# **3M Tape AU-2190** Conductive Gold Fabric

# Data Sheet

# **Product Description**

3M<sup>™</sup> Conductive Gold Fabric Tape AU-2190 consists of:

- Gold-coated conductive fabric
- Conductive acrylic adhesive
- Supplied on a removable liner for easy handling and die cutting

3M Conductive Gold Fabric Tape AU-2190 is available in standard and custom widths and lengths.

- Widths from 6mm to 700mm
- Standard length is 50M.
- Longer lengths up to several times normal length, dependent upon width. Check with a 3M sales representative.

## Applications

3M Conductive Gold Fabric Tape AU-2190 is typically used for applications requiring excellent electrical conductivity from the application substrate through the adhesive to the conductive fabric backing. Common uses include grounding and EMI shielding in equipment, components, shielded rooms, etc.

### **Shielding Effectiveness**

Many factors determine the shielding effectiveness of a conductive adhesive tape, including type and thickness of the conductive layers, adhesive strength, degree of contact, smoothness of application surface, frequency, etc. For 3M Conductive Gold Fabric Tape AU-2190, typical shielding effectiveness is in the range of 65dB to 75dB, using a standard test method.

### **Typical Values**

Properties	Typical Value
Type of Backing	Gold-coated conductive fabric
Type of Adhesive	Conductive acrylic adhesive
Total thickness (backing plus adhesive)	0.11 mm
Breaking strength <sup>1</sup>	18 kg <sub>f</sub> /25 mm (40 lb/in)
Adhesion strength <sup>1</sup>	900 g <sub>f</sub> /25 mm (31 oz/in)
Electrical resistance through adhesive <sup>2</sup>	0.005 Ω
Shielding effectiveness <sup>3</sup>	Refer to Attenuation Chart

Footnotes: 1. ASTM-D-1000 Test Method

2. MIL-STD-202 Method 307 maintained at 5 psi (3,4 N/cm<sup>2</sup>) measured over 1 in<sup>2</sup> surface area. Conductive particles in the adhesive provide the electrical path between the application substrate and the conductive backing.

3. ASTM-D-4935 Test Method.

#### **Shielding Effectiveness**



3M is a trademark of 3M Company.

#### **Important Notice**

Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use.

Warranty; Limited Remedy; Limited Liability. This product will be free from defects in material and manufacture as of the date of purchase. 3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, 3M will not be liable for any loss or damage arising from this 3M product, whether direct, Indirect, special, Incidental or consequential regardless of the legal theory asserted.

#### ЗМ

Electrical Markets Division 6801 River Place Blvd. Austin, TX 78726-9000 www.3M.com/electrical/oem

Litho in USA © 3M 2004 78-8126-6592-1-A