

# **DATA SHEET**

## **Thermal Pads**

Order code	Manufacturer code	Description		
38-1000	n/a	n/a		
38-1002	T0220/T0202	PK10 SIL-PAD 900-S TAC - T0220 (RC)		
38-1004	T0220 CLIP MOUNT	PK10 SILPAD900-STAC-T0220*OFFER 38-1005*		
38-1006	TO3P	PK10 SIL-PAD 900-S TAC - T03P (RC)		
38-1008	n/a	n/a		
38-1010	n/a	n/a		
38-1012	n/a	n/a		
38-1014	n/a	n/a		

Thermal Pads	Page 1 of 2
The enclosed information is believed to be correct, Information may change 'without notice' due to	Revision A
product improvement. Users should ensure that the product is suitable for their use. E. & O. E.	04/07/2003

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### Sil Pad 900-S Adhesive Coated Thermal Pads

#### Bergquist Sil-Pad 900-S

The Sil-Pad 800 and 900 family of thermally conductive insulation materials are designed for low cost applications requiring high thermal performance. These applications also typically have low mounting pressures for component clamping.

The SP 900-S material combines a smooth surface design with high thermal conductivity and electrical insulation. It has the added benefit of being thicker to reduce capacitive coupling. This material has higher breakdown voltage than SP-800-S. Applications requiring low component clamping forces include discrete semiconductors (TO-220, TO-247 and TO-218) mounted with spring clips. Spring clips provide quick assembly but apply a limited amount of pressure to the semiconductor. The smooth surface texture of Sil-Pad 900-S minimises interfacial thermal resistance and maximises thermal performance.

#### **Typical Properties Of Sil-Pad 900-S**

Physical Properties	Units	Value	<b>Test Method</b>
Colour		Mauve	Visual
Thickness	inches	$0.009 \pm 0.001$	
	(mm)	$0.23 \pm 0.025$	ASTM D374
Tensile Strength	Мра	9	ASTM D412
45° to Warp & Fill	(kpsi)	(1.3)	
Tensile Elongation			
45° to Warp & Fill		20	ASTM D412
Thermal Properties	Units	Value	Test Method
Thermal Conductivity	W/m-K	1.6	ASTM D5470
Thermal Resistance	C-in <sup>2</sup> /W	0.2	
	(mm²-°C)/Watt	150	ASTM D5470
Electrical Properties	Units	Value	Test Method
Breakdown Voltage			
Type 1 Electrodes	kVa-c	5.5	ASTM D149
Type 3 Electrodes	kVa-c	8.3	ASTM D149
Volume Resistivity	Ohm-meter	1 x 10 <sup>10</sup>	ASTM D257
Dielectric Constant, 1kHz		6.0	ASTM D150

**Tolerances:** 0.015 inches are held on width, length, hole diameter and hole location.