TIA222G Thermally Conductive Silicone

Description

TIA222G thermally conductive silicone is a two-component material used for encapsulating, gap filling, and as a thermal path to heat sinks. The flowability of TIA222G silicone allows it to conform to complex three-dimensional shapes and cavities in potting applications. TIA222G silicone quickly cures to a soft rubber gel with exposure to heat, and will also cure at room temperatures.

Key Features and Typical Benefits

- Good thermal conductivity
- Fast cure with exposure to heat
- Easy to use 1:1 mixing ratio by weight or volume
- Flame Retardant: UL94 V-0 certified (File No. E56745)

Typical Physical Properties

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Part A</td>
</tr>
<tr>
<td>Color</td>
<td>Dark Gray</td>
</tr>
<tr>
<td>Mixing Ratio (by weight or volume)</td>
<td>100:100</td>
</tr>
<tr>
<td>Viscosity (23 °C) (after mixing)</td>
<td>Pa.s</td>
</tr>
<tr>
<td>Pot Life</td>
<td>h</td>
</tr>
<tr>
<td>Cure Condition (with heat)</td>
<td>°C / h</td>
</tr>
<tr>
<td>Cure Condition (room temperature)</td>
<td>h</td>
</tr>
</tbody>
</table>

Post-Cure Properties
### Potential Applications

- Thermal encapsulating, gap filling, and potting.

### General Considerations for Use

- Parts A and B should each be thoroughly stirred before mixing together, as filler sedimentation may occur during storage.
- De-aerate the mixture to remove air entrapped during mixing.
- Materials such as water, sulfur, nitrogen compounds, organic metallic salts, phosphorus compounds, etc. contained in the surface layer of the substrate can inhibit curing. It is recommended that a preliminary test be performed to determine compatibility.

### Storage

- Store in a dark, cool place out of direct sunlight.
- TIA222G(B) silicone pail cans:

If after use there is TIA222G(B) material remaining inside the pail can, tie the can’s inner bag into a knot to reduce the volume of air to which the TIA222G(B) material is exposed during storage, and securely fasten the lid to the can.
Patent Status
Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

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