Technical Data Sheet

BERGQUIST GAP PAD TGP 1000VOUS

Known as BERGQUIST GAP PAD VO ULTRA SOFT
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PRODUCT DESCRIPTION

Ultra Conformable,Thermally Conductive Material for Filling Air Gaps.

Technology	Silicone
Appearance	Mauve/Pink
Reinforcement Carrier	Fiberglass
Thickness, ASTM D374	0.508 to 6.35mm , ASTM D374
Inherent Surface Tack	1 (1 sided)
Application	Thermal management, TIM (Thermal Interface Material)
Operating Temperature Range	-60 to 200ºC

FEATURES AND BENEFITS

- Thermal Conductivity: 1.0 W/m-K
- Conformable, low hardness
- “Gel-like” modulus
- Decreased strain
- Puncture, shear and tear resistant
- Electrically isolating

BERGQUIST GAP PAD TGP 1000VOUS is recommended for applications that require a minimum amount of pressure on components. The viscoelastic nature of the material also gives excellent low-stress vibration dampening and shock absorbing characteristics.

BERGQUIST GAP PAD TGP 1000VOUS is an electrically isolating material, which allows its use in applications requiring isolation between heat sinks and high-voltage, bare-leaded devices.

TYPICAL APPLICATIONS

- Telecommunications
- Computer and peripherals
- Power conversion
- Between heat-generating semiconductors or magnetic components and a heat sink
- Area where heat needs to be transferred to a frame, chassis or other type of heat spreader

TYPICAL PROPERTIES OF CURED MATERIAL

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

Physical Properties

Hardness, Shore 00, 30-sec delay value, ASTM D2240, Bulk rubber		5
Heat Capacity, ASTM E1269, J/g-K		1.0
Density, Bulk rubber, ASTM D792, g/cc		1.6
Flammability, UL 94		V-0
Young's Modulus, ASTM D575	kPa (psi)	55 (8)

Electrical Properties

Dielectric Breakdown Voltage, ASTM D149, VAC	6,000
Dielectric Constant, ASTM D150, 1,000Hz	5.5
Volume Resistivity, ASTM D257, ohm-meter	1×10^{11}

Thermal Properties

Thermal Conductivity, ASTM D5470, W/(m-K)	1.0
Thermal Impedance, 0.040 inch ASTM D5470, ºC-in²/W:	
10% Deflection	1.97
20% Deflection	1.87
30% Deflection	1.68

The recorded value includes interfacial thermal resistance. These values are provided for reference only. Actual application performance is directly related to the surface roughness, flatness and pressure applied.

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 1000VOUS is available in the following configurations:

- Sheet form
- Die-Cut parts

Natural tack one (1) side with fiberglass.

STORAGE

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: 25ºC (±3), 50% RH (±10) for a 12 months shelf life. Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

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
psi x 145 = N/mm²
MPa = N/mm²
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

Disclaimer

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