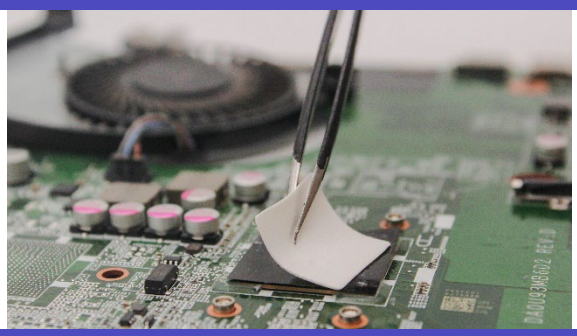
Thermexit®
A Nanoramic® Labs Technology

Thermexit-XEI
P/N: 08-0060-0.1

KEY FEATURES

- Electrically insulating
- Non-silicone, non-reactive, non-curing system with no resin-filler separation
- High thermal stability, with continuous operation up to 135°C
- High thermal conductivity
- Facilitates reworkability of the thermal management system
- Easy pick and place application without residue/mess
- Highly compressible to minimize contact resistance without high force



TECHNICAL SPECIFICATIONS

Test	Description	Min	Typ	Max	Units
Thermal Conductivity	ASTM D5470 (at 20 psi)		18		W/m*K
Thermal Resistance vs Pressure [1]	ASTM D5470	0.67 at 140 kPa (20 psi)			K-cm^2/W
Compression-Deflection [2]	Modified ASTM C165 In-House Method	17% at 210 kPa (30 psi)			
Electric Resistance	ASTM D257, volume resistivity	$1x10^{14}$			Ohm-cm
Dielectric Constant/Dielectric Loss @ 1MHz	ASTM D150/ Thermexit In-House Method	4.73/0.009			
Dielectric Strength (Voltage Breakdown)	ASTM D149	7875			Vac/mm
Operating Temperature		-40		135	°C
Storage Temperature/Shelf Life	In packaging, stored between 10-40°C	12			months
Weight Loss (Thermal Stability)	Per TGA (Thermogravimetric Analysis	<0.2% at 150°C			
Outgassing CVCM (Collected Volatile Condensable Materials)	Per ASTM E595	0.07			Wt%
Outgassing TML (Total Mass Loss)	Per ASTM E595	0.20			Wt%
Hardness	Per ASTM D2240	77		87	Shore 00
Flammability [3]	UL94 Vertical	UL94 V-0			
Length		50			mm
Width		50			mm
Thickness		0.5		5	mm
Density (Specific Gravity)	In-house method based on ASTM D792	1.71			g/cm^3
Color		White			
Adhesive Layer		No			

Notes
[1]- Using unit thickness of 0.5mm. Additional data available upon request.
[2]- Using unit thickness of 2.0mm. Additional data available upon request.
[3]- Using unit thickness of 2.5mm. Additional data available upon request.

Standard length/width is 50mm x 50mm. Refer to Product Variation Catalog for complete list sizing
These materials are not deemed by Nanoramic Laboratories to require an SDS.

RoHS compliant
REACH COMPLIANCE

TYPICAL APPLICATIONS

- Consumer electronics
- Power supplies
- Automotive electronics
- LEDs and Lasers
- Motor controls
- High power semiconductors
- 5G Telecom Infrastructure
- Batteries or energy storage devices