

Thermalsil III

Part Number - 53-02-103ACG

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

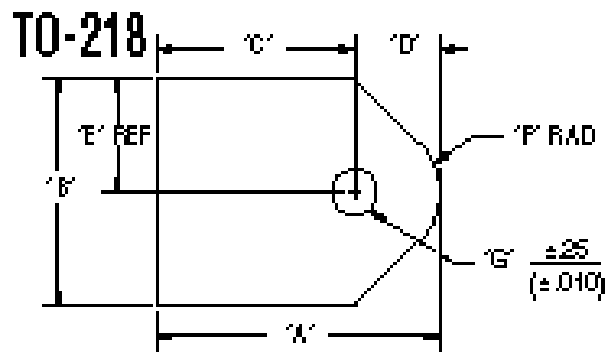
Property	Typical Value 25°C	Test Method
Electrical		
Dielectric Constant	2.5@50 Hz 2.5@10 ³ Hz 2.5@10 ⁶ Hz	ASTM D150
Dielectric Breakdown Voltage	26.3 x 10 ³ volts/mm (667 volts/mil) ASTM D-149	ASTM D149
Volume Resistivity	5.7 x 10 ¹⁵ ohm-cm	ASTM D257
Dielectric Dissipation Factor	.008@50 Hz .004 @10 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 psi)	
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)



Part Number	A	B	C	D	E	F	G
53-02-103ACG*	23.80 (0.937)	19.05 (0.750)	16.66 (0.656)	7.14 (0.281)	9.53 (0.375)		3.18 (0.125)

* These insulators may also be used for TO-3P and TO-247 devices.