**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**

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>IMPERIAL VALUE</th>
<th>METRIC VALUE</th>
<th>TEST METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Gray</td>
<td>Gray</td>
<td>Visual</td>
</tr>
<tr>
<td>Reinforcement Carrier</td>
<td>Fiberglass</td>
<td>Fiberglass</td>
<td>—</td>
</tr>
<tr>
<td>Thickness (inch) / (mm)</td>
<td>0.010 to 0.020</td>
<td>0.254 to 0.508</td>
<td>ASTM D374</td>
</tr>
<tr>
<td>Inherent Surface Tack (1 side)</td>
<td>2</td>
<td>2</td>
<td>—</td>
</tr>
<tr>
<td>Density (Bulk Rubber) (g/cc)</td>
<td>1.6</td>
<td>1.6</td>
<td>ASTM D792</td>
</tr>
<tr>
<td>Heat Capacity (J/g-K)</td>
<td>1.0</td>
<td>1.0</td>
<td>ASTM E1269</td>
</tr>
<tr>
<td>Hardness (Bulk Rubber) (Shore 00)</td>
<td>25</td>
<td>25</td>
<td>ASTM D2240</td>
</tr>
<tr>
<td>Young's Modulus (psi) / (kPa) (2)</td>
<td>40</td>
<td>275</td>
<td>ASTM D575</td>
</tr>
<tr>
<td>Continuous Use Temp (°F) / (°C)</td>
<td>-76 to 392</td>
<td>-60 to 200</td>
<td>—</td>
</tr>
</tbody>
</table>

**ELECTRICAL**

- Dielectric Breakdown Voltage (Vac) >5000 >5000 ASTM D149
- Dielectric Constant (1000 Hz) 5.5 5.5 ASTM D150
- Volume Resistivity (Ohm-meter) $10^{11}$ $10^{11}$ ASTM D257
- Flame Rating V-O V-O UL-94

**THERMAL**

- Thermal Conductivity (W/m-K) 1.0 1.0 ASTM D5470

**THERMAL PERFORMANCE vs. STRAIN**

<table>
<thead>
<tr>
<th>Deflection (% strain)</th>
<th>10</th>
<th>20</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal Impedance (°C-in²/W) 0.020&quot; (3)</td>
<td>1.30</td>
<td>1.00</td>
<td>0.96</td>
</tr>
</tbody>
</table>

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 inch². 3) The ASTM D5470 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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