3M™ Copper Foil Tape 1126 with Electrically Conductive Acrylic Adhesive

Data Sheet **July 2023**

Product Description

3M™ Copper Foil Tape 1126 is a nominal 2.6-mil (0.066 mm) thick tape composed of a 1.4-mil (0.036 mm) flat copper foil backing coated on one side with a non-corrosive, electrically conductive acrylic pressure-sensitive adhesive supplied on a removeable liner.

- Commonly used for EMI/RFI shielding applications in the electronics industry and
- for static charge draining, seaming shielded rooms, cable wrapping and surface contact to non-solderable materials
- Can be die-cut, is solderable 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)
Color - Visual	Copper
Adhesive	Electrically Conductive Acrylic
Backing	Copper Foil - Flat
Flame Retardant[2]	Pass
Mechanical Properties	**Value Imperial (Metric)**
Backing Thickness - Nominal	1.4 mil (0.036 mm)
Total Thickness[1]	2.6 +/- 0.4 mils (0.066 +/- 0.01 mm)
Adhesion to Steel[1] **- Minimum**	25 oz/in (2.7 N/cm)
Breaking Strength[1] **- Minimum**	22 lb/in (39 N/cm)

Electrical Properties	Value Imperial (Metric)
Electrical Resistance[4] **- Maximum**	0.005 Ω/in²
Shielding Effectiveness[3] **- Average** 300 kHz – 2.5 GHz	70 dB
Shielding Effectiveness[3] **- Average** 300 kHz to 500 MHz	69 dB
Shielding Effectiveness[3] **- Average** 500 MHz to 1.0 GHz	70 dB
Shielding Effectiveness[3] **- Average** 1.0 GHz to 1.5 GHz	70 dB
Shielding Effectiveness[3] **- Average** 1.5 GHz to 2.0 GHz	68 dB
Shielding Effectiveness[3] **- Average** 2.0 GHz to 2.5 GHz	71 dB

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
   a. 3M Test Reports RPT-791659 available – Shielding Effectiveness 300 kHz to 2.5 GHz
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
- Test report RPT-791659 available Shielding Effectiveness 300 kHz to 2.5 GHz
- 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™ Copper Foil Tape 1126 available from 3M authorized distributors and converters

Also available from www.3M.com/oem or call 1.800.676.8381.

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with Electrically Conductive Acrylic Adhesive

TECHNICAL STATEMENT

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