BERGQUIST SIL PAD TSP 3500
Known as BERGQUIST SIL-PAD 2000
November 2018

PRODUCT DESCRIPTION
Higher Performance, High Reliability Insulator.

Thermal Performance vs. Pressure
TO-220 Thermal Performance
@ 0.01"
@ 10 psi 2.61
@ 25 psi 2.32
@ 50 psi 2.02
@ 100 psi 1.65
@ 200 psi 1.37

Thermal Impedance
@ 0.01"
@ 10 psi 0.57
@ 25 psi 0.43
@ 50 psi 0.33
@ 100 psi 0.25
@ 200 psi 0.2

i) 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.

FEATURES AND BENEFITS
● Thermal impedance: 0.33°C-in²/W @ 50 psi
● Optimal heat transfer
● High Thermal Conductivity: 3.5 W/m-K

TYPICAL APPLICATIONS
● Power supplies
● Motor controls
● Power semiconductors
● Aerospace
● Avionics

BERGQUIST SIL PAD TSP 3500 is a high performance, thermally conductive insulator designed for demanding aerospace and commercial applications. BERGQUIST SIL PAD TSP 3500 is a silicone elastomer formulated to maximize the thermal and dielectric performance of the filler/binder matrix.

The result is a grease-free, conformable material capable of meeting or exceeding the thermal and electrical requirements of high reliability electronic packaging applications.

TYPICAL PROPERTIES
Physical Properties
Hardness, Shore A, ASTM D2240 90
Flammability Rating, UL 94 V-0

Electrical Properties
Dielectric Breakdown Voltage, ASTM D149, Vac 4,000
Dielectric Constant, ASTM D150 @ 1,000 Hz 4.0
Volume Resistivity, ASTM D257, ohm-meter 1×10¹¹

Thermal Properties
Thermal Conductivity, ASTM D5470, W/(m-K) 3.5

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 SIL PAD TSP 3500 are supplied in:
● Sheet form and die-cut parts
● With or without pressure-sensitive adhesive

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

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Reference 1