Product Information

Thermal Interface -
Pads and Films

** FEATURES **
- Thermal conductivity: 0.73 W/m*K
- Both side compressible
- Foam reinforcement
- Alumina-filled system
- Highly compressible
- Homogeneous construction
- Low compression set
- One side tacky
- Gap filling
- Conformable

** BENEFITS **
- Good thermal performance with reduced interfacial thermal resistance
- Noise/vibration dampening
- Shock absorbing
- No internal interference or delamination
- Good compressibility
- Long-term reliability
- Ease of application, manufacturing and handling
- No need for liner

** POTENTIAL USES **
- Thermal bridge for low thermal resistance between heat sources and heat sinks of power components
- NB and DT Memory
- DIMM Modules
- Handheld Devices
- Flat Panel Displays

** Dow Corning® TP-2160-TX.X Thermal Pad **

Gap filler interface Foam based one side tacky thermal gel

** TYPICAL PROPERTIES **
Specification Writers: Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

<table>
<thead>
<tr>
<th>Property</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>-</td>
<td>Light Gray</td>
</tr>
<tr>
<td>Thermal Conductivity</td>
<td>btu/hr ft degF</td>
<td>1.263</td>
</tr>
<tr>
<td></td>
<td>W/mK</td>
<td>0.73</td>
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<tr>
<td>UL Flammability Classification</td>
<td>NA</td>
<td>UL1-94 V-1</td>
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<tr>
<td>Durometer Shore 00</td>
<td>-</td>
<td>34</td>
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<tr>
<td>Specific Gravity (Cured)</td>
<td>-</td>
<td>1.84</td>
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</table>

** APPLICATION METHODS **
- Cold applied
- Requiring no heating or curing
- Material can be installed and removed easily and cleanly
DESCRIPTION
Dow Corning® TP-2160 Thermal Gap Pad is a cost-competitive, highly compressible, silicone gap filler with moderate bulk conductivity, delivered with a highly conductive non-tacky surface on one side. This gel uses foam reinforcement to maintain compressibility, while providing easy handling to simplify application and improve long-term reliability. It is ideal for use in low-power applications requiring heat transfer across any large air gap. Good heat transfer depends on a good interface between a heat-producing device and a heat-transfer media. Silicones have a low surface tension that enables them to wet most surfaces, which can lower the thermal contact resistance between the substrate and the material. Phase change materials flow above the phase change temperature and wet out the thermal interface. In addition to sustaining their physical and electrical properties over a broad range of operating conditions, silicones are resistant to ozone and ultraviolet degradation and have good chemical stability.

HOW TO USE
Thin thermal interface and gap filler thermal interface materials are cold-applied and require no heating or curing. The materials can be removed easily and cleanly, with no special tools, for access and rework. Unlike greases, Dow Corning® brand thermal interface materials are not messy to apply and do not flow away from the interface with thermal cycling. These thermally conductive silicones function as heat-transfer media, barriers against environmental contaminants and as stress-relieving shock and vibration absorbers over a wide temperature and humidity range. For gap filling, their high compressibility accommodates tolerance stack-up and requires a lower clamping force, reducing system costs.

STORAGE AND SHELF LIFE
The product should be stored in the original packaging under normal warehouse conditions to maintain the integrity of the packaging materials.

HEALTH AND ENVIRONMENTAL INFORMATION
To support customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area. For further information, please see our website, www.dowcorning.com, or consult your local Dow Corning representative.

LIMITATIONS
These products are neither tested nor represented as suitable for medical or pharmaceutical uses.

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For More Information
To learn more about these and other products available from Dow Corning, please visit the Dow Corning Electronics website at www.dowcorning.com/electronics.
### Dow Corning® TP-2160 Thermal Gap Pad

<table>
<thead>
<tr>
<th>Thickness</th>
<th>mm</th>
<th>2.20</th>
<th>3.00</th>
<th>3.80</th>
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<tbody>
<tr>
<td>Thermal Resistance (°C·cm²/W) ASTM D5470</td>
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<td>3.51 kg/cm²</td>
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<td>5.27 kg/cm²</td>
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<td>7.03 kg/cm²</td>
<td>18.213</td>
<td>20.845</td>
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<tr>
<td>Compression Deflection (%) at Given Pressure ASTM D575 (Measured at specific thickness)</td>
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<td>7.03 kg/cm²</td>
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