

TIC 1000A

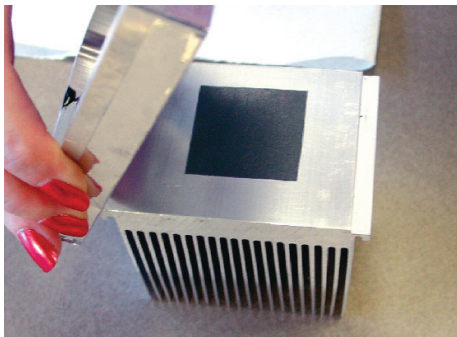
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PRODUCT DESCRIPTION

High Performance, Value Compound for High-End Computer Processors

FEATURES AND BENEFITS

- High thermal performance: 0.32°C/W (@ 50 psi)
- Good screenability
- Room temperature storage
- No post “cure” required
- Exceptional value



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

The TIC™ 1000A 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 TIC™ 1000A 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™ 1000A.

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

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

TYPICAL PROPERTIES OF TIC 1000A

PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD			
Color	Gray	Gray	Visual			
Density (g/cc)	2.1	2.1	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)	1.5	1.5	ASTM D5470			
THERMAL PERFORMANCE vs PRESSURE						
	Pressure (psi)	10	25	50	100	200
	TO-220 Thermal Performance (°C/W) (2)	0.32	0.32	0.32	0.31	0.28

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.

Assembly – No Post Screen Cure

TIC™ 1000A has good screenability. No solvent is used to reduce the viscosity, so no post “cure” conditioning is required.

Application Cleanliness

1. Pre-clean heat sink and component interface with isopropyl alcohol prior to assembly or repair. Ensure heat sink is dry before applying TIC™ 1000A.

Application Methods

1. Dispense and/or screenprint TIC™ 1000A 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 CPUs and GPUs

Disclaimer

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