

**Microwave systems for advanced,
low temp thermal processing of
next generation semiconductors!**

MICRO CURE®
1300

By Lambda Technologies

Features

OEM heating module using VFM technology for integration into larger assembly

Compatible with other heating technologies to allow user to create hybrid heating

Same world class controls architecture as all Lambda VFM systems

Sub-host microprocessor for communication with larger system

All microwave transmission line components included

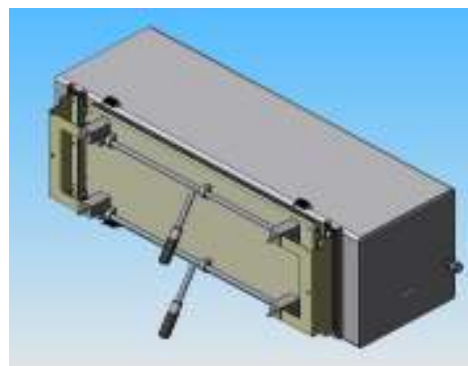
Optional, remote cavities available



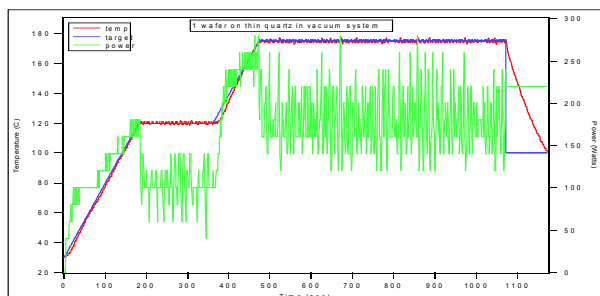
MC1300 configured with 200W SSPA

Applications & Benefits

- MC1300 combined with conventional heating methods provides molecular heating to heat materials faster
- Less time at temperature as well as selective heating work to reduce stress and provide for a wider range of material choices
- Reduced heating time also saves on an assemblies' valuable thermal budget allotment
- Less Work In Process (WIP) reduces loss incurred in cases when unscheduled production line stoppages occur
- VFM requires less energy and floor space



Optional Cavity for MC1300



Precise Temperature Control

About Lambda

Lambda Technologies has pioneered the application of Variable Frequency Microwave heating for materials processing. We develop and sell a variety of microwave process tools and provide microwave process development assistance.

Specifications

Microwave Source Options*

C-Band

100 Watt, 5.8–7.0 GHz (1300-C100)
200 Watt, 5.8–7.0 GHz. (1300-C200)
400 Watt, 5.8–7.0 GHz. (1300-C400)
700 Watt, 5.8–7.0 GHz. (1300-C700)

X-Band

400 Watt, 7.9-8.4 GHz. (1300-X400)

KU-Band

400 Watt, 13.75-14.5 GHz. (1300-K400)
700 Watt, 13.75-14.5 GHz. (1300-K700)

*Other bands and higher power sources are available by request.

Controls

Embedded PC for Self Hosting

- GUI Control application with recipe generation and data logging.
- Application Programming Interface libraries and examples for remote control.
- TCP/IP & RS232 host interface.
- SECS / GEM (option).

Optional Cavities

General Material Processing

Dimensions 16"x14"x13" HWD
Construction Aluminum
Ports Std. 6" Cir., 3 sides.
Door Manual front door, full opening.

Vacuum and Controlled Atmosphere

Dimensions 16"x14"x13" HWD
Construction Stainless, Electropolished
Ports 2xCF40, 2xCF25, 3x 0.25" VCR
Door Viton O-ring, manual operation.

Available Fittings

Cut-off Chokes Sizes to 1" OD. Brass.
Hybrid Chokes Sizes to 10" W x 0.5" H
Doors Rect. & Circular, w/ Safety Switches.
Vacuum MW & IR transparent windows.

VFM / Convection Hybrid**

- Option 1 : Independently controlled forced convection heating.
Option 2 : Independently controlled cavity wall heaters.

** Enables high temp. operation for low power MW sources.

Sensors

Standard

- Non-Contact IR Pyrometer (20 – 800 °C).

Optional

- Fiber Optic Contact Probes (1 to 4 Channels, 20 – 275 °C)
- Thermocouple Controller (20 – 1000 °C, specify junction type).

Electrical

700 & 400 Watt Systems:

Single phase, 230VAC, 20 Amp

200 Watt and Below:

Single phase, 120VAC, 20 Amp

Meets CE Safety Standards.

Mechanical

Dimensions 31"Hx10"Lx19"D
Weight 97 lbs.
Dual 19" Rank Mount Enclosure

Environmental Specifications

Operating temperature:

90° F max. @ 85% humidity

Acoustic Noise:

68.5db maximum @ 1 meter from the front of the MicroCure.

Vibration:

Equipment does not generate nor requires isolation from excessive vibration.



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