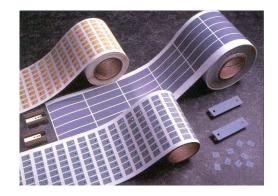


The Original Kapton® Based Insulator

Features and Benefits

- Thermal impedance 0.48°C-in²/W (@50 psi)
- · Withstands high voltages
- · High dielectric strength
- Very durable



Sil-Pad K-4 uses a specially developed film which has high thermal conductivity, high dielectric strength and is very durable. Sil-Pad K-4 combines the thermal transfer properties of well-known Sil-Pad rubber with the physical properties of a film.

Sil-Pad K-4 is a durable insulator that withstands high voltages and requires no thermal grease to transfer heat. Sil-Pad K-4 is available in customized shapes and sizes.

Typical Properties of Sil-Pad K-4						
Property	Imperial Value		Metric Value		Test Method	
Color	Gray		Gray		Visual	
Reinforcement Carrier	Kapton		Kapton		***	
Thickness, (inch) / (mm)	0.006		0.152		ASTM D374	
Hardness, (Shore A)	90		90		ASTM D2240	
Breaking Strength, (lbs./inch) / (kN/m)	30		5		ASTM D1458	
Elongation, (%45° to Warp & Fill)	40		40		ASTM D412	
Tensile Strength, (psi) / (Mpa)	5000		34		ASTM D412	
Continuous Use Temp., (°F) / (°C)	-76 to 356		-60 to 180		***	
Electrical	Imperial Value		Metric Value		Test Method	
Dielectric Breakdown Voltage, (VAC)	6000		6000		ASTM D149	
Dielectric Constant, (1000 Hz)	5.0		5.0		ASTM D150	
Volume Resistivity, (Ohm-meter)	1012		1012		ASTM D257	
Flame Rating	VTM-O		VTM-O		U.L.	
Thermal	Imperial Value		Metric Value		Test Method	
Thermal Conductivity, (W/m-K)	0.9		0.9		ASTM D5470	
Thermal Impedance vs. Pressure						
Pressure (psi)		10	25	50	100	200
TO-220 Thermal Performance, (°C/W)		3.66	3.43	3.13	2.74	2.42
Thermal Impedance, (°C-in²/W) (I)		1.07	0.68	0.48	0.42	0.38

1). The ASTM D5470 (Bergquist Modified) test fixture was used. The recorded value includes interfacial thermal resistance. These values are given to the customer for reference only. Actual application performance is directly related to the surface roughness, flatness and pressure applied.

Typical Applications Include

- Power supplies
- Motor controls
- Power semiconductors

Configurations

Available:

- · Sheet form
- Die-Cut parts
- Roll form
- With or without pressure sensitive adhesive

We produce thousands of specials. Tooling charges vary depending on tolerances and complexity of the part.

Sil-Pad[®]: U.S. Patents 4,574,879; 4,602,125; 4,602,678; 4,685,987; 4,842,911 and others Kapton[®] is a registered trademark of DuPont.

Product Data Sheet / PDS-0602-001-01; Rev 01

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MIL-I-49456
MIL-M-87111
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The Bergquist Company-Asia 9F-1, No. 314, Section 4 Ren Ai Road Taipei, Taiwan, ROC 106 Phone: 886-2-2700-7796 Fax: 886-2-2700-7795 All statements, technical information and recommendations herein are based on tests we believe to be reliable, and THE FOLLOWING IS MADE IN LIEU OF ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MARKETABILITY INTENSES FOR PURPOSE. Sellers and manufacturers only obligation shall be to replace such quantity of the product proved to be defective. Before using, user shall determine the suitability of the product for its intended use, and the user assumes all risks and liability whatsoever in connection therewith. NETHER ESLLER NOR MANUFACTURER SHALL BE LIABLE ETHER IN TOTA OR IN CONTROL FOR ANY LOSS OR DAMAGE, DIRECT, INCIDENTAL, OR CONSEQUENTIAL, INCLUDING LOSS OF PROFITS OR REVENUE ARISING OUT OF THE USE OR THE INABILITY TO USE A PRODUCT. No statement, purchase order or recommendations by seller or purchaser not contained herein shall have any force or effect unless in an agreement signed by the officers of the seller and manufactures.