SilCool* TIG830SP

Description
TIG830SP is a silicone grease that provides high thermal conductivity and low thermal resistance. The workability of TIG830SP makes it a good candidate for screen-printing and dispensing processes, and its dielectric and thermal performance contribute to help solving heat dissipation challenges in a variety of electronic components and designs.

Key Features and Typical Benefits

- High thermal conductivity
- Low thermal resistance
- Thin bond lines
- Highly workable - excels in screen-printing and dispensing processes
- Wide operating temperature range (-40 °C ~ 150 °C)
- Minimal weight loss at elevated temperatures
- Minimal ionic impurities

Typical Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Gray paste</td>
<td></td>
</tr>
<tr>
<td>Thermal conductivity$^{(2)}$</td>
<td>W/m·k</td>
<td>4.1</td>
</tr>
<tr>
<td>Viscosity (23 °C)</td>
<td>Pa·s</td>
<td>300</td>
</tr>
<tr>
<td>Penetration$^{(3)}$ (23 °C)</td>
<td></td>
<td>360</td>
</tr>
<tr>
<td>Specific Gravity (23 °C)</td>
<td></td>
<td>2.88</td>
</tr>
<tr>
<td>Bleed (150 °C, 24h)</td>
<td>wt%</td>
<td>0.0</td>
</tr>
<tr>
<td>Evaporation (150 °C, 24h)</td>
<td>wt%</td>
<td>0.3</td>
</tr>
<tr>
<td>Thermal Resistance$^{(1)}$ (BLT 20 µm)</td>
<td>mm²·k/w</td>
<td>12</td>
</tr>
<tr>
<td>Dielectric Strength</td>
<td>kV/0.25 mm</td>
<td>4.5</td>
</tr>
</tbody>
</table>

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Typical properties are average data and should not be used as or to develop product specifications.

(1) Laser lash analysis  (2) Hot wire method  (3) JIS K 2220

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