BERGQUIST GAP PAD TGP 3000
Known as BERGQUIST GAP PAD 3000S30
November 2018

PRODUCT DESCRIPTION

<table>
<thead>
<tr>
<th>Technology</th>
<th>Silicone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Light blue</td>
</tr>
<tr>
<td>Reinforcement Carrier</td>
<td>Fiberglass</td>
</tr>
<tr>
<td>Thickness , ASTM D374</td>
<td>0.254 to 3.175mm</td>
</tr>
<tr>
<td>Inherent Surface Tack</td>
<td>2 (2 sides)</td>
</tr>
<tr>
<td>Application</td>
<td>Thermal management, TIM (Thermal Interface Material)</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-60 to 200ºC</td>
</tr>
</tbody>
</table>

FEATURES AND BENEFITS
- Thermal Conductivity: 3.0 W/m-K
- Low “S-Class” thermal resistance at very low pressures
- Highly conformable, “S-Class” softness
- Designed for low-stress applications
- Fiberglass reinforced for puncture, shear and tear resistance

BERGQUIST GAP PAD TGP 3000 is a soft gap filling material rated at a thermal conductivity of 3 W/m-K. The material offers exceptional thermal performance at low pressures due to an all new 3 W/m-K filler package and low-modulus resin formulation. It is reinforced to enhance material handling, puncture, shear and tear resistance. It is well suited for high performance, low-stress applications that typically use fixed standoff or clip mounting. BERGQUIST GAP PAD TGP 3000 maintains a conformable yet elastic nature that allows for excellent interfacing and wet-out characteristics, even to surfaces with high roughness and/or topography.

BERGQUIST GAP PAD TGP 3000 is offered with natural inherent tack on both sides of the material, eliminating the need for thermally-impeding adhesive layers. The material’s natural inherent tack allows for stick-in-place characteristics during assembly. BERGQUIST GAP PAD TGP 3000 is supplied with protective liners on both sides. The top side has reduced tack for ease of handling.

TYPICAL APPLICATIONS
- Processors
- Server S-RAMS
- Mass storage drives
- Wireline / wireless communications hardware
- Notebook computers
- BGA packages
- Power conversion

TYPICAL PROPERTIES OF CURED MATERIAL
Young's modulus is calculated using 0.01 in/min, step rate of strain with a sample size 0.79 inch².

<table>
<thead>
<tr>
<th>Physical Properties</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardness, Shore 00, Thirty second delay value</td>
<td>30 ASTM D2240, Bulk rubber</td>
</tr>
<tr>
<td>Heat Capacity, ASTM E1269, J/g-K</td>
<td>1.0</td>
</tr>
<tr>
<td>Density, ASTM D792, g/cc</td>
<td>3.2</td>
</tr>
<tr>
<td>Flammability, UL 94, V-0</td>
<td></td>
</tr>
<tr>
<td>Young's Modulus, ASTM D575, kPa</td>
<td>180</td>
</tr>
<tr>
<td>Young's Modulus, ASTM D575, psi</td>
<td>(26)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electrical Properties</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Dielectric Breakdown Voltage, ASTM D149, VAC</td>
<td>&gt;3,000</td>
</tr>
<tr>
<td>Dielectric Constant, ASTM D150, 1,000Hz</td>
<td>7.0</td>
</tr>
<tr>
<td>Volume Resistivity, ASTM D257, ohm-meter</td>
<td>1×10⁹</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Thermal Properties</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal Conductivity, ASTM D5470, W/(m-K)</td>
<td>3.0</td>
</tr>
</tbody>
</table>

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

**Thicknes vs. Thermal Resistance**

![Graph showing the relationship between resultant thickness (mils) and thermal impedance (°C-in²/W).]
GENERAL INFORMATION
For safe handling information on this product, consult the Safety Data Sheet (SDS).

Not for product specifications
The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

CONFIGURATIONS AVAILABLE
BERGQUIST GAP PAD TGP 3000 is available in the following configurations:

- Sheet form
- Die-Cut parts

Natural tack both sides with fiberglass.

STORAGE
Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: 25°C (±3), 50% RH (±10) for a 12 months shelf life. Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Conversions

\[(°C \times 1.8) + 32 = °F\]
\[\text{kV/mm} \times 25.4 = \text{V/mil}\]
\[\text{mm} / 25.4 = \text{inches}\]
\[\text{N} \times 0.225 = \text{lb}\]
\[\text{N/mm} \times 5.71 = \text{lb/in}\]
\[\text{psi} \times 145 = \text{N/mm}^2\]
\[\text{MPa} = \text{N/mm}^2\]
\[\text{N.m} \times 8.851 = \text{lb-in}\]
\[\text{N.m} \times 0.738 = \text{lb-ft}\]
\[\text{N.mm} \times 0.142 = \text{oz-in}\]
\[\text{mPa.s} = \text{cP}\]

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