TC-SET4-20 is a high thermal conductive silicone soft pad with low compression set property while maintaining the flexibility of low hardness.

1 Features
1) High Thermal conductivity, Low thermal resistance
2) Excellent compressibility and stress relaxation property
3) Excellent workability
4) Low compression set compared with conventional soft pad
5) Low oil bleed

2 Applications
In-vehicle module which particularly long-term heat cycle reliability and vibration reliability are required

3 General properties

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Test Method</th>
<th>Grade</th>
<th>TC-SET4-20</th>
<th>TC-CAT-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Features</td>
<td>—</td>
<td>Low compression set</td>
<td>Conventional</td>
<td></td>
</tr>
<tr>
<td>Appearance (color)</td>
<td>—</td>
<td>Light reddish brown</td>
<td>Gray</td>
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<tr>
<td>Structure</td>
<td>—</td>
<td>Single layer</td>
<td>Single layer</td>
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</tr>
<tr>
<td>Density 23°C g/cm³</td>
<td>JIS K 6249</td>
<td>3.2</td>
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<tr>
<td>Hardness Asker C</td>
<td>JIS K 6249</td>
<td>20</td>
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</tr>
<tr>
<td>Break down voltage kV/1mm</td>
<td>JIS K 6249</td>
<td>15</td>
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<td>Thermal conductivity W/m-K</td>
<td>ISO 22007-2</td>
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<td>Flame retardancy UL94</td>
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<td>V-0 equivalent</td>
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</tbody>
</table>

(Not specified values)

4 Pressure and Thickness

5 Pressure and Thermal Resistance
6 Compression set test

Test Method
1) 3 mm thickness pad was cut to 20 x 20 mm size, and sandwiched by polyimide films.
2) Pad sample was compressed to 50% thickness (1.5 mm) with compression tool and spacer.
3) Sample was put into aging chamber. After aging, sample was taken out.
4) Pad sample was released after it returned to room temperature, and the thickness 60 minutes later was measured.

Test Results
TC-SET4-20 shows low compression set property.

7 Handling precautions
1) Products should be stored in a dry place out of direct sunlight.
2) Avoid contact with residual solvents or oils as they may deteriorate the properties of the product.
3) For better results, the substrate surface should be cleaned and dried to remove any dirt, moisture or oils before application.
4) Prior to using the product with a thermal interface grease, test a sample with a small amount to determine compatibility.
5) Keep out of reach of children.
6) Please read the Safety Data Sheets (SDS) before use. SDS can be obtained from our Sales Department.

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