Technical Data Sheet

BERGQUIST SIL PAD TSP K1300

Known as BERGQUIST SIL-PAD K-10
August 2022

PRODUCT DESCRIPTION

The High Performance Kapton Based Insulator.

Technology	Silicone
Appearance	Beige
Reinforcement Carrier	Kapton
Total Thickness , ASTM D374	0.15 ± 0.025 mm
Application	Thermal management, Thermally conductive adhesive
Operating Temperature Range	-60 to 180ºC

BERGQUIST SIL PAD TSP K1300 is designed to replace ceramic insulators such as Beryllium Oxide, boron Nitride and Alumina. These insulators are expensive and they break easily. BERGQUIST SIL PAD TSP K1300 eliminates breakage and costs much less than ceramics.

TYPICAL PROPERTIES

Physical Properties

Hardness, Shore A, ASTM D2240	90
Breaking Strength, ASTM D1458, KN/m	5
Elongation , 45º to warp and fill, ASTM D412,%	40
Tensile Strength, ASTM D412, MPa	35

Electrical Properties

Dielectric Breakdown Voltage, ASTM D149 (VAC, min)	6,000
Dielectric Constant, ASTM D150 @ 1,000 Hz	3.7
Volume Resistivity, ASTM D257, ohm-meter	1×10^{12}

Thermal Properties

Thermal Conductivity , ASTM D5470, W/(m-K)	1.3
Thermal Resistance Bergquist Flat Plate Test Method, ºC-in²/W	0.2
Thermal Vacuum Weight Loss (TML), as manufactured, NASA SP-R-0022A, %	0.36
Volatile Condensable Material (VCM), as manufactured, NASA SP-R-0022A, %	0.09

GENERAL INFORMATION

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

CONFIGURATIONS AVAILABLE

BERGQUIST SIL PAD TSP K1300 is supplied in:

- Special Thicknesses
  Available in a variety of thicknesses to meet customer requirements.
- 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

(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
N x 0.225 = lb/F
N/mm x 5.71 = lb/in
N/mm² x 145 = psi
N/mm² = MPa
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

Not for product specifications

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