

Thermalsil III

RoHS Compliant

Thermally Conductive Silicone Rubber Insulators

The newest Thermalsil™ III formula has improved thermal conductivity, providing excellent thermal resistance. It is used as an electrically-isolating interface material composed of silicone elastomer binder with a thermally conductive filler. It is reinforced with glass cloth to resist tearing and cut-through due to burrs on transistors or heat sinks.

Thermalsil™ III eliminates the need for grease application and conforms to mounting surfaces under clamping pressure for optimum heat conduction.

Thermalsil™ III is 0.152mm (0.006") thick and grey green in color. A finely woven glass cloth provides the thinnest possible matrix for enhanced thermal resistance.

Part No.	Width
5300 1.500G	38.10mm (1.500")
5300AC 1.500G	38.10mm (1.500")
5300 2.875G	76.20mm (3.000")
5300AC 2.875G	76.20mm (3.000")
5300 6.000G	152.40mm (6.000")
5300AC 6.000G	152.40mm (6.000")

Thermalsil™ III

Property	Typical Value 25°C	Test Method
Electrical		
Dielectric Constant	2.5@50 Hz 2.5@10 ³ Hz 2.5@10 ⁶ Hz	ASTM D150
Dielectric Breakdown Voltage	26.3 x 10 ³ volts/mm (667 volts/mil) ASTM D-149	ASTM D149
Volume Resistivity	5.7 x 10 ¹⁵ ohm-cm	ASTM D257
Dielectric Dissipation Factor	.008@50 Hz .004 @10 ³ Hz .004 @10 ⁶ Hz	ASTM D150
Physical		
Thickness	.15 + .03/-0.05mm (0.006 + .001/-0.002 in.)	
Color	Gray-Green	
Tensile Strength	6.1 x 10 ⁷ Pa (8786 psil)	
Hardness, Shore A	87	
Elongation	2% or less	
Thermal		
Thermal Conductivity	0.92 w/m °C	
Flame Resistance	UL 94V-0	UL card #E-58126 (S)
Service Temperature	-60°C to 180°C (-76°F to 356°F)	