

Q-Pad® II

January 2015

PRODUCT DESCRIPTION

Foil-Format Grease Replacement for Maximum Heat Transfer

FEATURES AND BENEFITS

- Thermal impedance: 0.22°C-in²/W (@50 psi)
- · Maximum heat transfer
- · Aluminum foil coated both sides
- · Designed to replace thermal grease



Q-Pad® II is a composite of aluminum foil coated on both sides with thermally/ electrically conductive Sil-Pad® rubber. The material is designed for those applications in which maximum heat transfer is needed and electrical isolation is not required. Q-Pad® II is the ideal thermal interface material to replace messy thermal grease compounds.

Q-Pad® II eliminates problems associated with grease such as contamination of reflow solder or cleaning operations. Unlike grease, Q-Pad® II can be used prior to theseoperations. Q-Pad® II also eliminates dust collection which can cause possible surface shorting or heat buildup..

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

TYPICAL PROPERTIES OF Q-PAD II						
PROPERTY	IMPERIAL VALUE		METRIC VALUE		TEST METHOD	
Color	Black		Black		Visual	
Reinforcement Carrier	Aluminum		Aluminum		_	
Thickness (inch) / (mm)	0.006		0.152		ASTM D374	
Hardness (Shore A)	93		93		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		10 ²		ASTM D257	
Flame Rating	V-O		V-O		U.L.94	
THERMAL						
Thermal Conductivity (W/m-K)	2.5		2.5		ASTM D5470	
THERMAL PERFORMANCE vs PRESSU	RE					
Pressui	re (psi)	10	25	50	100	200
TO-220 Thermal Performance (°C/W)		2.44	1.73	1.23	1.05	0.92
Thermal Impedance (°C-in²/W) (1)		0.52	0.30	0.22	0.15	0.12
The ASTM D5470 test fixture was used. The record	ed value incl	udes interfaci	al thermal resi	stance These	values are nr	vided 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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