

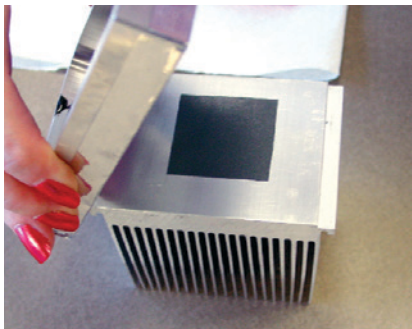
BERGQUIST® TGR 1500A

Formerly known as TIC 1000A

High Performance, Value Compound for High-End Computer Processors

Features and Benefits

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



BERGQUIST® TGR 1500A 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 also benefit from the extremely low thermal impedance of BERGQUIST® TGR 1500A.

BERGQUIST® TGR 1500A 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. BERGQUIST® TGR 1500A compound will resist dripping.

For microprocessor applications, traditional screw fastening or spring clamping methods will provide adequate force to optimize the thermal performance of BERGQUIST® TGR 1500A.

An optimized application would utilize the minimum volume of BERGQUIST® TGR 1500A material necessary to ensure complete wet-out of both mechanical interfaces.

TYPICAL PROPERTIES OF BERGQUIST® TGR 1500A

PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD			
Color	Grey	Grey	Visual			
Density (g/cc)	2.1	2.1	ASTM D792			
Continuous Use Temp. (°F) / (°C)	302	150	—			
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
<small>1) The compound contains an electrically conductive filler surrounded by electrically nonconductive resin. 2) TO-220 performance data is provided as a reference to compare material thermal performance.</small>						

Assembly – No Post-Screen Cure

BERGQUIST® TGR 1500A 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 the heat sink is dry before applying BERGQUIST® TGR 1500A.

Application Methods

1. Dispense and/or screenprint BERGQUIST® TGR 1500A compound onto the processor or heat sink surface like thermal grease (see a Henkel representative for application information).
2. Assemble the processor and heat sink with spring clips or constant-pressure fasteners.

Typical Applications Include:

- High-performance CPUs
- High-performance GPUs