

# **1182 Tape** Copper Foil Conductive Adhesive on Both Sides Data Sheet

# **Product Description**

3M<sup>™</sup> 1182 Tape consists of a 1-ounce deadsoft copper foil backing that is coated on both sides with a unique electrically conductive pressure-sensitive acrylic adhesive.

- Deadsoft 1-ounce copper foil backing
- Conductive acrylic adhesive on both sides
- Supplied with removable liner on both sides for easy handling and diecutting

Like all 3M shielding tapes, 3M 1182 is available in standard and custom widths and lengths. Standard length is 18 yards.

- Widths from 1/4" to 23"
- Longer lengths up to several times normal length, dependent upon width. Check with Customer Service.

### Applications

3M 1182 is typically used to bond two surfaces together, both electrically and physically. An example would be adhering a conductive gasket to a conductive surface as part of the EMI shielding solution for an electronic enclosure.

# Conductivity

Since 3M 1182 double-sided copper tape would typically be used as an electrical path between two surfaces, its most important feature is its conductivity. Highly conductive particles in the acrylic adhesive provide a multitude of electrical paths between the application substrate and the surface of the copper foil on each side. The resistance of the conductive path through the adhesive (measured over a 1-in<sup>2</sup> area) typically measures only a few milliohms.

| Properties   | Typical Values        |
|--|-----------------------|
| Backing thickness <sup>1</sup>                                     | 1.4 mil (0,04mm)      |
| Total thickness (backing plus adhesive on both sides) <sup>3</sup> | 3.5 mil (.088mm)      |
| Breaking strength <sup>1</sup>                                     | 25 lb./in (44 N/10mm) |
| Adhesion to steel <sup>1</sup>                                     | 35 oz/in (3,8 N/10mm) |
| Electrical resistance through adhesive <sup>2</sup>                | 0.010 ohm             |
| Flame retardancy <sup>3</sup>                                      | Pass                  |

\* Footnote: 1. Test method ASTM D 1000

- 2. MIL-STD-202 Method 307 maintained at 5 psi (3,4 N/cm<sup>2</sup>) measured over 1 in<sup>2</sup> surface area. Conductive particles in the adhesive provide the electrical path between the application substrate and the foil backing.
- 3. UL-recognized for flame retardancy per UL 510, Product Category 0ANZ2, File E17385.

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