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1245 Tape

Embossed Copper Foil

Data Sheet

Product Description

3M™ 1245 Tape consists of an embossed 1-ounce deadsoft 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 copper foil backing
- Conductivity “through the adhesive”
- Supplied on a removable liner for easy handling and diecutting

Like all 3M shielding tapes, 3M 1245 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 1245 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 copper foil backing is solderable and resists 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 1245 Tape, typical shielding effectiveness (far field) is in the range of 75dB to 85dB (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]	35 oz/in (3,8 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/cm^2) measured over 1 in^2 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.

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