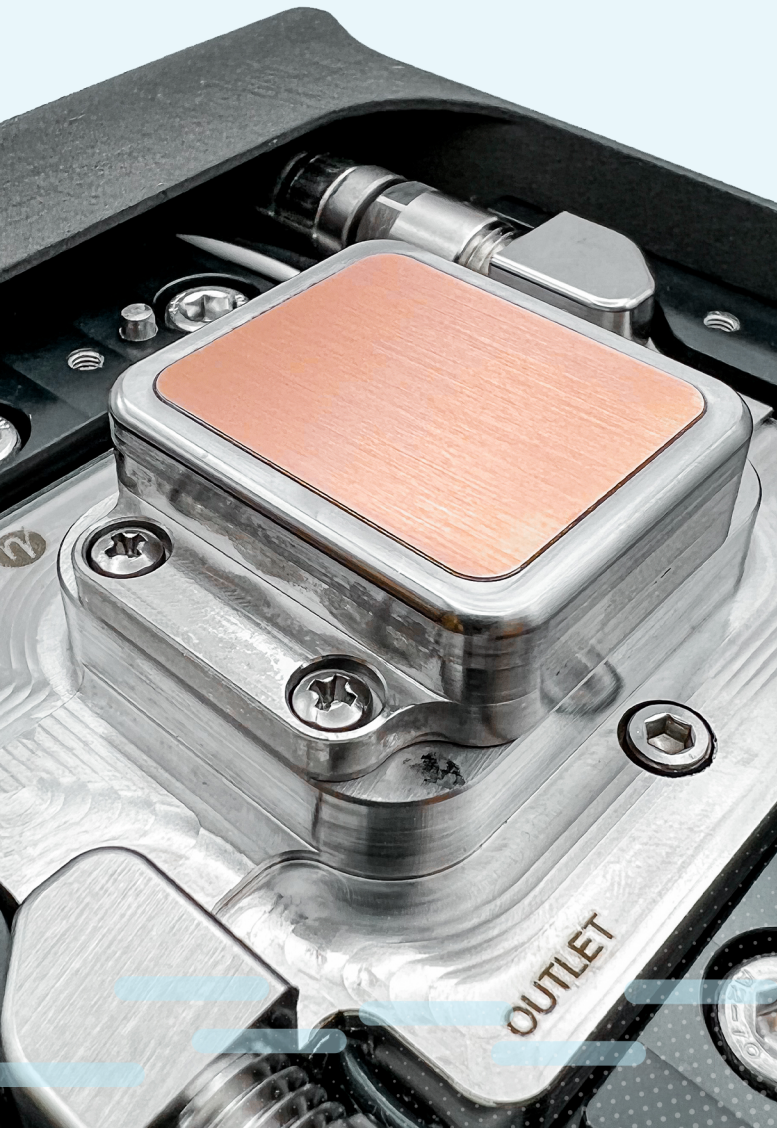


# MIKROS

# TU3



## HEAT | COOL | TEST

### ABOUT THE TU3

The TU3 is a thermal test head for semiconductor validation that combines Mikros' patented high-performance microchannel cooling with embedded heaters, precision fluid controls and full mechanical gimbaling to provide tight temperature control of chips during their various stages of testing.

### OPTIMIZATION FOR TEST

Originally designed to retrofit into existing automated test equipment (ATE), the TU3 thermal control technology can be customized to a wide variety of test setups. The TU3 provides the highest cooling capacity and fastest thermal transients available on the market today. The Mikros TU3 pairs a standard test head and controller with DUT-specific cold plate for optimized performance and hardware reusability.

### KEY FEATURES

- > **High cooling capacity** using microchannel flow paths
- > **Fast thermal transients** using integrated heater designs
- > **Easy serviceability** with quick disconnect hoses
- > **Removeable cold plates** for new processors
- > **User interface** for easy performance tracking
- > **Durability tested** to 1 million insertions

### SYSTEM PERFORMANCE

<b>COOLING CAPACITY*</b>	100 to 250 W/cm <sup>2</sup> <small>with fluorinated dielectric coolants</small> 150 to 400 W/cm <sup>2</sup> <small>with aqueous coolants</small>	<b>DATA LOGGING</b>	Automatic and manual tracking of thermal data
<b>THERMAL TRANSIENT</b>	80°C drop in < 2 sec	<b>COMPLIANCE</b>	X-Y: 1mm, Tilt: 5° from horizontal
<b>TEMP RANGE</b>	-20 C° - 105 C°	<b>CONTROL MODES</b>	DUT Temp control Cold Plate Temp control

\*Ranges represent 5 °C inlet, 95 °C test temperature, indium or graphite TIM, 4 to 20 cm<sup>2</sup> die area. Please contact us with your test conditions for a detailed performance estimate





## AC REQUIREMENTS

- 120-240 VAC, SINGLE PHASE

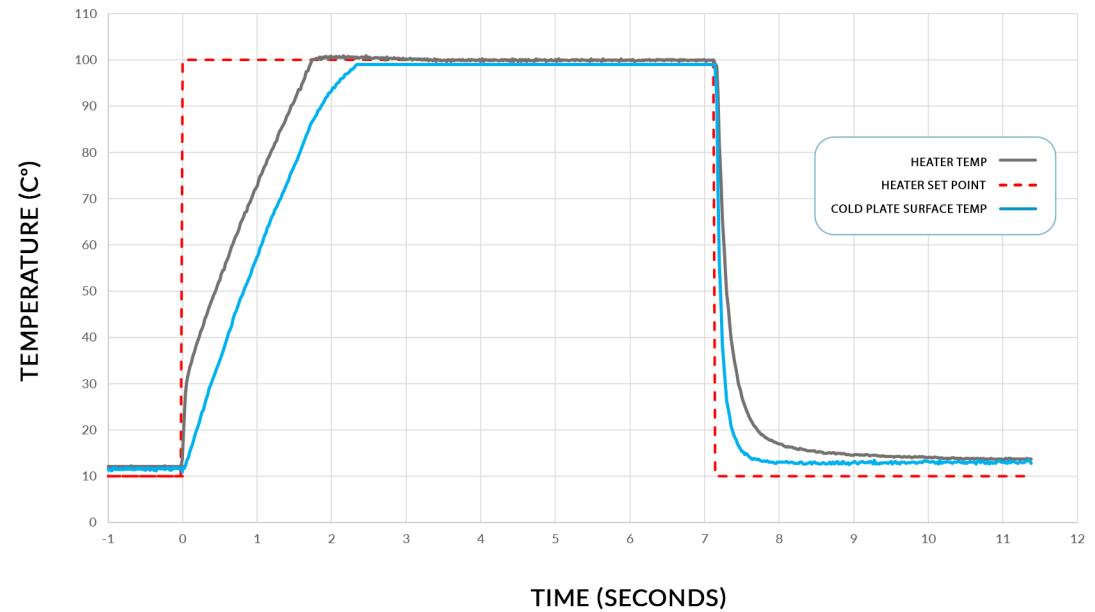
## PRESSURE/FLOW

- CHILLER WITH PUMP CAPABLE OF 1.2 LPM @ 40 PSI

## CUSTOMIZATION

- COMMUNICATION
- USB SERIAL  
ANALOG IO
- ADAPTABLE TO A WIDE  
VARIETY OF HANLDERS

## TU3 TEMPERATURE RAMP TEST



Thermal Head (Front)



Controller



Thermal Head (Back)

**Would you like to implement this into your test system?**

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