### 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						
Press	sure (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-in²/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						

## **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

reference only. Actual application performance is directly related to the surface roughness, flatness and pressure applied.

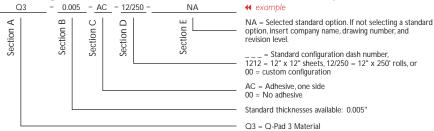
- Between a heat sink and a chassis
- Under electrically isolated power modules or devices such as resistors, transformers and solid state relays

## **Configurations Available:**

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

### **Building a Part Number**

## **Standard Options**



Note: To build a part number, visit our website at 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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