Technical Data Sheet

BERGQUIST GAP PAD TGP 1500

Known as BERGQUIST GAP PAD 1500
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PRODUCT DESCRIPTION

Thermally Conductive, Un-Reinforced Gap Filling Material.

Technology	Silicone
Appearance	Black
Thickness, ASTM D374	0.508 to 5.08mm , ASTM D374
Inherent Surface Tack	2 (1 sided)
Application	Thermal management, TIM (Thermal Interface Material)
Operating Temperature Range	-60 to 200ºC

FEATURES AND BENEFITS

- Thermal Conductivity: 1.5 W/m-K
- Un-reinforced construction for additional compliancy
- Conformable, low hardness
- Electrically isolating

BERGQUIST GAP PAD TGP 1500 has an ideal filler blend that gives it a low-modulus characteristic that maintains optimal thermal performance yet still allows for easy handling.

The natural tack on both sides of the material allows for good compliance to adjacent surfaces of components, minimizing interfacial resistance.

TYPICAL APPLICATIONS

- Telecommunications
- Computer and peripherals
- Power conversion
- RDRAM™ memory modules / chip scale packages
- Areas 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, Thirty second delay value, ASTM D2240, Bulk rubber		40
Heat Capacity, ASTM E1269, J/g-K		1.0
Density, Bulk rubber, ASTM D792, g/cc		2.1
Flammability, UL 94		V-0
Young's Modulus, ASTM D575	kPa (psi)	310 (45)

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)	1.5
Thermal Impedance, 0.040 inch ASTM D5470, ºC-in²/W:	
10% Deflection	1.62
20% Deflection	1.5
30% Deflection	1.33

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 1500 is available in the following configurations:

- Sheet form
- Die-Cut parts

Natural tack both sides 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 180-day 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

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Reference N/A