

High Cut-Through Resistant, Electrically Insulating Thermally Conductive Material

Features and Benefits

- Thermal impedance:
1.07°C-in²/W (@50 psi)
- Excellent cut-through resistance
- Use in screw-mounted applications with cut-through problems



In addition to excellent heat transfer and dielectric properties, Sil-Pad 980 is specially formulated for high resistance to crushing and cut-through typically found in high-pressure applications where surface imperfections such as burrs and dents are inherently common (e.g. heavily-machined metal surfaces manufactured from extrusions or castings).

With a field-proven history of reliability, Sil-Pad 980 is Bergquist's best material for cut-through resistance in screw-mounted and other applications with cut-through problems

TYPICAL PROPERTIES OF SIL-PAD 980						
PROPERTY		IMPERIAL VALUE		METRIC VALUE		TEST METHOD
Color		Mauve		Mauve		Visual
Reinforcement Carrier		Fiberglass		Fiberglass		—
Thickness (inch) / (mm)		0.009		0.229		ASTM D374
Hardness (Shore A)		95		95		ASTM D2240
Breaking Strength (lbs/inch) / (kN/m)		140		26		ASTM D1458
Elongation (%45° to Warp and Fill)		10		10		ASTM D412
Cut-Through (lbs) / (kg)		750		340		ASTM D412
Continuous Use Temp (°F) / (°C)		-40 to 302		-40 to 150		—
ELECTRICAL						
Dielectric Breakdown Voltage (Vac)		4000		4000		ASTM D149
Dielectric Constant (1000 Hz)		6.0		6.0		ASTM D150
Volume Resistivity (Ohm-meter)		10 ¹⁰		10 ¹⁰		ASTM D257
THERMAL						
Thermal Conductivity (W/m-K)		1.2		1.2		ASTM D5470
THERMAL PERFORMANCE vs PRESSURE						
Pressure (psi)		10	25	50	100	200
TO-220 Thermal Performance (°C/W)		5.48	5.07	4.52	4.04	3.56
Thermal Impedance (°C-in ² /W) (1)		1.51	1.22	1.07	0.89	0.53
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.						

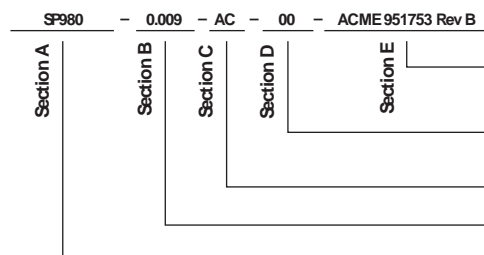
Typical Applications Include:

- Silicone-sensitive assemblies
- Telecommunications
- Automotive electronics

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: 0.009"

SP980 = Sil-Pad 980 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



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