Technical Data Sheet

BERGQUIST GAP PAD TGP 800VOS

Known as BERGQUIST GAP PAD VO Soft
November 2018

PRODUCT DESCRIPTION

Highly Conformable, Thermally Conductive Material for Filling Air Gaps.

Technology	Silicone
Appearance	Mauve/Pink
Reinforcement Carrier	Sil-Pad
Thickness ASTM D374	0.508 to 5.08
Inherent Surface Tack	1(1 side)
Application	Thermal management, TIM (Thermal Interface Material)
Operating Temperature Range	-60 to 200ºC

FEATURES AND BENEFITS

- Thermal Conductivity: 0.8 W/m-K
- Conformable, low hardness
- Enhanced puncture, shear and tear resistance
- Electrically isolating

BERGQUIST GAP PAD TGP 800VOS is recommended for applications that require a minimum amount of pressure on components. BERGQUIST GAP PAD TGP 800VOS is a highly conformable, low-modulus, filled-silicone polymer on a rubber-coated fiberglass carrier. The material can be used as an interface where one side is in contact with a leaded device.

TYPICAL APPLICATIONS

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

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Hardness, Shore 00, Thirty second delay value, ASTM D2240, Bulk rubber		25
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 (1)	kPa	275
	(psi)	(40)

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)	0.8
Thermal Impedance, 0.040"(2) ASTM D5470, ºC-in²/W:	
10% Deflection	2.48
20% Deflection	2.29
30% Deflection	2.11

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

(2) The ASTM D5470 test fixture was utilized. The recorded values include the interfacial thermal resistance. The 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 800VOS is available in the following configurations:

- Sheet form and die-cut parts

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
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

Note:
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