

Technical Data Sheet

BERGQUIST SIL PAD TSP 1750

Known as BERGQUIST SIL-PAD 1950 January 2022

PRODUCT DESCRIPTION

Sil-Pads for High Humidity, High Dielectric (U.L. 1950, IEC 950) Requirements.

Technology	Silicone
Appearance	Yellow
Reinforcement Carrier	Fiberglass
Total Thickness	0.31mm
, ASTM D374	
Application	Thermal management, Thermally conductive adhesive

BERGQUIST SIL PAD TSP 1750 is designed to be an economical material solution for high humidity, high dielectric requirements. The combination of high thermal conductivity and excellent dielectric strength retention after humidity exposure is formulated into the BERGQUIST SIL PAD TSP 1750 elastomeric pad.

The material transfers heat due to its high loading of specialty ceramics and its ability to exclude air from large interfaces.

BERGQUIST SIL PAD TSP 1750 relies on new processes that minimize the effect of high humidity on the electrical properties of finished material. Therefore, exposure to humid environments during assembly, or over long term operating conditions, will not severely affect the ability of the material to perform.

TYPICAL PROPERTIES

Physical Properties Hardness, Shore A, ASTM D2240 85 Breaking Strength, ASTM D1458, KN/m 12 **Electrical Properties** Dielectric Breakdown Voltage, ASTM D149 6.000 (VAC, min) 4,000* Dielectric Constant, ASTM D150 @ 100 Hz 5 Volume Resistivity, ASTM D257, ohm-meter 1×1012 **Thermal Properties** Thermal Conductivity, Mil I 49456, W/(m-K) 1.7 Thermal Impedance, Mil I 49456, , °C-in2/W 0.23

* 3.5" x 3.5" Electrodes, 7000lbf, 48 Hours @ 90% RH and 35°C

GENERAL INFORMATION

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

CONFIGURATIONS AVAILABLE

BERGQUIST SIL PAD TSP 1750 are supplied in:

• Special Shapes We produce thousands of specials. Tooling charges vary depending on tolerances and complexity of the part.

Tolerances

.015 inches are held on width, length, hole diameter and hole location.

Contact the factory if tighter tolerances are required.

Sheet form

 $6" \times 6"$, $6" \times 12"$, $8" \times 8"$, $10" \times 10"$, or $12" \times 12"$ Sheets are available from stock, with or without adhesive.

Conversions

 $(^{\circ}C \ge 1.8) + 32 = ^{\circ}F$ kV/mm $\ge 25.4 =$ V/mil mm / 25.4 = inches N $\ge 0.225 =$ lb/F N/mm $\ge 5.71 =$ lb/in N/mm² $\ge 145 =$ psi N/mm² $\ge MPa$ N·m $\ge 8.851 =$ lb·in N·m $\ge 0.738 =$ lb·ft N·mm $\ge 0.738 =$ lb·ft N·mm $\ge 0.142 =$ oz·in mPa·s = cP

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local Henkel representative for assistance and recommendations on the specifications of this product.

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