

# Q-Pad® 3

December 2008

#### PRODUCT DESCRIPTION

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



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.

Note: To build a part number, visit our website at www.bergquistcompany.com.

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)	102		102		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
I) 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
- · Between a heat sink and a chassis
- Under electrically isolated power modules or devices such as resistors, transformers and solid state relays

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

#### **CONFIGURATIONS AVAILABLE**

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



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#### Note:

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