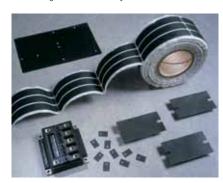
### Glass-Reinforced Grease Replacement Thermal Interface

#### **Features and Benefits**

- Thermal impedance: 0.35°C-in<sup>2</sup>/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	ure (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						

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

# **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

- 12/250

Section <sup>1</sup>

#### **Building a Part Number** 0.005 - AC

Section

Section

Section

### **Standard Options** NA = Selected standard option. If not selecting a standard option, insert company name, drawing number, and 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.

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