



# 3M™ Thermally Conductive Acrylic Interface Pads

## Selection Guide

3M™ Thermally Conductive Acrylic Interface Pads 5500H, 5550H, 5578H, and 5571 are designed to provide a preferential heat transfer path from heat generating components to a cooling device (e.g., aluminum plate or heat sink.)

3M Thermally Conductive Acrylic Interface Pads offer the following key features:

- UL94 V-0 listed
- Does not contain intentionally added silicone, so there is not siloxane VOC or oil bleeding, which are associated with silicone products
- Conformable even for non-flat surfaces
- Good conformability to fill gaps for excellent thermal conductivity
- Good electrical insulation properties
- Soft, compliant material allows for pressure relaxation, helping to reduce high pressure zones on components
- Incorporates a thin acrylic layer for easy handling during pre-assembly and die-cutting

Note: The technical information and data provided below are for reference only and should be used for specification purposes. It is the responsibility of the customer to evaluate feasibility for their specific application.

Series Number	Thickness (mm)	Color	Thermal Conductivity (W/m-K)	Hardness (Shore 00) <sup>2</sup>	Breakdown Voltage (kV)	Volume Resistivity (Ω-cm)	UL Rating <sup>3</sup>	Typical Applications
5500H <sup>1</sup>	0.5/ 1.0/ 1.5/ 2.0	White/ light gray	1.96 (Min. 1.70)	72	21.8 (Min. 17.0)	1.5 E+12 (Min. 3.0 E+11)	V0	Automotive battery cooling, power electronics, and HMI displays
5550H <sup>1</sup>	0.5/ 1.0	White/ light gray	1.92 (Min. 1.75)	54	19.6 (Min. 17.0) <sup>7</sup>	4.9 E+11 (Min. 3.0 E+11)	V0	
5571 <sup>4</sup>	1.0/ 1.5/ 2.0	Yellowish White	2.1 (3 M TM) <sup>5</sup>	78	17.0	2.5 E+14	V0	
5578H	0.5/ 1.0	White/ light gray	2.39 (Min. 2.0) <sup>1</sup>	71	11.0 (Min. 8.0) <sup>6</sup>	1.0 E+13 (Min. 1.0 E+10) <sup>6</sup>	V0	

<sup>1</sup> Tests conducted on 1.0 mm thick product

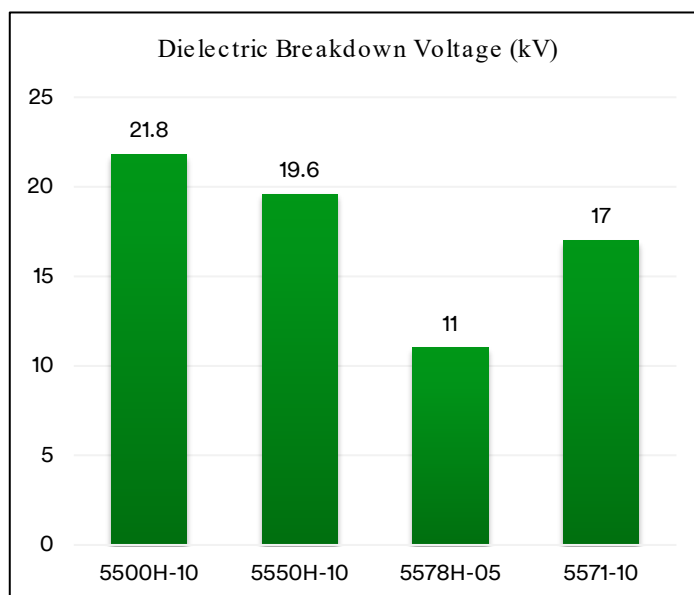
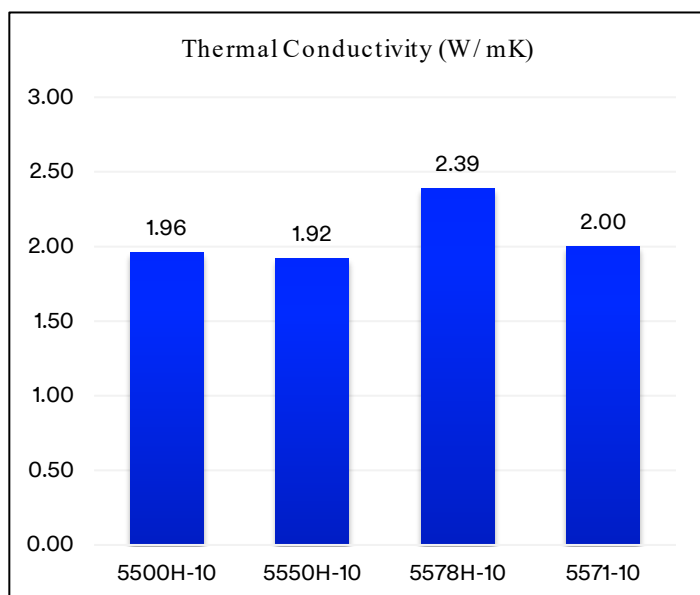
<sup>2</sup> Specific range shown in TDS

<sup>3</sup> UL File Number for 3M thermal pads 5571 and 5578: QMFZ2.E239181; UL File Number for 3M thermal pads 5500H, 5550H: QMFZ2.E176845

<sup>4</sup> Tests conducted on initial thickness

<sup>5</sup> Due to double-sided construction thermal conductivity tested using 3M Test Method rather than more common ASTM D5470

<sup>6</sup> Tests conducted on 0.5 mm thick product



Notice: Breakdown voltage values are depending on the certain thickness

## Contact Information

The information provided in this technical document is intended as a guide for this product. For more information or help in selecting a 3M product for an application, please contact your 3M application engineering representative or [connect with a 3M expert](#).

**Intended Use:** These products are intended for use within a high voltage lithium-ion battery pack and power electronics to help maintain temperature uniformity of cells and electrical components in automotive, off-highway, industrial and marine applications. Since there are many factors that can affect a product's use, the customer remains responsible for determining whether the 3M product is suitable and appropriate for the customer's specific application and system, including customer conducting an appropriate risk assessment and evaluating the 3M product in customer's application and system. **Restricted Use:** 3M advises against the use of this 3M product in any application other than the stated intended use(s), since other applications have not been evaluated by 3M and may result in an unsafe or unintended condition.

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