

3M™ Charge-Collection Solar Tape 3007

Product Description

3M™ Charge-Collection Solar Tape 3007 consists of a 1-ounce tin-plated deadsoft copper foil backing and an electrically conductive pressure-sensitive adhesive. This single-coated foil tape features:

- Excellent conductivity
- Deadsoft copper with corrosion resistant tin-plating
- Excellent high-temperature adhesive shear properties
- PET release liner

3M Charge-Collection Solar Tape 3007 is available in standard and custom widths and lengths:

- Standard widths: 4 mm (0.157"), 6.35 mm (0.25"), 194 mm (7.64")
- Standard lengths: 66 m (216')

Please contact your local 3M Representative regarding availability of custom product sizes.

Applications

3M Charge-Collection Solar Tape 3007 is designed for use as a charge collector or bus within a thin-film solar panel. The adhesive was formulated to undergo the vacuum lamination process typically used in the manufacture of solar panels.

Typical Physical Properties

(Data not for specification purposes)

Properties	Typical Values
Conductive Adhesive	0.9 mil (0.023 mm) Acrylic
Backing Thickness	1.4 mil (0.035 mm) Tin-Plated Copper
Total Thickness (Backing and Adhesive)	2.3 mil (0.058 mm)
Release Liner	1.3 mil (0.050 mm) 1-side si-coated PET
Color	Silver (tin)
Temperature Process (short term vacuum lamination)	320°F (160°C)

Adhesion Properties:

Adhesion to Steel ¹	1.61 lb/in (0.28 N/mm)
Liner Release	11 g/in

Mechanical Properties:

Breaking Strength ¹	34 lb/in (60 N/cm)
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Electrical Properties:

Electrical Resistance Through Adhesive ²	<0.002 ohm
Flame Retardancy ³	Pass

¹ Test Method ASTM D-1000

² Mil-Std 202 Method 307 (5 psi over 1 in² surface area).

³ UL510 Flammability

This product is not on the Qualified Product Listing under the Defense Standardization Program and has not been tested for military use.

Shelf Life

To obtain best performance, use this product within 24 months from date of manufacture.

Storage Conditions

Store under normal conditions of 50°F to 80°F (10°C to 27°C) and less than 75% relative humidity in the original carton.



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South Korea

82 2 3771 4043

India

91 80 22231414

Canada

800 364 3577

Brazil

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Mexico

52 55 52702250

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81 3 3709 8283

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Other Areas

800 755 2654

For more information on our solar manufacturing product line, contact 3M Renewable Energy at 800-755-2654 or visit us at www.3M.com/solar.

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