Tgrease™ 300X
High Performance TIM

PRODUCT DESCRIPTION

Tgrease™ 300X is a silicone-based thermal grease for use with high performance CPUs, GPUs, custom ASICs, Multi-Chip, SoC, etc. It has a high thermal conductivity of 3.0 W/mK and superior wetting characteristics, resulting in very low thermal resistance and excellent long-term reliability. Tgrease™ 300X has been formulated with a high thixotropic index. It does not sag or drip enabling easier pump and syringe dispensing. Tgrease™ 300X is ideal for automatic dispensing and screen-printing.

FEATURES & BENEFITS

- 3.0 W/mK bulk thermal conductivity
- Low thermal resistance
- Resists pump out through novel gel technology
- Fully characterized long term reliability
- Unique formulas will not harden, dry out, settle, or oxidize.
- Environmentally friendly solution that meets regulatory requirements including RoHS and REACH

MARKETS

- Semiconductor Packaging
- Graphics Card
- Notebooks
- Desktops
- Servers
- IGBTs
- Automotive
- Memory Modules

AVAILABILITY

- Available in 1kg (quart can), 20 kgs (5 gallon pail) and a range of cartridges and syringes sizes

STORAGE CONDITIONS

- Store 15ºC to 45ºC & maximum 50% RH
- Shelf Life: 2 years from date of mix in cans and pails and 1 years from the date of mix in syringes and cartridges when stored at above conditions.

TYPICAL PROPERTIES

PROPERTY	VALUE	TEST METHOD
Construction	Silicone Thermal Grease	N/A
Color	Grey	Visual
Density	2.7 g/cc	Helium Pycnometer
Bulk Thermal Conductivity	3.0 W/m-K	Hot Disk
Thermal Resistance **10 psi & 50°C** **50 psi & 50°C**	 0.20°C-cm^2/W 0.12°C-cm^2/W	ASTM D5470
Operating Temperature Range	-40°C to 150°C	Laird Test Method
Viscosity	400,000 cP	Brookfield Viscometer - TF spindle at 20rpm (helipath) at 23°C
Thixotropic Index	3.35	Brookfield Viscometer
Minimum Bond Line Thickness	25 µm	Laird Test Method
Outgassing (TML)	0.07%	E595
Outgassing (CVCM)	0.01%	E595
Dielectric Constant	28.3@1KHz / 31.8@1MHz	ASTM D150
Dissipation Factor	0.014@1KHz 0.005@1MHz	ASTM D150
Volume Resistivity	1.0x10^{14} Ω-cm	ASTM D991

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