

Gap Pad® VO

July 2011

PRODUCT DESCRIPTION

Conformable, Thermally Conductive Material for Filling Air Gaps

FEATURES AND BENEFITS

- Thermal conductivity: 0.8 W/m-K
- Enhanced puncture, shear and tear resistance
- Conformable gap filling material
- Electrically isolating



Gap Pad® VO is a cost-effective, thermally conductive interface material. The material is a filled, thermally conductive polymer supplied on a rubber-coated fiberglass carrier allowing for easy material handling. The conformable nature of Gap Pad® VO allows the pad to fill in air gaps between PC boards and heat sinks or a metal chassis.

Note: To build a part number, visit our website at www.bergquistcompany.com.

TYPICAL PROPERTIES OF GAP PAD VO

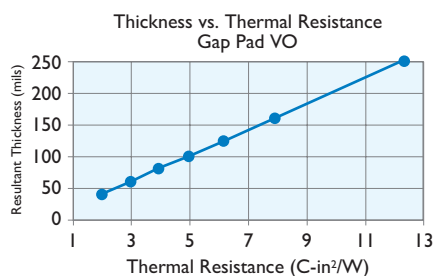
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD	
Color	Gold/Pink	Gold/Pink	Visual	
Reinforcement Carrier	Sil-Pad	Sil-Pad	—	
Thickness (inch) / (mm)	0.020 to 0.250	0.508 to 6.350	ASTM D374	
Inherent Surface Tack (1 sided)	I	I	—	
Density (Bulk Rubber) (g/cc)	1.6	1.6	ASTM D792	
Heat Capacity (J/g-K)	1.0	1.0	ASTM E1269	
Hardness (Bulk Rubber) (Shore 00) (1)	40	40	ASTM D2240	
Young's Modulus (psi) / (kPa) (2)	100	689	ASTM D575	
Continuous Use Temp (°F) / (°C)	-76 to 392	-60 to 200	—	
ELECTRICAL				
Dielectric Breakdown Voltage (Vac)	>6000	>6000	ASTM D149	
Dielectric Constant (1000 Hz)	5.5	5.5	ASTM D150	
Volume Resistivity (Ohm-meter)	10 ¹¹	10 ¹¹	ASTM D257	
Flame Rating	V-O	V-O	U.L. 94	
THERMAL				
Thermal Conductivity (W/m-K)	0.8	0.8	ASTM D5470	
THERMAL PERFORMANCE vs. STRAIN				
	Deflection (% strain)	10	20	30
	Thermal Impedance (°C-in ² /W) 0.040" (3)	2.47	2.37	2.24
1) Thirty second delay value Shore 00 hardness scale. 2) Young's Modulus, calculated using 0.01 in/min. step rate of strain with a sample size of 0.79 inch ³ . 3) The ASTM D5470 test fixture was used. 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.				

TYPICAL APPLICATIONS INCLUDE

- 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

CONFIGURATIONS AVAILABLE

- Sheet form and die-cut parts



PDS_GP_VO_0711

Disclaimer

Note:

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