TIMTRONICS
THERMAL INTERFACE MATERIALS

DATA SHEET

Blue Ice™412

Non-Silicone Thermal Grease

DESCRIPTIONS

Blue Ice 412 Heat Sink Compound specially formulated with thixotropic agent to control bleed and pump out during thermal cycles. Offers high thermal conductivity, low thermal resistance and excellent wetting property No-Slump property allowed using in vertical applications.

Blue Ice 412 has been engineered to solve the problems of contamination and migration associated with silicone-based products. The compound is unique Polysynthetic-based thermal grease used to insure rapid and efficient heat transfer and dissipation for the full operational life of your hardware

KEY FUTURES AND BENEFITS

- Thixotropic Paste-No-Slump Type
- Cost-Effective Thermal Solution
- Non-Silicone Advantages, No creep or contamination
- Thin Bond line Thickness >40 micron

APPLICATIONS

- Interface for semiconductors requiring low pressure or spring clamp mounting
- Thermal sensors, TEC modules, Thermal Wells
- IGBT's, LED
- Power Transistors, Diodes, Power Resistors

AVAILABILITY

Syringes (3cc, 10cc, 30cc). Jars (8 oz & 1 Kg). Cartridges (6 oz. Semco & 300cc). 1 gallon & 5 gallon pail

Typical Property	Test Method	Results
Type		Silicone Free
Special Future		High Dielectric. Thixotropic. Minimum pump out
Color	Visual	White
Viscosity 5 rpm @ 25°C, PaS	Helipath	400
Specific Gravity	ASTM D792	2.7
Operating Temperature Range.°C		-55°C to 200°C
Shelf Life @25C		5 years
THERMAL		
Thermal Conductivity (W/m-K)	ASTM D5470	2.0
Thermal Resistance °C-in²/W	ASTM D5470	0.03
ELECTRICAL		
Breakdown Voltage (KV/mm)	ASTM D149	16
Dissipation Factor (1KHz)	ASTM D150	0.003
Volume Resistivity (Ohm-cm)	ASTM D257	10^14