



# BERGQUIST SIL PAD TSP K1100

Known as BERGQUIST 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<br/>, ASTM D374</b> | 0.15 ± 0.025<br>mm                                   |
| <b>Application</b>                     | Thermal management,<br>Thermally conductive adhesive |
| <b>Operating Temperature<br/>Range</b> | -60 to 180°C                                         |

BERGQUIST SIL PAD TSP K1100 is a medium performance Kapton based thermally conductive insulator.

Thermally conductive Kapton MT film is coated with an aluminum 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 |

## 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 K1100 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 the factory.
- **Special Shapes**  
We produce thousands of specials. Tooling charges vary depending on tolerances and complexity of the part.

## Conversions

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

## Disclaimer

### Note:

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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## Reference 1

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- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
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Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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