# **3M 1194 Tape** Copper Foil with Nonconductive Adhesive Data Sheet

# **Product Description**

3M<sup>™</sup> 1194 Tape consists of a 1-ounce deadsoft copper foil backing and an aggressive nonconductive pressure-sensitive acrylic adhesive.

- Deadsoft 1-ounce copper foil backing
- Nonconductive acrylic adhesive
- Supplied on a removable liner for easy handling and diecutting

Like all 3M shielding tapes, 3M 1194 is available in standard and custom widths and lengths. Standard length for 3M 1194 is 36 yards.

- Widths from 1/4" to 23"
- Longer lengths up to several times normal length, dependent upon width. Check with Customer Service.

### Applications

3M 1194 Tape is typically used for applications requiring economical electrical bonding, grounding, and EMI shielding. 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 1194 Tape, typical shielding effectiveness (far field) is in the range of 50dB to 60dB (30 MHz to 1 GHz).

| Properties                              | <b>Typical Values</b> |  |
|---|-----------------------|--|
| Backing thickness <sup>1</sup>          | 1.4 mil (0,04mm)      |  |
| Total thickness (backing plus adhesive) | 2.6 mil (0.066mm)     |  |
| Breaking strength <sup>1</sup>          | 25 lb./in (44 N/10mm) |  |
| Adhesion to steel <sup>1</sup>          | 40 oz/in (4,4 N/10mm) |  |
| Flame retardancy <sup>2</sup>           | Pass                  |  |

\* Footnote: 1. Test method ASTM D 1000

2. UL-recognized for flame retardancy per UL 510, Product Category 0ANZ2, File E17385.

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