



ACCELERATE YOUR NEXT BREAKTHROUGH

Measure and understand small-scale thermal properties in-house with SSTR-F.

- ✓ Material Characterization
- ✓ Research & Development
- ✓ In-line Metrology
- ✓ Quality Assurance

SSTR-F FEATURES

With intuitive analysis software, SSTR-F offers a variety of analysis options and quantitative mapping of thermal properties at length scales from nanometers to microns.



SAMPLE SIZE

Coupons from 5 mm up to 6-inch diameter wafers with automated motion stage



THICKNESS RANGE

Thermal resistance measurements for thin films as thin as 1 nm; thermal conductivity for most films thicker than 100 nm up through bulk materials



CONTROL

Full PC control with automated focus and sample alignment for turn-key testing; multi-sample batch testing



LASER SAFETY

Class I or Class IIIb

LASER THERMAL

Laser Thermal was born out of research at the University of Virginia striving to create a **faster, simpler, more accurate way to measure thermal material properties.**

We developed SSTR-F as a turn-key solution for companies interested in thermal testing in industries ranging from semiconductors to aerospace, and anywhere in between.

After only a couple hours of training, your team members can start using SSTR-F to **measure the thermal conductivity and resistance of interfaces, thin films, and substrates in minutes instead of days or weeks.** Even better, the measurements are accurate and highly repeatable, giving you the data you need to make the best decisions for your products and materials development efforts.

THERMAL MANAGEMENT MADE BETTER, EASIER, FASTER

Spend less time acquiring data and more time learning from it.

1

MEET SSTR-F

Tell us about your thermal measurement needs and learn how SSTR-F can help you quickly and easily measure materials with values ranging from 0.05 to 500 W/m/K.

2

PLUG & PLAY

Forget weeks or months of waiting for results. After a couple hours of training on SSTR-F, you can get reliable, repeatable data in just minutes.

3

GET BETTER DATA

Armed with accurate thermal data, you can make confident decisions, reduce R&D time, and release better products.

THERMAL CONDUCTIVITY SOLUTIONS FOR TECHNICAL INDUSTRIES

The data you need most, made accessible now.

- ✓ Semiconductors
- ✓ Aerospace and Defense
- ✓ Academic Lab R&D
- ✓ Ceramics
- ✓ Batteries

Check out our use cases:



[R&D](#)



[Semiconductor Innovation](#)



[Yield Improvement](#)

ACQUIRING SMALL-SCALE THERMAL PROPERTIES HAS NEVER BEEN EASY... UNTIL NOW

Let's face it. Thermal data at device scales are essential for innovation, but next-to impossible to obtain.

Outside of the few academic labs in the country with thermoreflectance capabilities, you have no options. These traditional methods for obtaining thermal property data rely on complicated optical table setups prone to error and generally not suitable for use in a commercial environment.

Laser Thermal's turnkey steady-state thermoreflectance tool, **SSTR-F (Steady-State Thermoreflectance in Fiber Optics)**, will bring your thermal conductivity and thermal resistance testing for materials, interfaces, thin films, and substrates in-house so you can develop better products, faster.

