



TIMA[®] 6

Thermal Interface Material Analyzer



Beyond Standards. Beyond Comparison.

Advanced Control. Expanded Output. Proven Reliability.

Simplistic, yet versatile

TIMA is a state-of-the-art laboratory and industrial platform for comprehensive thermal and mechanical characterization, engineered for maximum precision and scientific reliability.

Sample range

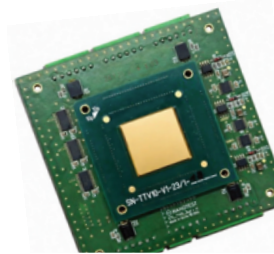
- Greases and pastes
- Phase change materials and putty's
- Cured gap fillers and adhesives
- Graphite sheets and liquid metals

Output figures

- Overall thermal resistance
- Effective and bulk thermal conductivity
- Thermal interface resistance
- Pressure, temperature and thickness dependency

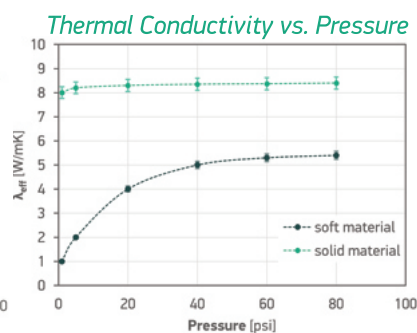
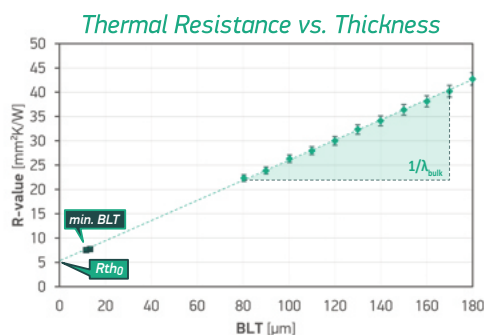
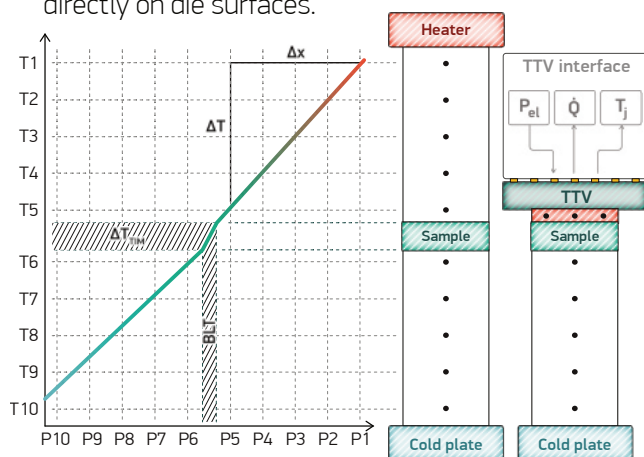
Advanced applications

- Curing parameters study
- In-situ reliability investigation
- Material conformity testing
- Production quality verification

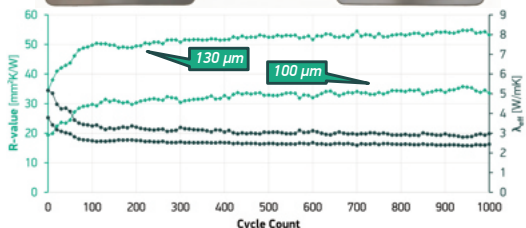
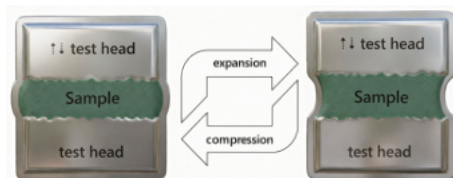


ASTM D5470 Standard Conforming and Beyond

TIMA 6 fully complies with ASTM D5470-17 while extending far beyond the standard through fully automated characterization and advanced capabilities. These include interchangeable test heads with variable surface roughness for precise interface resistance evaluation, as well as the optional TTV module for realistic TIM1 testing directly on die surfaces.



- Interchangeable test heads
- Optional TTV module
- Fully automated measurement
- Thickness control with 1 μm accuracy
- Up to 200 °C sample temperature
- ± 900 N clamping and tensile force with integrated load cell



Advanced Ageing & Reliability Testing

TIMA performs accelerated lifetime characterization of TIMs under defined thermo-mechanical load profiles, replicating real application strain. Precise programmable cycling control enables in-depth reliability assessment and accurate evaluation of pump-out mechanisms.



- In-situ monitoring of aging / degradation
- Highly accelerated: 5000 cycles per day
- Application-related testing conditions
- Thickness-, pressure- and temperature-controlled cycling

learn more

nanotest.eu/tima

