3M

1182 Tape

Copper Foil Conductive Adhesive on Both Sides Data Sheet

Product Description

3M[™] 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-in² area) typically measures only a few milliohms.

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

^{*} Footnote: 1. Test method ASTM D 1000

^{2.} MIL-STD-202 Method 307 maintained at 5 psi (3,4 N/cm²) measured over 1 in² 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.

Important Notice

Technical information provided by 3M is based on experience and/or tests believed to be reliable, but their accuracy is not guaranteed and the results may not be relevant to every user's application. For this reason 3M does not accept responsibility or liability, direct or consequential, arising from reliance upon any information provided and the user should determine the suitability of the products for their intended use. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence. All questions of liability relating to 3M products are governed by the seller's terms of sale subject where applicable to the prevailing law

If any goods supplied or processed by or on behalf of 3M prove on inspection to be defective in material or workmanship, 3M will (at its option) replace the same or refund to the Buyer the price paid for the goods or services. Except as set our above, all warranties and conditions, whether express or implied, statutory or otherwise are excluded to the fullest extent permissible at law.

 $3\mbox{M}$ and Scotchcast are trademarks of the $3\mbox{M}$ Company. Printed in the UK.

© 3M United Kingdom PLC, 1999

3M United Kingdom PLC **Electrical Products Group Hudson Road** Bedford MK41 0HR Tel: 01234 268868 Fax: 01234 229433

3M Ireland **Electrical products Group** 3M House, Adelphi Centre Dun Loaghaire, CO. Dublin, Ireland Tel: (01) 2803555

Fax: (01) 2803509



Jan. 2000