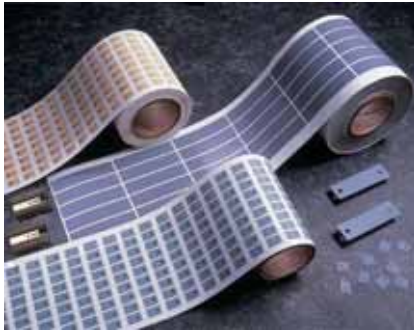


The Medium Performance Kapton®-Based Insulator

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 (%)		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-in²/W) (1)		0.82	0.62	0.49	0.41	0.36
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.						

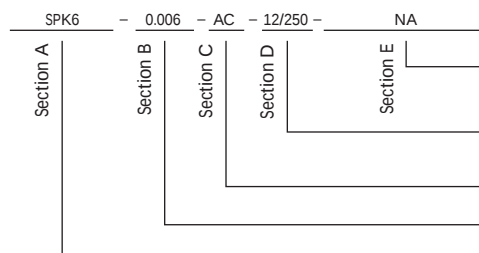
Typical Applications Include:

- Power supplies
- Motor controls
- Power semiconductors

Configurations Available:

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

Building a Part Number



Standard Options

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

1212 = 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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