



BERGQUIST SIL PAD TSP 1200

Known as BERGQUIST SIL-PAD 1000
November 2018

PRODUCT DESCRIPTION

High Performance Thermally Conductive Insulator.

Technology	Silicone
Appearance	Pink
Reinforcement Carrier	Fiberglass
Total Thickness , ASTM D374	0.23 ± 0.025mm
Application	Thermal management, Thermally conductive adhesive
Operating Temperature Range	-60 to 180°C

BERGQUIST SIL PAD TSP 1200 has the same excellent mechanical and physical characteristics of our BERGQUIST SIL PAD TSP 900 while offering a 35% reduction in thermal resistance.

BERGQUIST SIL PAD TSP 1200 is a composite of silicone rubber and fiberglass. It is boron nitride filled and offers low thermal resistance.

In addition, BERGQUIST SIL PAD TSP 1200 is non-toxic and resists damage from cleaning agents. The material is flame retardant and is specially formulated for use as a thermally conductive insulator.

TYPICAL PROPERTIES

Physical Properties

Breaking Strength, ASTM D1458, KN/m	18
Elongation , 45° to warp and fill, ASTM D412,%	40
Shore Hardness, ASTM D2240, Shore A	85
Specific Gravity, ASTM D792	1.5
Tensile Strength, ASTM D412, 45° to warp and fill, 30 MPa	

Electrical Properties

Dielectric Breakdown Voltage , ASTM D149, minimum	4,500
Dielectric Constant, ASTM D150 @ 1,000 Hz	4.5
Volume Resistivity, ASTM D257, ohm-meter:	
Normal	1×10 ¹¹
Moist	1.5×10 ⁹

Thermal Properties

Thermal Resistance, Bergquist Flat Plate Test Method, °C-in ² /W	0.35
Thermal Conductivity , ASTM D5470, W/(m-K)	1.2
Thermal Vacuum Weight Loss (TML), NASA SP-R-0022A, %	0.22
Volatile Condensable Material (VCM), NASA SP-R-0022A, %	0.08

GENERAL INFORMATION

For safe handling information on this product, consult the Safety Data Sheet, (SDS).

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

CONFIGURATIONS AVAILABLE

BERGQUIST SIL PAD TSP 1200 is supplied in:

- Tolerances
.015 inches are held on width, length, hole diameter and hole location.
Contact the factory if tighter tolerances are required.
- Sheet form
6" x 6", 6" x 12", 8" x 8", 10" x 10", or 12" x 12"
Sheets are available from stock, with or without adhesive.
- Roll form
Sil-Pad materials are available in roll form, with or without adhesive. Contact the factory.
- Special Shapes
We produce thousands of specials. Tooling charges vary depending on tolerances and complexity of the part.



Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{psi} \times 145 = \text{N/mm}^2$
 $\text{MPa} = \text{N/mm}^2$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

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The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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