



# Tape AL-50BT

## Aluminum Foil with Conductive Acrylic Adhesive

### Data Sheet



#### Product Description

3M™ Tape AL-50BT consists of an aluminum foil backing and a unique electrically conductive pressure-sensitive acrylic adhesive.

- Soft aluminum foil backing
- Conductive acrylic adhesive
- Supplied on a removable liner for easy handling and die cutting
- UL recognized for flame retardancy per UL 510, Product category OANZ2, File 59505.

Please consult with a 3M sales representative about custom width and length. Standard length is 20M.

#### Applications

3M Tape AL-50BT is typically used for applications requiring excellent electrical conductivity from the application substrate through the adhesive to the foil backing. Common uses include grounding and EMI shielding in equipment, components, shielded rooms, etc.

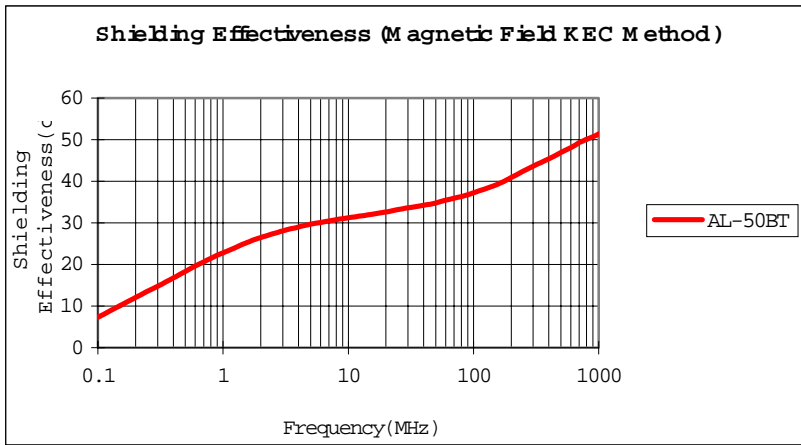
#### Shielding Effectiveness

Shielding effectiveness depends on conductivity, permeability, thickness of metalization, adhesive strength, degree of contact, smoothness of application surface, strength and frequency of EMI signal, etc. However, using standard tests and fixtures, it is possible to determine a value for the attenuation. (See chart below.)

#### Typical Properties

Properties	Typical Value
Backing thickness <sup>1</sup>	2.0 mil (0.050 mm)
Total thickness (backing plus adhesive) <sup>1</sup>	3.1 mil (0.08 mm)
Adhesion to steel <sup>1</sup>	3.4 N/cm
Electrical resistance through adhesive <sup>2</sup>	0.01 $\Omega$ /25 mm <sup>2</sup>

\* Foot notes: 1. ASTM-D-1000 Test method  
2. 3M Test method 1.



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.**

**3M**

**Electrical Markets Division**

6801 River Place Blvd.

Austin, TX 78726-9000

[www.3M.com/electrical/oem](http://www.3M.com/electrical/oem)

Litho in USA

© 3M 2004 78-8126-6591-3-A