

3M™ Circuit Plating Tape 851

Product Description

3M™ Circuit Plating Tape 851 is a green polyester film tape with a unique conformable adhesive for printed circuit board masking during electroplating.

Product Construction

Backing	Adhesive	Color	Standard Roll Length
Transparent Polyester	Blended silicone and rubber	Translucent green	144 yds. (132 m)

Typical Physical Properties

Note: The following technical information and data is based upon limited 3M testing conditions and should not be used for specification purposes.

ASTM Test Method		
Adhesion to Stainless Steel:	29 oz./in. width (27 N/100 mm)	D-3330
Tensile Strength at Break:	26.8 lbs./in. width (368 N/100 mm)	D-3759
Elongation at Break:	124%	D-3759
Backing Thickness:	0.9 mil (0.02 mm)	D-3652
Total Tape Thickness:	3.6 mils (0.10 mm)	D-3652

Features

- Polyester backing reduces stretch and recovery of tape associated with uneven stop-off line.
- Thick adhesive coating reduces undercutting because adhesive blocks out solutions between fingers.
- Specially designed adhesive that generally performs better when no ovens are used to heat tape and boards.



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Application Techniques

- Low-stretch polyester film can be applied by machine or by hand.
- Tape must be firmly pressed down by equipment with rubber-covered rollers or a rubber-covered platen press. Hand rolling usually does not provide enough pressure. A vivid outline of the circuit leads usually indicates adequate pressure was used.
- Solvent* clean-up of the board is recommended to facilitate subsequent soldering.

***Note:** Be sure to follow the manufacturer's precautions and directions for use when using solvents.

Application Ideas

- For masking printed circuit boards during solder stripping and precious metal plating of fingers.
- Splicing of silicone coated papers.

Storage

Store under normal conditions of 60° to 80°F (16° to 27°C) and 50% R.H. in the original carton.

Shelf Life

To obtain best performance, use this product within 18 months from date of manufacture.

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Certification/Recognition

MSDS: 3M has not prepared a MSDS for this product which is not subject to the MSDS requirements of the Occupational Safety and Health Administration's Hazard Communication Standard, 29 C.F.R. 1910.1200(b)(6)(v). When used under reasonable conditions or in accordance with the 3M directions for use, the product should not present a health and safety hazard. However, use or processing of the product in a manner not in accordance with the directions for use may affect its performance and present potential health and safety hazards.

TSCA: This product is defined as an article under the Toxic Substances Control Act and therefore, it is exempt from inventory listing requirements.

RoHs Complaint/REACH Compliant: This product complies with the European Union's "Restriction of Hazardous Substances" (RoHs) initiative and with European REACH regulations 2002/95/EC and 2005/618/EC.

For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-251-8634. Address correspondence to: 3M, Electronics Markets Materials Division, 3M Center, Building 225-3S-06, St. Paul, MN 55144-1000. Our fax number is 651-778-4244 or 1-877-369-2923. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-787-750-3000. In Mexico, phone: 52-70-04-00.

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