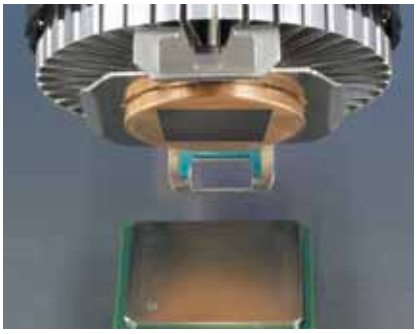
TIC™ 1000G

High Performance, Value Compound for High-End Computer Processors

Features and Benefits

- Thermal performance: 0.29°C/W (@ 50 psi)
- Excellent screenability
- No post "cure" required
- Cost vs. performance leader



TIC 1000G is a high performance, thermally conductive compound intended for use as a thermal interface material between a high-end computer processor and a heat sink. Other high watt density applications will benefit from the extremely low thermal impedance of TIC 1000G.

TIC 1000G compound wets-out the thermal interface surfaces and flows to produce the lowest thermal impedance. The compound requires pressure of the assembly to cause flow. The compound will resist dripping.

For microprocessor applications, traditional screw fastening or spring clamping methods will provide adequate force to optimize the thermal performance of TIC 1000G.

An optimized application would utilize the minimum volume of TIC 1000G compound necessary to ensure complete wet-out of both mechanical interfaces.

Note: TIC 1000G is ideally suited to screen-printing applications. Please contact Bergquist Sales for application notes related to screen-printing.

Assembly – No Post Screen Cure

TIC 1000G has excellent screenability. No solvent is used to reduce the viscosity, so no post "cure" conditioning is required.

TYPICAL PROPERTIES OF TIC 1000G

PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Black	Black	Visual
Density (g/cc)	1.2	1.2	ASTM D792
Continuous Use Temp (°F) / (°C)	302	150	—
ELECTRICAL			
Electrical Resistivity (Ohm-meter) (1)	N/A	N/A	ASTM D257
THERMAL			
Thermal Conductivity (W/m-K)	0.7	0.7	ASTM D5470

THERMAL PERFORMANCE vs PRESSURE					
Pressure (psi)	10	25	50	100	200
TO-220 Thermal Performance (°C/W) (2)	0.32	0.30	0.29	0.27	0.26

1) The compound contains an electrically conductive filler surrounded by electrically non-conductive resin.
2) TO-220 performance data is provided as a reference to compare material thermal performance.

Application Cleanliness

Pre-clean heat sink and component interface with isopropyl alcohol prior to assembly or repair. Be sure heat sink is dry before applying TIC 1000G.

Application Methods

1. Dispense and/or screenprint TIC 1000G compound onto the processor or heat sink surface like thermal grease (see a Bergquist Representative for application information).
2. Assemble the processor and heat sink with spring clips or constant-pressure fasteners.

Typical Applications Include:

- High performance CPU's
- High performance GPU's

Building a Part Number

TIC1000G – 00 – 00 – 5cc – NA

- Section A: TIC1000G = Thermal Interface Compound 1000G; TIG1000G = Thermal Interface Gel 1000G
- Section B: 00 = No options
- Section C: 00 = No options
- Section D: Cartridges: 5cc = 5.0cc, 25cc = 25.0cc, 200cc = 200.0cc, 800cc = 800.0cc, 1600cc = 1600.0cc
- Section E: NA = Selected standard option. If not selecting a standard option, insert company name, drawing number, and revision level.

Standard Options

◂◂ *example*

Note: To build a part number, visit our website at www.bergquistcompany.com.

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