

Hi-Flow® 225UT

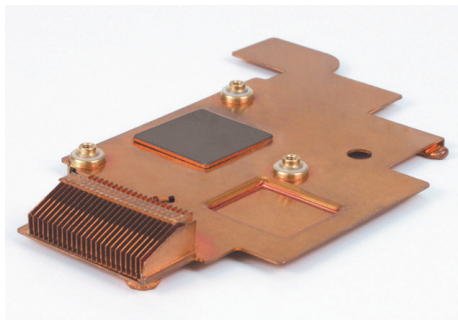
August 2013

PRODUCT DESCRIPTION

Un-Reinforced, Pressure Sensitive Phase Change Thermal Interface Material

FEATURES AND BENEFITS

- Thermal impedance: 0.08°C-in²/W (@25 psi)
- 55°C phase change composite with inherent tack characteristics
- High-visibility protective tabs
- Pressure sensitive phase change thermal interface material



Hi-Flow® 225UT is designed as a pressure sensitive thermal interface material for use between a high performance processor and a heat sink. Hi-Flow® 225UT is a thermally conductive 55°C phase change composite with inherent tack. The material is supplied on a polyester carrier liner and is available with high-visibility protective tabs.

Above its phase change temperature, Hi-Flow® 225UT wets-out the thermal interface surfaces and flows to produce the lowest thermal impedance. The material requires pressure of the assembly to cause flow. Hi-Flow® 225UT coatings will resist dripping.

Application Methods

1. Hand-apply Hi-Flow® 225UT to a room- temperature heat sink. The Hi-Flow® 225UT pad exhibits inherent tack and can be hand-applied similar to an adhesive pad. The tab liner can remain on the heat sink and pad throughout shipping and handling until it is ready for final assembly.

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

TYPICAL PROPERTIES OF HI-FLOW 225UT

PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD			
Color	Black	Black	Visual			
Reinforcement Carrier	None	None	—			
Thickness (inch) / (mm)	0.003	0.077	ASTM D374			
Continuous Use Temp (°F) / (°C)	248	120	—			
Phase Change Temp (°F) / (°C)	131	55	ASTM D3418			
ELECTRICAL						
Flame Rating	V-O	V-O	U.L. 94			
THERMAL						
Thermal Conductivity (W/m-K) (1)	0.7	0.7	ASTM D5470			
THERMAL PERFORMANCE vs PRESSURE						
	Pressure (psi)	10	25	50	100	200
TO-220 Thermal Performance (°C/W)		0.60	0.53	0.46	0.40	0.35
Thermal Impedance (°C-in²/W) (2)		0.09	0.08	0.07	0.06	0.05
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.						

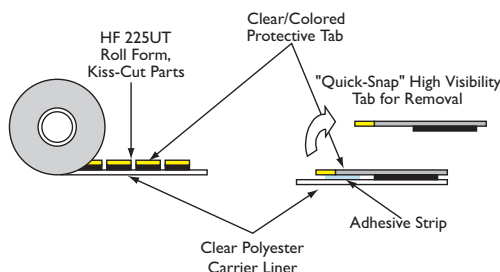
TYPICAL APPLICATIONS INCLUDE

- Computer and peripherals
- High performance computer processors
- Graphic cards
- Power modules

CONFIGURATIONS AVAILABLE

- Roll form with tabs, kiss-cut parts – no holes

Hi-Flow® 225UT is limited to a square or rectangular part design. Dimensional tolerance is +/- 0.020 inch (0.5mm).



Disclaimer

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