

CHO-THERM® 1677

Thermally Conductive Insulators

Description

Used throughout the world, CHO-THERM® thermal interface pads conform to uneven surfaces to lower the thermal resistance between hot components and heat sinks. These advanced materials utilize silicone resins filled with boron nitride or aluminum oxide particles to achieve a range of thermal performance levels. Easy to handle and apply, CHO-THERM pads can provide electrical insulation while improving the thermal management of electronic systems, and lowering assembly costs.

Typical Applications

- Power conversion equipment
- Power supplies and UPS systems
- Power semiconductors
- Automotive electronics
- Motor controllers
- TVs and consumer electronics

Features/Benefits

- Insulating pads reinforced with polyimide (Kapton) or fiberglass
- Available in sheets, roll form, or die-cut for use with
- standard semiconductor packages

CHO-THERM 1677 INSULATORS (Fluorosilicone-based)

CHO-THERM 1677 insulators, consisting of boron nitride particles in a fluorosilicone binder, were developed to withstand long-term exposure to environments which are damaging to conventional silicone materials: aircraft fuels and greases, cleaning solutions and solvents, or other petrochemicals and aromatic solvents. This material offers thermal performance equal to or better than that of alumina-filled elastomers, plus greater dielectric strength. Thermal and electrical interface performance approach those of mica and grease in environments and applications not permitting the use of thermal grease. Glass cloth reinforced.

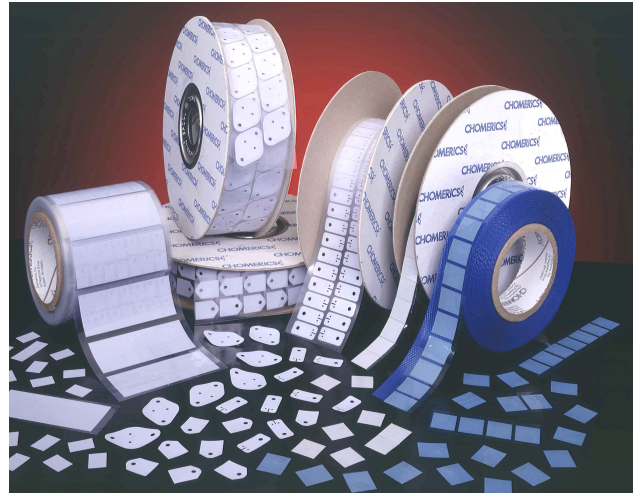


TABLE 1
KEY PROPERTIES

	1677
Binder	Fluorosilicone
Filler	Boron Nitride
Glass Cloth Reinforced	Yes
Thermal Impedance ⁽¹⁾	.38-.42
$\left(\frac{^{\circ}\text{C}\cdot\text{in}^2}{\text{watt}}\right)$ ⁽²⁾	.42-.46
Thermal Conductivity	
$\left(\frac{\text{Btu}\cdot\text{in}}{\text{Hr}\cdot\text{ft}^2\cdot^{\circ}\text{F}}\right)$	15
Voltage Breakdown Level (VAC) min	4000
Thickness (mils)	20 ± 4
Color	White
Outgassing (ASTM 3-595):	
% TML	.57
% CVCM	.01
<i>(1) Typical flat plate test values</i>	

TB 1001 EN 01/06