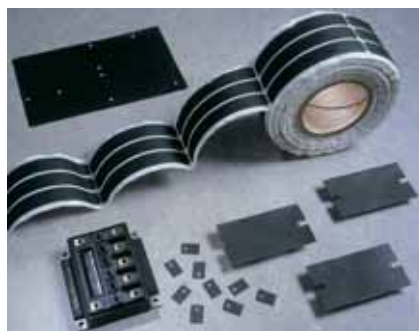


## Glass-Reinforced Grease Replacement Thermal Interface

### Features and Benefits

- Thermal impedance:  
0.35°C-in²/W (@50 psi)
- Eliminates processing constraints typically associated with grease
- Conforms to surface textures
- Easy handling
- May be installed prior to soldering and cleaning without worry



Bergquist Q-Pad 3 eliminates problems associated with thermal grease such as contamination of electronic assemblies and reflow solder baths. Q-Pad 3 may be installed prior to soldering and cleaning without worry. When clamped between two surfaces, the elastomer conforms to surface textures thereby creating an air-free interface between heat-generating components and heat sinks.

Fiberglass reinforcement enables Q-Pad 3 to withstand processing stresses without losing physical integrity. It also provides ease of handling during application.

| TYPICAL PROPERTIES OF Q-PAD 3                                                                                                                                                                                                                                |  |                 |      |                 |      |             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------|------|-----------------|------|-------------|
| PROPERTY                                                                                                                                                                                                                                                     |  | IMPERIAL VALUE  |      | METRIC VALUE    |      | TEST METHOD |
| Color                                                                                                                                                                                                                                                        |  | Black           |      | Black           |      | Visual      |
| Reinforcement Carrier                                                                                                                                                                                                                                        |  | Fiberglass      |      | Fiberglass      |      | —           |
| Thickness (inch) / (mm)                                                                                                                                                                                                                                      |  | 0.005           |      | 0.127           |      | ASTM D374   |
| Hardness (Shore A)                                                                                                                                                                                                                                           |  | 86              |      | 86              |      | ASTM D2240  |
| Continuous Use Temp (°F) / (°C)                                                                                                                                                                                                                              |  | -76 to 356      |      | -60 to 180      |      | —           |
| ELECTRICAL                                                                                                                                                                                                                                                   |  |                 |      |                 |      |             |
| Dielectric Breakdown Voltage (Vac)                                                                                                                                                                                                                           |  | Non-Insulating  |      | Non-Insulating  |      | ASTM D149   |
| Dielectric Constant (1000 Hz)                                                                                                                                                                                                                                |  | NA              |      | NA              |      | ASTM D150   |
| Volume Resistivity (Ohm-meter)                                                                                                                                                                                                                               |  | 10 <sup>2</sup> |      | 10 <sup>2</sup> |      | ASTM D257   |
| Flame Rating                                                                                                                                                                                                                                                 |  | V-O             |      | V-O             |      | U.L.94      |
| THERMAL                                                                                                                                                                                                                                                      |  |                 |      |                 |      |             |
| Thermal Conductivity (W/m-K)                                                                                                                                                                                                                                 |  | 2.0             |      | 2.0             |      | ASTM D5470  |
| THERMAL PERFORMANCE vs PRESSURE                                                                                                                                                                                                                              |  |                 |      |                 |      |             |
| Pressure (psi)                                                                                                                                                                                                                                               |  | 10              | 25   | 50              | 100  | 200         |
| TO-220 Thermal Performance (°C/W)                                                                                                                                                                                                                            |  | 2.26            | 1.99 | 1.76            | 1.53 | 1.30        |
| Thermal Impedance (°C-in <sup>2</sup> /W) (1)                                                                                                                                                                                                                |  | 0.65            | 0.48 | 0.35            | 0.24 | 0.16        |
| 1) The ASTM D5470 test fixture was used.The recorded value includes interfacial thermal resistance. These values are provided for reference only Actual application performance is directly related to the surface roughness, flatness and pressure applied. |  |                 |      |                 |      |             |

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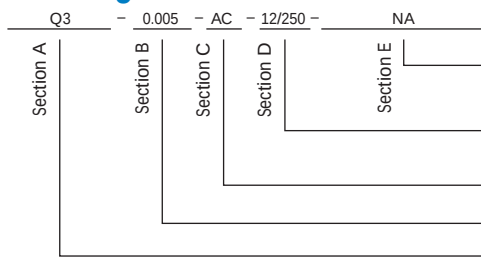
### Typical Applications Include:

- Between a transistor and a heat sink
- Between two large surfaces such as an L-bracket and the chassis of an assembly
- Between a heat sink and a chassis
- Under electrically isolated power modules or devices such as resistors, transformers and solid state relays

### Configurations Available:

- Sheet form, die-cut parts and roll form
- With or without pressure sensitive adhesive

### Building a Part Number



### Standard Options

◀ example

NA = Selected standard option. If not selecting a standard option, insert company name, drawing number, and revision level.

1212 = Standard configuration dash number, 1212 = 12" x 12" sheets, 12/250 = 12" x 250' rolls, or 00 = custom configuration

AC = Adhesive, one side  
00 = No adhesive

Standard thicknesses available: 0.005"

Q3 = Q-Pad 3 Material

Note: To build a part number, visit our website at [www.bergquistcompany.com](http://www.bergquistcompany.com).

Sil-Pad®: U.S. Patents 4,574,879; 4,602,125; 4,602,678; 4,685,987; 4,842,911 and others



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