

3M™ Thermally Conductive Adhesive Transfer Tape 8910-03

Product Description

3M™ Thermally Conductive Adhesive Transfer Tape 8910-03 is designed to provide a preferential heat-transfer path between heat generating components and heat sinks or other cooling devices (e.g., fans, heat spreaders or heat pipes). The 3M tape 8910-03 is a pressure sensitive adhesive with thermally conductive fillers that do not require a heat cure cycle to form an excellent bond to many substrates. Only pressure is needed to form an excellent bond and thermal interface. The tape offers good adhesion performance and has a U.L. 94 rating of V2.

Product Construction

	PSA (Acrylic adhesive)	
	Backing (Halogen free acrylic backing)	Tape thickness: 0.30mm
	PSA (Acrylic adhesive)	
	Release liner (Film liner)	

Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Typical Properties and Performance Characteristics

Property	Method	Value
Color	–	White
Thermal Conductivity (W/mK)	3M Method	0.6
Flammability	UL94 UL registration: file No. E176845	V-2
Density (g/cm³, @ 25°C)	JIS K6249	1.5

Adhesive Strength

Property	Value
90° Adhesion Strength (N/cm)	20
Shear Strength (N/cm²)	138
Shear Holding Power (90°C, mm)	0.5

(Test Method)

90° Adhesion Strength (N/cm):

Backside substrate: 130 µm Aluminum, Sample width: 25mm, Substrate: Stainless Steel (SS304BA)

Pressure: 10kg roller twice for each direction, Dwelling condition: 23°C for 72 Hr., Peel speed: 300mm/min.

Shear Strength (N/cm²):

Substrate: Stainless Steel (SS304BA), Pressure: 10kg roller twice for each direction, Dwelling condition: 23°C for 72 Hr.,

Peel speed: 300mm/min.

Share Holding Power (mm):

Substrate: Stainless Steel (SS304BA), Pressure: 10kg roller twice for each direction, Dwelling condition: 23°C for 72 Hr.,

Load: 250g/ cm², Measure shift length after 10,000 min @ 90°C.



3M™ Thermally Conductive Adhesive Transfer Tape 8910-03

Properties (continued)

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Electrical Properties of 3M™ Thermally Conductive Adhesive Transfer Tape 8910-03 (0.3mmt)

Property	Unit	Value			Test Method
Surface Resistivity	Ω-cm	2.8 x 10 ¹⁵			ASTM D-257
Volume Resistivity	Ω-cm	1.1 x 10 ¹⁴			ASTM D-257
Dielectric Strength	kV/mm	32			ASTM D-149
Dielectric Constant	Freq. (Hz)	3M	100M	1G	ASTM D-150
	–	4.5	3.9	3.4	

3M™ Thermally Conductive Adhesive Transfer Tape 8910-03

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 1-866-599-4227. 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.

Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. 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. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture at the time 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 indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**



Electronics Markets Materials Division

3M Center, Building 225-3S-06
St. Paul, MN 55144-1000
1-866-599-4227 phone
651-778-4244 fax
www.3M.com/electronics

3M is a trademark of 3M Company.
Please recycle. Printed in U.S.A.
©3M 2010. All rights reserved.
60-5002-0450-2

