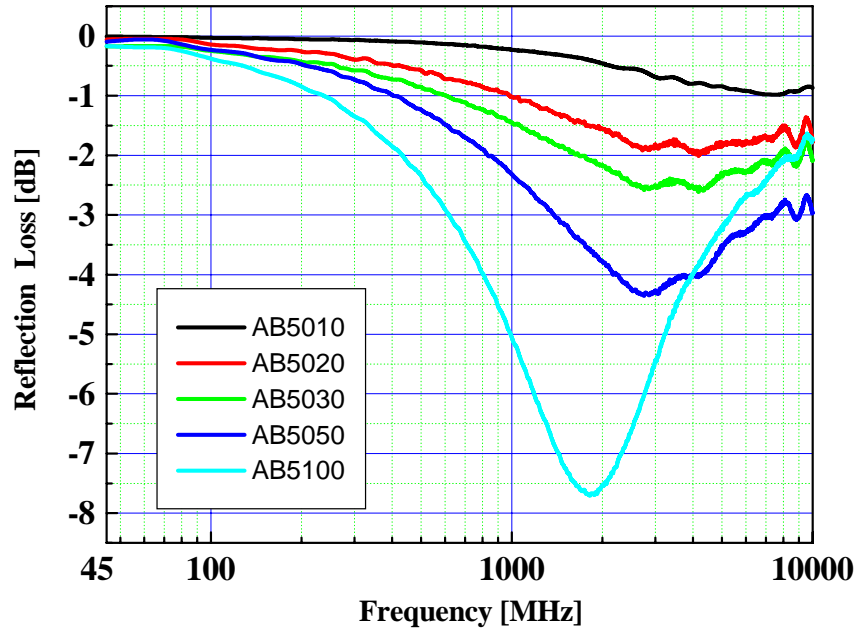
3M AB 5000 series EMI absorber typical attenuation range is dependent on thickness.

#### AB 5000 EMI Absorber — Typical Properties

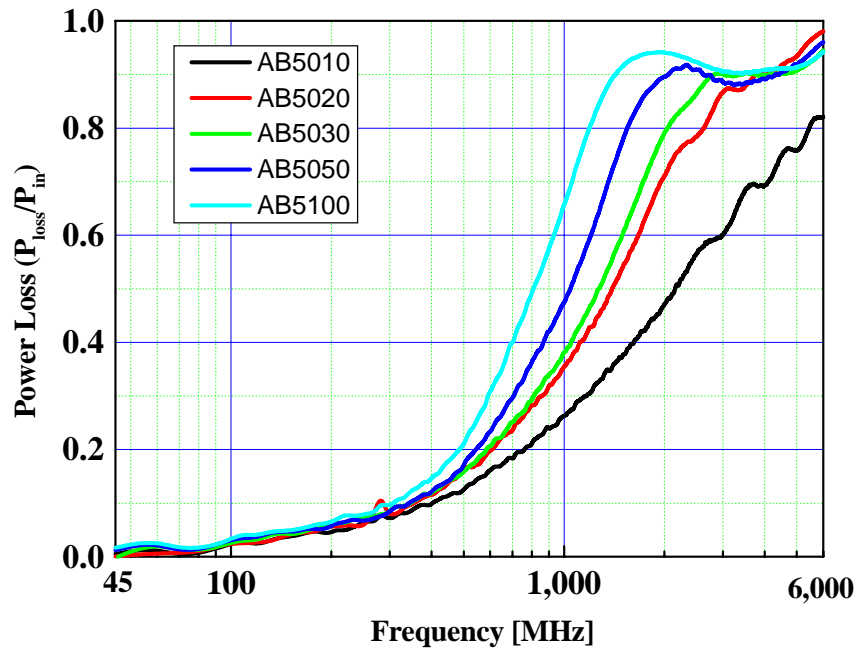
Properties	Typical Value				
Type of Backing	Polymer resin with metal flake filler				
Type of Adhesive	Acrylic non-conductive pressure sensitive adhesive (PSA)				
Product Number	AB5010	AB5020	AB5030	AB5050	AB5100
Thickness <sub>1</sub>	0.10mm	0.20mm	0.30mm	0.50mm	1.00mm
Standard packaging	210mm x 297mm				
Temperature range	-25 ~ 85				
Surface resistivity <sub>2</sub>	1x10 <sup>6</sup> (min)				
Thermal conductivity	0.7 W/mK				
Tensile strength <sub>3</sub>	6.0MPa(min)				
Attenuation (S11 Reflection Loss) and Power Loss <sub>4</sub>	Refer to attached chart				

1. This value does not contain a double side adhesive tape thickness. Typical adhesive tape thickness is 50μm (AB5010 contains 30μm adhesive)
2. Test method : ASTM D257
3. Test method : JIS K 6251
4. Attenuation measured by 7mm coaxial verification kit under short fixed condition. Power loss measured by 50 microstrip line.

## Attenuation



## Power Loss



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