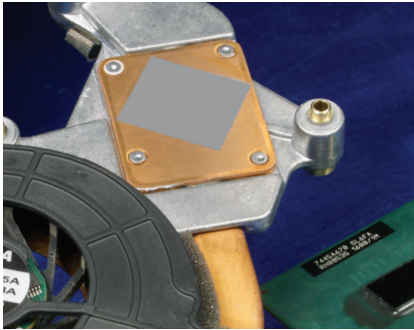


High Performance, Unreinforced Phase Change Thermal Interface Material

Features and Benefits

- Thermal impedance: 0.04°C-in²/W (@25 psi)
- Very high thermal conductivity: 3.5 W/m-K
- 52°C phase change temperature
- Unsupported



Hi-Flow 565U is a thermally conductive phase change material which is applied in tabulated pad form. In the application the easy to use material undergoes a phase change at 52°C. After phase change, Hi-Flow 565U wets out the thermal interfaces resulting in a very low thermal impedance.

Hi-Flow 565U displaces easily at low pressures to provide a thermal performance comparable to the best thermal greases. Hi-Flow 565U is provided at a consistent thickness to ensure reliable performance. Hi-Flow 565U is attached to the target surface via pressure from a hard rubber roller or squeegee.

TYPICAL PROPERTIES OF HI-FLOW 565U						
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD			
Color	Gray	Gray	Visual			
Reinforcement Carrier	None	None	—			
Thickness (inch) / (mm)	0.005, 0.010	0.127, 0.254	ASTM D374			
Continuous Use Temp (°F) / (°C)	257	125	—			
Phase Change Temp (°F) / (°C)	126	52	ASTM D3418			
ELECTRICAL						
Flame Rating	V-O	V-O	U.L. 94			
THERMAL						
Thermal Conductivity (W/m-K) (1)	3.5	3.5	ASTM D5470			
THERMAL PERFORMANCE vs PRESSURE						
	Pressure (psi)	10	25	50	100	200
TO-220 Thermal Performance (°C/W)		0.29	0.27	0.25	0.24	0.23
Thermal Impedance (°C-in ² /W)(2)		0.05	0.04	0.04	0.04	0.03

1) This is the measured thermal conductivity of the Hi-Flow coating. It represents one conducting layer in a three-layer laminate. The Hi-Flow coatings are phase change compounds. These layers will respond to heat and pressure induced stresses. The overall conductivity of the material in post-phase change, thin film products is highly dependent upon the heat and pressure applied. This characteristic is not accounted for in ASTM D5470. Please contact Bergquist Product Management if additional specifications are required.
2) The ASTM D5470 test fixture was used and the test sample was conditioned at 70°C prior to test. The recorded value includes interfacial thermal resistance. These values are provided for reference only. Actual application performance is directly related to the surface roughness, flatness and pressure applied.

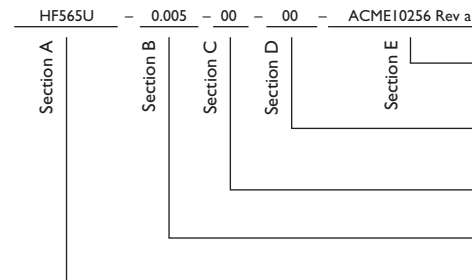
Typical Applications Include:

- Processor lid to heat sink
- FBDIMM to heat spreader
- Processor die to lid or heat sink

Configurations Available:

- Tabulated in roll form, kiss-cut parts - no holes
- Hi-Flow 565U is typically provided as a square or rectangular part design.

Building a Part Number



Standard Options

◀ example

NA = Selected standard option. If not selecting a standard option, insert company name, drawing number, and revision level.

--- = Standard configuration dash number, 11/100 = 11" x 100' rolls, or 00 = custom configuration

00 = No adhesive

Standard Thickness Available = 0.005", 0.010"

HF565U = Hi-Flow 565U Phase Change Material

Note: To build a part number, visit our website at www.bergquistcompany.com.

Hi-Flow®: U.S. Patent 6,197,859 and others



www.bergquistcompany.com

The Bergquist Company - North American Headquarters
18930 West 78th Street
Chanhassen, MN 55317
Phone: 800-347-4572
Fax: 952-835-0430

The Bergquist Company - European Headquarters
Bramenberg 9a, 3755 BT Eemnes
Netherlands
Phone: 31-35-5380684
Fax: 31-35-5380295

The Bergquist Company - Asia
Room 15, 8/F Wah Wai Industrial Centre
No. 38-40, Au Pui Wan Street
Folan, Shatin, N.T. Hong Kong
Ph: 852.2690.9296
Fax: 852.2690.2344

All statements, technical information and recommendations herein are based on tests we believe to be reliable, and THE FOLLOWING IS MADE IN LIEU OF ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MARKETABILITY AND FITNESS FOR PURPOSE. Sellers' and manufacturers' only obligation shall be to replace such quantity of the product proved to be defective. Before using, user shall determine the suitability of the product for its intended use, and the user assumes all risks and liability whatsoever in connection therewith. NEITHER SELLER NOR MANUFACTURER SHALL BE LIABLE EITHER IN TORT OR IN CONTRACT FOR ANY LOSS OR DAMAGE, DIRECT, INCIDENTAL OR CONSEQUENTIAL, INCLUDING LOSS OF PROFITS OR REVENUE ARISING OUT OF THE USE OR THE INABILITY TO USE A PRODUCT. No statement, purchase order or recommendations by seller or purchaser not contained herein shall have any force or effect unless in an agreement signed by the officers of the seller and manufacturer.

PDS_HF_565U_1107