

# Gap Pad® HC1000

"Gel-Like" Modulus Gap Filling Material

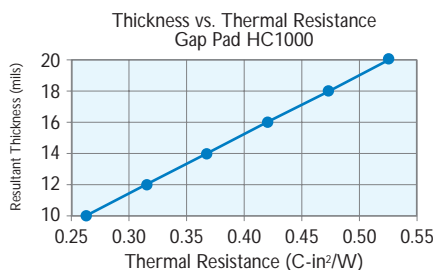
## Features and Benefits

- 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: Resultant thickness is defined as the final gap thickness of the application.*



TYPICAL PROPERTIES OF GAP PAD HC1000			
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Gray	Gray	Visual
Reinforcement Carrier	Fiberglass	Fiberglass	—
Thickness (inch) / (mm)	0.015 to 0.020	0.381 to 0.508	ASTM D374
Inherent Surface Tack (1- or 2-sided)	2	2	—
Density (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	—
<b>ELECTRICAL</b>			
Dielectric Breakdown Voltage (Vac)	>5000	>5000	ASTM D149
Dielectric Constant (1000 Hz)	5.5	5.5	ASTM D150
Volume Resistivity (Ohm-meter)	10 <sup>11</sup>	10 <sup>11</sup>	ASTM D257
Flame Rating	V-O	V-O	U.L. 94
<b>THERMAL</b>			
Thermal Conductivity (W/m-K)	1.0	1.0	ASTM D5470

1) 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 inch<sup>2</sup> and 0.020 inches thick. For more information on Gap Pad modulus, refer to Bergquist Application Note #116.

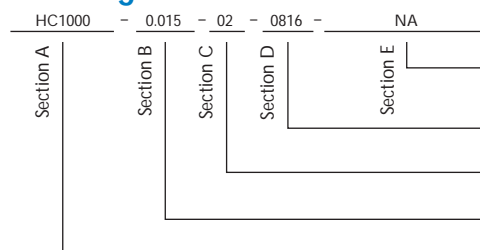
## Typical Applications Include:

- 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
- FB DIMM modules

## Configurations Available:

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

## 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.
- 0816 = Standard sheet size 8" x 16", or 00 = custom configuration
- 02 = Natural tack, both sides
- Standard thicknesses available: 0.015", 0.020"
- HC1000 = High Compliance 1000 Material

Note: To build a part number, visit our website at [www.bergquistcompany.com](http://www.bergquistcompany.com).

Gap Pad®: U.S. Patent 5,679,457 and others



[www.bergquistcompany.com](http://www.bergquistcompany.com)

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