

**Technical Data Sheet** 

# **BERGQUIST GAP PAD TGP 1350**

Known as BERGQUIST GAP PAD 1450 November 2018

#### PRODUCT DESCRIPTION

Highly Conformable, Thermally Conductive, Reworkable Gap Filling Material.

| Technology                     | Silicone  |
|--------------------------------|---|
| Appearance                     | Light Pink  |
| Reinforcement Carrier          | PEN Film  |
| Thickness                      | 0.508 to 3.175mm , ASTM D374                            |
| Inherent Surface Tack          | 1 (1 sided)   |
| Application                    | Thermal management,<br>TIM (Thermal Interface Material) |
| Operating Temperature<br>Range | -60 to 150°C  |

#### FEATURES AND BENEFITS

- Thermal Conductivity: 1.3 W/m-K (Bulk Rubber)
- PEN film reinforcement allows easy rework and resistance to puncture and tear resistance
- Highly Conformable, low hardness
- Low strain on fragile components

BERGQUIST GAP PAD TGP 1350 is a highly compliant Gap Pad material that is ideal for fragile component leads. The material includes a PEN film, which facilitates rework and improves puncture resistance and handling characteristics.

The tacky side of BERGQUIST GAP PAD TGP 1350 maintains a conformable, yet elastic nature that provides excellent interfacing and wet-out characteristics, even to surfaces with high roughness or uneven topography.

BERGQUIST GAP PAD TGP 1350 has inherent tack on one side of the material, eliminating the need for thermally impeding adhesive layers. It is highly recommended that the PEN film be left intact. However, film removal will not have a significant impact on thermal performance.

Please contact your local Bergquist Sales Representative for sample inquiries and additional product information.

#### **TYPICAL APPLICATIONS**

- Lighting and LED applications
- · Low strain is required for fragile component leads
- Computer and peripherals
- Telecommunications
- Between any heat-generating semiconductor and a heat sink

#### TYPICAL PROPERTIES OF CURED MATERIAL

| Physical Prope | erties |
|----------------|--------|
|----------------|--------|

| Hardness, Shore 00, Thirty second delay va | lue, 30 |
|--|---------|
| ASTM D2240, Bulk rubber                    |         |
| Heat Capacity, ASTM E1269, J/g-K           | 1.0     |
| Density, Bulk rubber, ASTM D792, g/cc      | 1.8     |
| Flammability, UL 94                        | V-0     |
| Young's Modulus, ASTM D575 kPa             | 110     |
| (psi                                       | ) (16)  |

Young's Modulus, calculated using 0.01 in/min. step rate of strain with a sample size of 0.79 inch² .

#### **Electrical Properties**

| Dielectric Breakdown Voltage , ASTM D149, VAC | >6,000 |
|---|--------|
| Dielectric Constant, ASTM D150, 1,000Hz       | 5.0    |
| Volume Resistivity, ASTM D257, ohm-meter      | 1×10º  |

#### **Thermal Properties**

Thermal Conductivity, ASTM D5470, W/(m-K) 1.3

#### **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 GAP PAD TGP 1350 is available in the following configurations:

Sheet form and die-cut parts

#### Conversions

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



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#### 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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 4860
 SC80-W2

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 A17713-05
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