



1345 Tape

Embossed Tin-Plated Copper Foil

Data Sheet

Product Description

3M™ 1345 Tape consists of an embossed 1-ounce deadsoft tin-plated copper foil backing and an aggressive pressure-sensitive acrylic adhesive. The edges of the embossed pattern pressed into the foil cut through the adhesive layer to establish reliable metal-to-metal contact between the backing and the application substrate.

- Embossed deadsoft 1-ounce tin-plated copper foil backing
- Conductivity “through the adhesive”
- Supplied on a removable liner for easy handling and diecutting

Like all 3M shielding tapes, 3M 1345 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 1345 Tape 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. The tin plating on the copper foil backing facilitates soldering and improves resistance to oxidation and discoloration.

Shielding Effectiveness

Many factors determine the true shielding effectiveness of a shielding tape, including type and thickness of foil, adhesive type, intimacy of 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 attenuation.

For 3M 1345 Tape, typical shielding effectiveness (far field) is in the range of 75dB to 95dB (30 MHz to 1 GHz).

Properties

Typical Values

Backing thickness ¹	1.4 mil (0,04mm)
Total thickness (backing plus adhesive)	4.0 mil (.101mm)
Breaking strength ¹	25 lb./in (44 N/10mm)
Adhesion to steel ¹	45 oz/in (4.9 N/10mm)
Electrical resistance through adhesive ²	0.001 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. The edges of the embossing pattern in the foil backing penetrate through the nonconductive adhesive to make metal-to-metal contact with the application substrate.

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 out above, all warranties and conditions, whether express or implied, statutory or otherwise are excluded to the fullest extent permissible at law.

3M and Scotchcast are trademarks of the 3M 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

3M Innovation

Jan. 2000

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[3M:](#)

[1345-3/8x18yrd](#)