

Gap Pad® HC1000

July 2011

PRODUCT DESCRIPTION

"Gel-Like" Modulus Gap Filling Material

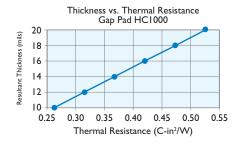
FEATURES AND BENEFITS

- Thermal conductivity: 1.0 W/m-K
- · Highly conformable, low hardness
- · "Gel-like" modulus
- Fiberglass reinforced for puncture, shear and tear resistance



Gap Pad® HC 1000 is an extremely conformable, low-modulus polymer that acts as a thermal interface and electrical insulator between electronic components and heat sinks. The "gel-like" modulus allows this material to fill air gaps to enhance the thermal performance of electronic systems. Gap Pad® HC1000 is offered with removable protective liners on both sides of the material.

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



TYPICAL PROPERTIES OF GAP PAD HC1000				
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD	
Color	Gray	Gray	Visual	
Reinforcement Carrier	Fiberglass	Fiberglass	_	
Thickness (inch) / (mm)	0.010 to 0.020	0.254 to 0.508	ASTM D374	
Inherent Surface Tack (1 side)	2	2	_	
Density (Bulk Rubber) (g/cc)	1.6	1.6	ASTM D792	
Heat Capacity (J/g-K)	1.0	1.0	ASTM E1269	
Hardness (Bulk Rubber) (Shore 00) (1)	25	25	ASTM D2240	
Young's Modulus (psi) / (kPa) (2)	40	275	ASTM D575	
Continuous Use Temp (°F) / (°C)	-76 to 392	-60 to 200 —		_
ELECTRICAL				
Dielectric Breakdown Voltage (Vac)	>5000	>5000	ASTM D149	
Dielectric Constant (1000 Hz)	5.5	5.5	ASTM D150	
Volume Resistivity (Ohm-meter)	1011	1011	ASTM D257	
Flame Rating	V-O	V-O	U.L. 94	
THERMAL				
Thermal Conductivity (W/m-K)	1.0	I.0 ASTM D5		D5470
THERMAL PERFORMANCE vs. STR	AIN			
Deflection (% strain) 10			20	30
Thermal Impedance (°C-in²/W) 0.020" (3) 1.30 1.00				0.96

I) Thirty second delay value Shore 00 hardness scale. 2) Young's Modulus, calculated using 0.01 in/min. step rate of strain with a sample size of 0.79 inch². 3) The ASTM DS470 test fixture was used. 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
- Telecommunications
- · Heat interfaces to frames, chassis or other heat spreading devices
- RDRAM™ memory modules/chip scale packages
- CDROM/DVD cooling
- · Areas where irregular surfaces need to make a thermal interface to a heat sink
- DDR SDRAM memory modules
- FBDIMM modules

CONFIGURATIONS AVAILABLE

Sheet form, die-cut parts, and roll form (converted or unconverted)

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Note:

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Reference 0.1