

3M™ Thermally Conductive Interface Tapes Selection Guide

Engineered to provide efficient heat transfer along with adhesion and potentially replacing fasteners, 3M™ Thermally Conductive Interface Tapes are used to bond heat-generating components to heat sinks and cooling devices. Thermal management can help improve device reliability and extend the overall life of electronic devices. Each 3M tape combines high-performance adhesives and thermal conductivity for reliable thermal management. These tapes perform well in applications requiring high adhesion. Acrylic resin can typically operate up to 90°C. These tapes help provide robust thermal management for applications in a variety of market segments, such as automotive, LED lighting, communication infrastructure, and aerospace and defense.

For applications requiring heat distribution in select areas, 3M™ Thermally Conductive Heat Spreading Tape 9876 can be used to help provide heat distribution on the horizontal plane.

3M™ Thermally Conductive Interface Tapes

Product	Color	Base Material Type	Product Thickness mil (mm)	Filler Type	Liner Type	Peel Strength ' @72 hr Dwell at RT (kg/in) <small>3M Test Method *ASTM D-3330</small>	Thermal Conductivity (W/m-K) <small>ASTM C177 *ASTM C1113 **ASTM D5470 ***3M Test Method</small>	Thermal Impedance °C-in ² /W (°C-cm ² /W) <small>3M Test Method *ASTM D-1002</small>	Dielectric Strength (kV/mm) <small>ASTM D-149 **ASTM D-1002 ***3M Test Method</small>	Volume Resistivity (ohm-cm) <small>ASTM D-2577</small>	UL 94 Flammability Rating	
3M tape 8711	White	Acrylic	5 (0.125)	Ceramic	PET Film	*2.0	*0.6	0.7 (4.3)	26	-	V-0	
★ 3M tape 8805	White	Filled Acrylic Polymer	5 (0.125)		Silicone-treated Polyester Dual Liner	1.5	0.6	0.5 (3.2)	26 (8815)	5.2 X 10 ¹¹	-	
★ 3M tape 8810			10 (0.25)			2.1		0.9 (5.8)		3.9 X 10 ¹¹		
★ 3M tape 8815			15 (0.375)			2.5		1.2 (7.7)		3.8 X 10 ¹¹		
★ 3M tape 8820			20 (0.50)			3		1.5 (9.7)		3.8 X 10 ¹¹		
★ 3M tape 8926-02 ★ 8926-025 ★ 8926-05			Yellowish white			7.9 (0.2) 10 (0.25) 20 (0.5)		Clear PET Liner		*2.0		
3M tape 9882	White	Filled Acrylic Polymer	2 (0.05)		Silicone-treated Polyester Single Liner	0.5-0.9 (9885)	0.6	0.35 (2.1)	30 (9890)	2 X 10 ¹⁴ (9890)	-	
3M tape 9885			5 (0.125)					0.50 (3.2)				
3M tape 9890			10 (0.25)					0.90 (5.7)				
★ 3M tape 9876-10 9876-15	Pink	Acrylic Polymer on Cu Layer	3.9 (0.1) 5.9 (0.15)		Not applicable	Release coated paper liner Printed film liner	***0.8		0.30 (1.93) 0.45 (2.90)	****29 ****24	-	-

★ = Some thicknesses included in go-to materials list

- Tested in accordance with 3M Test Method or test method otherwise specified. Contact your 3M Technical Representative for details
- The following technical information and data should be considered representative or typical only and should not be used for specification purposes.
- Per UL File Number: QMFZ2.E239181.
- UL flame rating is only valid for the material coated on one side of aluminum plate with minimum 1.0 mm thickness and the other side of recognized component (QMTS2) FR-4 laminate at minimum of 0.8 mm thickness.

For devices that deliver consistent reliability and performance, you need thermal management materials that stand up to a lifetime of heat. At 3M, we can help you find the right solution for your thermal management needs. Contact us to learn more, or to help us find a custom solution for your application. Visit [3M.com/3M/en_US/consumer-electronics-us/](https://www.3m.com/3M/en_US/consumer-electronics-us/)

Have questions? Need technical assistance? We're here to help!
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