

Tacky, High Performance, Un-Reinforced Phase Change TIM

Features and Benefits

- Thermal impedance: 0.05°C-in²/W (@25 psi)
- High thermal conductivity: 3.0 W/mk
- Phase change softening temp 52°C
- Naturally tacky
- Tabulated for ease of assembly



Hi-Flow 565UT is a naturally tacky, thermally conductive phase change material which is supplied in an easy to use tabulated pad form. In the application the material undergoes a phase change softening, starting near 52°C. The phase change softening feature improves handling characteristics prior to a facilitated assembly. At application temperatures and pressures, Hi-Flow 565UT wets out the thermal interfaces producing a very low thermal impedance.

The thermal performance of Hi-Flow 565UT is comparable to the best thermal greases. Hi-Flow 565UT is provided at a consistent thickness to ensure reliable performance. Hi-Flow 565UT can be applied in high volumes to the target surface via low pressure from a roller or manual application.

TYPICAL PROPERTIES OF HI-FLOW 565UT						
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD			
Color	Blue	Blue	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 Softening Temp (°F) / (°C)	126	52	ASTM D3418			
ELECTRICAL						
Flame Rating (1)	V-O	V-O	U.L. 94			
THERMAL						
Thermal Conductivity (W/m-K) (2)	3.0	3.0	ASTM D5470			
THERMAL PERFORMANCE vs PRESSURE						
	Pressure (psi)	10	25	50	100	200
	TO-220 Thermal Performance (°C/W)	0.37	0.35	0.34	0.30	0.26
	Thermal Impedance (°C-in ² /W)(3)	0.09	0.05	0.03	0.02	0.02

1) Pending.
 2) 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.
 3) 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.

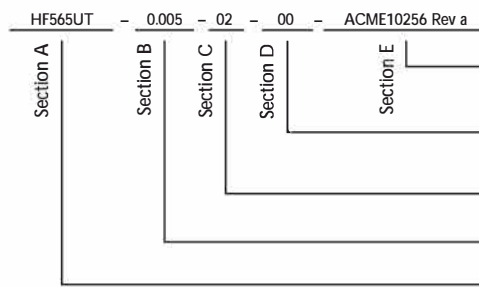
Typical Applications Include:

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

Configurations Available:

- Tabulated in roll form, kiss-cut parts - no holes
- Hi-Flow 565UT is limited to a square or rectangular part design. Dimensional tolerance is +/- 0.20 inch (0.5mm)

Building a Part Number



Standard Options

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

--- = Standard configuration dash number, 11/250 = 11" x 250' rolls, or 00 = custom configuration

02 = Natural Tack

Standard Thickness Available = 0.005", 0.010"

HF565UT = Hi-Flow 565UT 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



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