

Selecting the right 3M™ Thermally Conductive Interface Tapes

In order for devices to deliver consistent reliability and performance, you need thermal management materials that stand up to a lifetime of heat. Our 3M™ Thermally Conductive Interface Tapes are engineered to provide efficient and cost effective thermal transfer when bonding heat sinks, heat spreaders and other cooling devices to IC packages, power transistors and other heat-generating components.

Each tape combines high performance acrylic adhesive with highly conductive particles for reliable thermal interface. They apply quickly and easily with high conformability for excellent wet-out on surfaces. Choose from a variety of tape thicknesses and single and double-sided options for the right solution for your specific application.

3M™ Thermally Conductive Interface Tapes Selection Guide

| Product Number | Thickness (mm) | Color | Thermal Conductivity (W/m-K) | Thermal Impedence (C-cm ² /W) | Peel Strength (kg/inch) - initial | Peel Strength (kg/inch) - 72 Hour aging | Dielectric Strength (kV/mm) | Volume Resistivity (ohms-cm) | UL Rating* | Application |
|----------------|----------------|---------------------|------------------------------|--|-------------------------------------|---|-----------------------------|------------------------------|------------|-----------------------------|
| 8708-013 | 0.13 | Yellowish white | 0.6 | No data | Liner side : 2.0 Non-liner : 0.8 | Liner side : 3.0 Non-liner : 1.0 | 15 | No data | NA | LED BLU; Heat sink assembly |
| 8708-025 | 0.25 | Yellowish white | 0.6 | No data | Liner side : 2.0 Non-liner : 0.8 | Liner side : 3.0 Non-liner : 1.0 | 15 | No data | NA | LED BLU; Heat sink assembly |
| 8708-050 | 0.50 | Yellowish white | 0.6 | No data | Liner side : 2.0 Non-liner : 0.8 | Liner side : 3.0 Non-liner : 1.0 | 15 | No data | N/A | LED BLU; Heat sink assembly |
| 8709-02 | 0.20 | White with gray dot | 1.0 | No data | 2.5 | 5.0 | 10 | No data | N/A | LED BLU; Heat sink assembly |
| 8709-025 | 0.25 | White with gray dot | 1.0 | No data | 2.5 | 5.0 | 10 | No data | N/A | LED BLU; Heat sink assembly |
| 8709-05 | 0.50 | White with gray dot | 1.0 | No data | 2.5 | 5.0 | 10 | No data | N/A | LED BLU; Heat sink assembly |
| 8926-02 | 0.20 | Yellowish white | 1.5 | 8.5 | 1.3 | 2.0 | 15 | No data | V0** | LED BLU; Heat sink assembly |
| 8926-025 | 0.25 | Yellowish white | 1.5 | 8.7 | 1.3 | 2.0 | 15 | No data | V0** | LED BLU; Heat sink assembly |
| 8926-05 | 0.50 | Yellowish white | 1.5 | 9.7 | 1.3 | 2.0 | 15 | No data | V0** | LED BLU; Heat sink assembly |
| 8940 | 0.19 | Beige | 0.4 | 5.1 | 1.3 | 1.7 (24 hr.) | 33 | 2.5 × 10 ¹³ | N/A | Automotive, LED BLU |
| 8943 | 0.17 | Beige | 0.4 | 5.1 | 1.3 | 1.7 (24 hr.) | 33 | 2.5 × 10 ¹³ | N/A | Automotive, LED BLU |
| 8805 | 0.125 | White | 0.6 | 3.2 | 1.0 | 1.5 | 26 | 3.9 × 10 ¹¹ | N/A | LED BLU; Heat sink assembly |
| 8810 | 0.25 | White | 0.6 | 5.8 | 1.3 | 2.1 | 26 | 3.9 × 10 ¹¹ | N/A | LED BLU; Heat sink assembly |
| 8815 | 0.375 | White | 0.6 | 7.7 | 1.5 | 2.5 | 26 | 3.9 × 10 ¹¹ | N/A | LED BLU; Heat sink assembly |
| 8820 | 0.50 | White | 0.6 | 9.7 | 1.7 | 3.0 | 26 | 3.9 × 10 ¹¹ | N/A | LED BLU; Heat sink assembly |
| 9882 | 0.50 | White | 0.6 | 2.1 | 0.8 | 1.3 | 30 | 2.0 × 10 ¹⁴ | N/A | Heat sink assembly |
| 9885 | 0.125 | White | 0.6 | 3.2 | 1.2 | 1.6 | 30 | 2.0 × 10 ¹⁴ | N/A | Heat sink assembly |
| 9890 | 0.25 | White | 0.6 | 5.7 | 1.8 | 2.4 | 30 | 2.0 × 10 ¹⁴ | N/A | Heat sink assembly |

* 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.

We are confident that 3M has the right solution for your thermal management application. If your needs aren't reflected in this guide, custom options are available. To learn more about 3M™ Thermally Conductive Silicone Interface Pads, visit 3M.com/Electronics.

Have questions? Need technical assistance? We're here to help! Contact your 3M technical service representative for more information.

Safety Data Sheet: Consult safety data sheet (SDS) prior to use.

Regulatory: For regulatory information about this product, contact your 3M representative.

Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use: Many factors beyond 3M's control and uniquely within user's control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

Warranty, Limited Remedy, and Disclaimer: Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OR TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.



Electronics Materials Solutions Division

3M Center, Building 224-3N-11
St. Paul, MN 55144-1000

Phone 1-888-364-3577
Web www.3M.com/Electronics

©2017 3M. All rights reserved.
3M is a trademark of 3M.
60-5005-0052-9
10/2017