Sil-Pad® 400 is a composite of silicone rubber and fiberglass. The material is flame retardant and is specially formulated for use as a thermally conductive insulator. The primary use for Sil-Pad® 400 is to electrically isolate power sources from heat sinks.

Sil-Pad® 400 has excellent mechanical and physical characteristics. Surfaces are pliable and allow complete surface contact with excellent heat dissipation. Sil-Pad® 400 actually improves its thermal resistance with age. The reinforcing fiberglass provides excellent cut-through resistance. In addition, Sil-Pad® 400 is non-toxic and resists damage from cleaning agents.

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

**FEATURES AND BENEFITS**
- Thermal impedance: 1.13°C-in²/W (@50 psi)
- Original Sil-Pad material
- Excellent mechanical and physical characteristics
- Flame retardant

**PRODUCT DESCRIPTION**
The Original Sil-Pad® Material

**TYPICAL PROPERTIES OF SIL-PAD 400**

<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>0.007, 0.009</td>
<td>0.178, 0.229</td>
<td>ASTM D374</td>
</tr>
<tr>
<td>Hardness (Shore A)</td>
<td>85</td>
<td>85</td>
<td>ASTM D2240</td>
</tr>
<tr>
<td>Breaking Strength (lbs/inch) / (W/m/m)</td>
<td>30</td>
<td>5</td>
<td>ASTM D1458</td>
</tr>
<tr>
<td>Elongation (% at 45° to Warp and Fill)</td>
<td>54</td>
<td>54</td>
<td>ASTM D412</td>
</tr>
<tr>
<td>Tensile Strength (psi) / (MPa)</td>
<td>3000</td>
<td>20</td>
<td>ASTM D412</td>
</tr>
<tr>
<td>Continuous Use Temp (°F) / (°C)</td>
<td>-76 to 356</td>
<td>-60 to 180</td>
<td>—</td>
</tr>
</tbody>
</table>

**ELECTRICAL**
- Dielectric Breakdown Voltage (Vac): 3500, 4500
- Dielectric Constant (1000 Hz): 5.5
- Volume Resistivity (Ohm-meter): $10^n$
- Flame Rating: V-O

**THERMAL**
- Thermal Conductivity (W/m-K): 0.9
- Thermal Impedance (°C-in²/W) 0.007" (1): 2.34

1) 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**
- Power supplies
- Automotive electronics
- Power semiconductors
- Motor controls

**CONFIGURATIONS AVAILABLE**
- Sheet form, die-cut parts and roll form; with or without pressure sensitive adhesive
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Reference 0.1