GOF2000 Thermal Gasket

Graphite-Over-Foam w/ Silicone Foam

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Laird’s Graphite-over-Foam (GOF), GOF2000 thermal gasket, provides thermal transfer performance in the form of a traditional wrapped compressible foam gasket. GOF2000 combines the thermal transfer performance of the Tgon™ 9000 synthetic graphite outside wrap and the repeatable compression and rebound of a foam core. GOF2000 utilizes Laird LSF series silicone foam allowing for a UL V0 flammability rating.

FEATURES AND BENEFITS

- High Deflection
- High thermal transfer rate especially suitable for large gap sizes
- Repeatable compression and rebound cycles
- Lightweight
- Low force thermal interface
- Abrasion resistant exterior
- Ease of manufacturing for high volume
- Use multiple 5mm width columns to lower overall thermal resistance
- High operating temperature suitability and UL V0 flammability rating

VALUE

- Provides compressible thermal interface for sliding connections. Ideal for insertion applications.
- Ensures thermal interface contact in high movement locations that would separate a traditional thermal putty, gel, or grease
- Offers lower force than traditional thermal gap pads for pressure sensitive applications
- Ideal thermal performance for large gap sizes
- Improved reliability performance of electronics
- RoHS and REACH compliant

TYPICAL PROPERTIES

<table>
<thead>
<tr>
<th>TYPICAL PROPERTIES</th>
<th>DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>UL Flammability</td>
<td>UL 94 V0 (pending)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C to 125°C</td>
</tr>
<tr>
<td>Standard Thicknesses (mm)</td>
<td>1.0, 1.2, 1.8, 2.6, 3.4, 5.0, 6.6, and 9.8</td>
</tr>
<tr>
<td>Thickness and Width Tolerance</td>
<td>+/-0.3mm</td>
</tr>
<tr>
<td>Compression Set</td>
<td>&lt;35% @ 125°C @ 7 days @ 1-2mm</td>
</tr>
<tr>
<td></td>
<td>&lt;10% @ 125°C @ 7 days @ &gt;2mm</td>
</tr>
<tr>
<td>Shelf Life</td>
<td>12 Months at 23°C/60% R.H.</td>
</tr>
<tr>
<td>Recommended Compression Range</td>
<td>Target compression 25%</td>
</tr>
<tr>
<td></td>
<td>15% to 35% for &lt;2mm thick</td>
</tr>
<tr>
<td></td>
<td>15% to 50% for &gt;2mm thick</td>
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</tbody>
</table>
PSA

GOF2000 uses a 30um thick PSA as standard. This 30um is not included in the standard thickness listed in the chart above.

Thermal Conductivity & Thermal Resistance

Graphite over foam is not a homogeneous material and therefore thermal conductivity is not a constant value across the different configurations and sizes. The values in the chart below are only for comparison’s sake to traditional thermal gap pads. Thermal resistance is the more indicative value for design evaluation. Below values are based on representative 5.0mm wide by 25mm long samples.

A dual layer graphite version of GOF2000 is available for a 20% increase in thermal performance.

Thermal Resistance

![Thermal Resistance Chart](image)

Thermal Conductivity

![Thermal Conductivity Chart](image)
GOF2000 Sample Part Number

A sample of GOF2000, 2.5x5x25mm in shape, with the part number, LT19GOF2000SAMP.