



NANOTEST
Berliner Nanotest und Design GmbH

TIMA[®] 5



Thermal Interface Material Analyzer

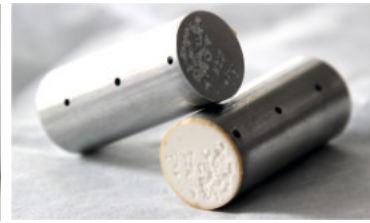
Model 5

The first convenient
automated
all-in-one
ASTM D 5470 test system.

Simple yet versatile

TIMA is a comprehensive laboratory and industrial measurement tool providing a wide range of thermal measurements and analyses to be performed with highest scientific standard.

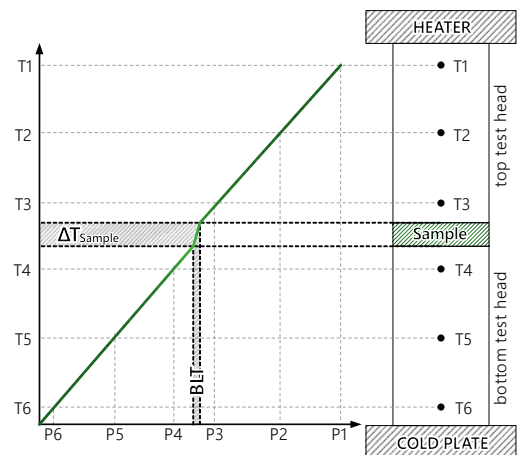
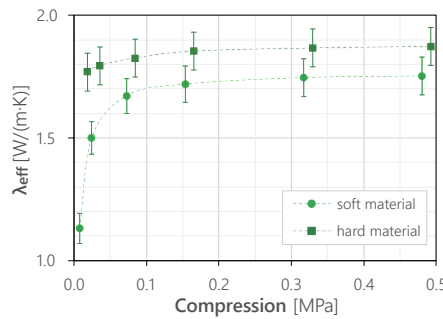
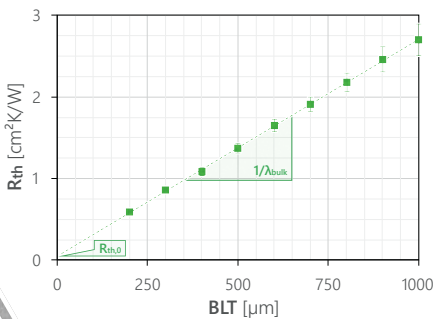
- ▶ Greases and pastes
- ▶ Overall thermal resistance
- ▶ Curing parameters study
- ▶ Cured gap fillers and adhesives
- ▶ Effective thermal conductivity
- ▶ Boundary conditions study
- ▶ Anisotropic composites
- ▶ Thermal interface resistance
- ▶ In-situ reliability investigation
- ▶ Phase change materials
- ▶ Bulk thermal conductivity
- ▶ Extreme conditions testing



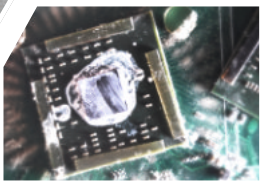
ASTM D 5470 Standard Conforming and Beyond

TIMA 5 fully meets the established test methodology described in ASTM Standard D 5470-17, while also providing fully automated characterization and many additional features not described in the ASTM Standard.

- ▶ Full coverage of specification range
- ▶ Up to 150°C sample temperature
- ▶ Scientific standard accuracy estimation
- ▶ Fully automated measurement
- ▶ ± 300 N clamping and tensile force
- ▶ Highly user-friendly, robust, and reliable

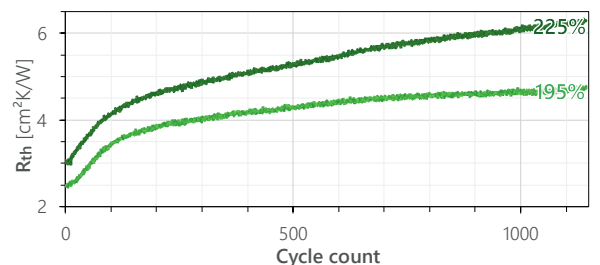
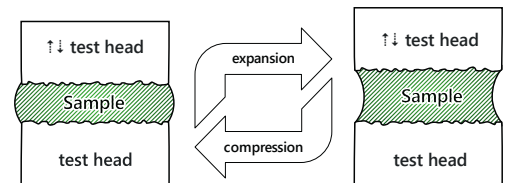


Ageing and Reliability Investigations



TIMA allows accelerated lifetime testing for thermal interface materials exposed to thermo-mechanical stress by emulating mechanical strain from in-field application.

- ▶ In-situ monitoring of aging / degradation
- ▶ Application-related testing conditions
- ▶ Highly accelerated: 500 cycles per day
- ▶ Thickness- and pressure-controlled cycling



nanotest.eu/tima