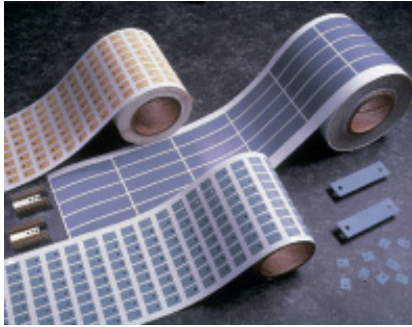


The Medium Performance Kapton®-Based Insulator

Features and Benefits

- Thermal impedance: 0.49°C-in²/W (@50 psi)
- Physically strong dielectric barrier against cut-through
- Medium performance film



Sil-Pad K-6 is a medium performance, film-based thermally conductive insulator. The film is coated with a silicone elastomer to deliver high performance and provide a continuous, physically strong dielectric barrier against "cut-through" and resultant assembly failures.

TYPICAL PROPERTIES OF SIL-PAD K-6

PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD			
Color	Bluegreen	Bluegreen	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 and 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						
Dielectric Breakdown Voltage (Vac)	6000	6000	ASTM D149			
Dielectric Constant (1000 Hz)	4.0	4.0	ASTM D150			
Volume Resistivity (Ohm-meter)	10 ¹²	10 ¹²	ASTM D257			
Flame Rating	VTM-O	VTM-O	U.L.94			
THERMAL						
Thermal Conductivity (W/m-K)	1.1	1.1	ASTM D5470			
THERMAL PERFORMANCE vs PRESSURE						
	Pressure (psi)	10	25	50	100	200
TO-220 Thermal Performance (°C/W)		3.24	3.03	2.76	2.45	2.24
Thermal Impedance (°C-in ² /W) (1)		0.82	0.62	0.49	0.41	0.36
1) The ASTM D5470 (Bergquist modified) 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.						

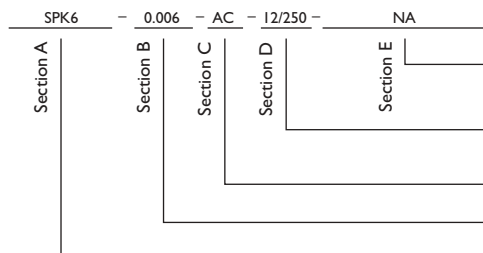
Typical Applications Include:

- Power supplies
- Power semiconductors
- FSCM Number 55285
- Military Specifications
 - MIL SPEC. MIL-M-38527/8A
 - MIL-I-49456
- Motor controls
- U.L. File Number E59150
- MIL-M-38527C
- MIL-M-87111

Configurations Available:

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

Building a Part Number



Standard Options

◀ example

NA = Selected standard option. If not selecting a standard option, insert company name, drawing number, and revision level.

— = 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: 0.006"

SPK6 = Sil-Pad K6 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

Kapton® is a registered trademark of DuPont.



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