



# SIL PAD TSP K 1100

Known as SIL-PAD K-6  
November 2018

## PRODUCT DESCRIPTION

The Economical, High Performance Kapton Based Insulator.

<b>Technology</b>	Silicone
<b>Appearance</b>	Blue-green
<b>Reinforcement Carrier</b>	Kapton
<b>Total Thickness</b> , ASTM D374	0.15 ± 0.025 mm
<b>Application</b>	Thermal management, Thermally conductive adhesive
<b>Operating Temperature Range</b>	-60 to 180°C

SIL PAD TSP K 1100 is a medium performance Kapton based thermally conductive insulator.

Thermally conductive Kapton MT film is coated with an aluminium oxide/boron nitride filled silicone elastomer to deliver "boron nitride" performance.

Kapton film provides a continuous physically tough dielectric barrier against "cut-through" and resultant assembly failures.

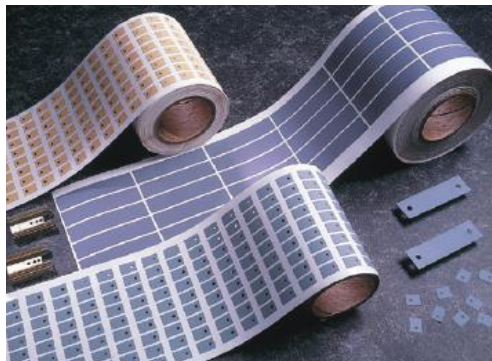
## TYPICAL PROPERTIES

### Physical Properties

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

### Electrical Properties

Dielectric Breakdown Voltage , ASTM D149 (VAC, 6,000 min)	
Dielectric Constant, ASTM D150 @ 1,000 Hz	4
Volume Resistivity, ASTM D257, ohm-meter	1×10 <sup>12</sup>



## Thermal Properties

Thermal Conductivity , ASTM D5470, W/(m-K)	1.1
Thermal Resistance Bergquist Flat Plate Test Method, °C-in <sup>2</sup> /W	0.3

## CONFIGURATIONS AVAILABLE

SIL PAD TSP K 1100 are 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 HITEK Electronic Materials for further details.
- Special Shapes  
HENKEL produce thousands of specials.  
Tooling charges vary depending on tolerances and complexity of the part.

## 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 HITEK Electronic Materials for assistance and recommendations on specifications for this product.



**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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Reference 1

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