Part Number: 53-03-16

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 .152mm (0.006") thick and grey green in color. A finely woven glass cloth provides the thinnest possible matrix for enhanced thermal resistance.

To order Thermalsil™ III with adhesive coated backing, add suffix "AC" to the part number. For example, 53-03-2AC.

Thermalsil™ III is available in any configuration with adhesive backing. Order by adding "AC" after the part number. For example: 53-03-2AC.

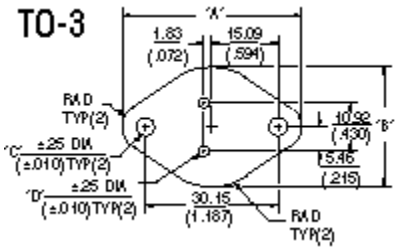
Thermalsil™ III

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/-.05mm (0.006 + .001/-.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)	

*Thickness:
4103: 1.78 (0.070) to 2.03 (0.080)
4104: 1.52 (0.060) to 2.03 (0.080)

Standard Thermalsil Configurations



Part Number	RoHS	A	B	C	D
53-03-16	RoHS ✓ Compliant	43.18 (1.700)	30.15 (1.187)	3.96 (0.156)	1.60 (0.063)