

# Sil-Pad® K-6

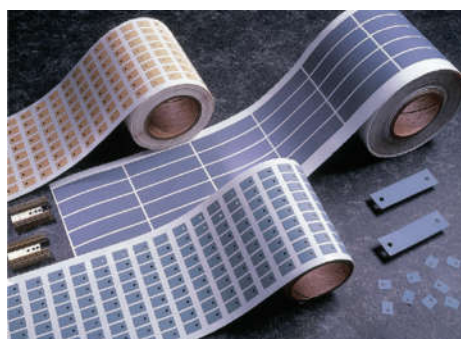
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## PRODUCT DESCRIPTION

The Medium Performance Polyimide-Based Insulator

## FEATURES AND BENEFITS

- Thermal impedance: 0.49°C-in<sup>2</sup>/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.

*Note: To build a part number, visit our website at [www.bergquistcompany.com](http://www.bergquistcompany.com).*

## TYPICAL PROPERTIES OF SIL-PAD K-6

PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD			
Color	Bluegreen	Bluegreen	Visual			
Reinforcement Carrier	Polyimide	Polyimide	—			
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	—			
<b>ELECTRICAL</b>						
Dielectric Breakdown Voltage (Vac)	6000	6000	ASTM D149			
Dielectric Constant (1000 Hz)	4.0	4.0	ASTM D150			
Volume Resistivity (Ohm-meter)	10 <sup>12</sup>	10 <sup>12</sup>	ASTM D257			
Flame Rating	VTM-O	VTM-O	U.L.94			
<b>THERMAL</b>						
Thermal Conductivity (W/m-K)	1,1	1,1	ASTM D5470			
<b>THERMAL PERFORMANCE vs PRESSURE</b>						
	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 <sup>2</sup> /W) (I)		0,82	0,62	0,49	0,41	0,36
<small>I) 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.</small>						

## 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

## Disclaimer

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