Sil-Pad[®] 1100ST

Affordable, Electrically Insulating, Thermally Conductive, Soft Tack Elastomeric Material

Features and Benefits

- Inherent tack on both sides for exceptional thermal performance and easy placement
- Re-positionable for higher utilization, ease of use and assembly error reduction
- · Lined on both sides for ease of handling prior to placement in high volume assemblies
- Exhibits exceptional thermal performance even at a low mounting pressure
- · Fiberglass reinforced
- Value alternative to Sil-Pad 1500ST



Sil-Pad 1100ST (Soft Tack) is a fiberglassreinforced thermal interface material featuring inherent tack on both sides. The material exhibits excellent thermal performance at low mounting pressures. The material is supplied on two liners for exceptionally easy handling prior to auto-placement in high-volume assemblies. The material is ideal for placement between an electronic power device and its heat sink.

TYPICAL PROPERTIES OF SIL-PAD 1100ST						
PROPERTY	IMPERIAL VALUE		METRIC VALUE		TEST METHOD	
Color	Yellow		Yellow		Visual	
Reinforcement Carrier	Fiberglass		Fiberglass		—	
Thickness (inch) / (mm)	0.012		0.305		ASTM D374	
Inherent Surface Tack (1or 2 sided)	2		2		_	
Hardness (Shore 00) (1)	85		85		ASTM D2240	
Breaking Strength (lb/inch) / (kN/m)	2.6		0.5		ASTM D1458	
Elongation (% - 45° to Warp and Fill)	16		16		ASTM D412	
Tensile Strength (psi) / (MPa)	220		1.5		ASTM D412	
Continuous Use Temp (°F) / (°C)	-76 to 356		-60 to 180		—	
ELECTRICAL						
Dielectric Breakdown Voltage (Vac)	5000		5000		ASTM D149	
Dielectric Constant (1000 Hz)	5.0		5.0		ASTM D150	
Volume Resistivity (Ohm-meter)	1010		1010		ASTM D257	
Flame Rating	V-O		V-O		U.L. 94	
THERMAL						
Thermal Conductivity (W/m-K)	1.1		1.1		ASTM D5470	
THERMAL PERFORMANCE vs. PRESSURE						
Pres	ssure (psi)	10	25	50	100	200
TO-220 Thermal Performance (°C/W)		2.72	2.71	2.68	2.62	2.23
Thermal Impedance (°C-in²/W) (2)		0.75	0.71	0.66	0.61	0.57

1) Thirty second delay value Shore 00 hardness scale

2) 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

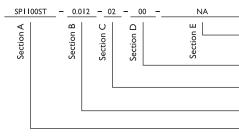
Typical Applications Include:

- Automotive ECMs
- Motor controls
- Power supplies
- Between an electronic power device and its heat sink

Configurations Available:

- Sheet form, die-cut parts and roll form
- Top and bottom liners

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. 1212 = 12"x12" sheets, 12/250 = 12"x 250' rolls or 00 = custom configuration 02 = Natural tack, both sides Standard thicknesses available: 0.012" SPI100ST = Sil-Pad 1100ST 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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