



3M™ EMI Copper Foil Shielding Tape 1182 with Double Coated Electrically Conductive Acrylic Adhesive

Data Sheet **June 2021**

Product Description 3M™ EMI Copper Foil Shielding Tape 1182 is a 3.5-mil (0.089 mm) thick tape composed of a 1.4-mil (0.036 mm) flat copper foil backing coated on both sides with a non-corrosive, electrically conductive acrylic pressure-sensitive adhesive supplied on a removeable liner.

- Commonly used for bonding two surfaces together, both physically and electrically
- Provides low z-axis resistance connection between substrates
- Can be die-cut and offers a multitude of uses in electrical design and test laboratories for prototyping, design and troubleshooting.
- Adhesive requires no moisture, solvents, heat or other manner of preparation to affect application
- Flame Retardant per UL-510A Standard

Properties

| Physical Properties | Value Imperial (Metric) | Electrical Properties | Value Imperial (Metric) |
|--|---|--|----------------------------|
| Color - Visual | Copper | Electrical Resistance⁴ - Maximum | 0.010 Ω/in ² |
| Adhesive | Double Coated Electrically Conductive Acrylic | Shielding Effectiveness³ - Average 300 kHz – 2.5 GHz | 54 dB |
| Backing | Copper Foil - Flat | | |
| Flame Retardant² | Pass | | |
| Mechanical Properties | Value Imperial (Metric) | | |
| Backing Thickness - Nominal | 1.4 mil (0.036 mm) | | |
| Total Thickness¹ | 3.5 +/- 0.5 mils (0.089 +/- 0.013 mm) | | |
| Adhesion to Steel¹ - Minimum | 25 oz/in (2.7 N/cm) | | |
| Breaking Strength¹ - Minimum | 22 lb/in (39 N/cm) | | |

Notes:

1. ASTM D1000 Test Method - properties measured at room temperature 73°F (23°C) unless otherwise stated
2. UL Recognized Flame Retardant per UL510A Standard, Category OARC2, File No. E17385
3. ASTM D4935 Test Method - properties measured at room temperature 73°F (23°C) unless otherwise stated
4. Test Method: MIL-STD-202 Method 307 maintained at 5 psi (3.4 N/cm²) measured over a 1 in² surface area
 - a. Silver coated glass beads embedded in acrylic adhesive provide the electrical path between application substrate and foil backing

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, frequency of the EMI signal, etc.

Agency Approvals & Self Certifications

- UL Component Recognized: UL510A Standard, Category OARC2, File No. E17385
- For Regulatory information including RoHS, REACH, please visit www.3M.com/regs

Shelf Life & Storage This product has a 5-year shelf life (from date of manufacture) when stored in humidity-controlled storage (50°F/10°C to 80°F/27°C and <75% relative humidity).

Availability 3M™ EMI Copper Foil Shielding Tape 1182 available from 3M authorized distributors / converters

Also available from 3M.com/oem or call 1.800.245.3573.

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