We Make It Easy! ETL | Laser Weld Services

Ellant

ENVIRONMENTAL TESTING LABORATORY (ETL)

- Fine & Gross Leak Detection
- **Laser Welding for Hermetic Units**
- **RF High-Power Testing**
- Sine & Random Vibration

- * Mechanical Shock
- Thermal Cycling
- **Thermal Shock**
- **Thermal Vacuum**











STATE-OF-THE-ART FACILITY | FOLSOM, CA

- > 57,000 square feet building
- > Two Class 100K clean rooms
- Complete range of RF/Microwave Active & Passive Components & Integrated Assemblies
- > For Commercial, Military and Space applications
- Design, Assembly, Integration and Test expertise
- > In-house Hermetic Laser Sealing and Environmental Testing
- > Fully Integrated Proposal, Program Management and
- > ISO 9001/2015 and AS9100:2016 Certified

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THIN-FILM CHIP AND WIRE & SOLDER ASSEMBLY

- > Chip & Wire: IAW MIL-STD-883 Uniform test methods for testing the environmental, physical, and electrical characteristics semiconductor devices.
- Soldering: IAW J-STD-001 Space Addendum Space and Military Applications Electronic Hardware Addendum to IPC J-STD-001 Requirements for Soldered Electrical and Electronic Assemblies.



Environmental Test	Size Accommodations	Temperature Ranges	Levels
Thermal Vacuum Chambers (x5)	18"(W) X 24"(L) X 12"(H)	-105°C to +150°C	<5x10-6 Torr
Thermal Shock Chambers (x4)	12"(W) X 9"(L) X 6"(H)	-65°C to +195°C	NA
Gross Leak	12"(W) X 8"(L) X 6"(H)	Ambient, +125°C	NA
Vacuum Bake, Laser Weld	19"(W) X 11"(L) X 11"(H)	Up to 300°C	NA
Thermal Cycle Chambers (x8)	20"(W) X 20"(L) X 25"(H)	-60°C to +150°C	NA
Helium Leak (x3)	10"(W) X 10"(L) X 2.5"(H)	NA	<1 x 10-9 cc/sec
Paint Booth	18'(W) X 12'(L) X 10'(H)	Ambient to 65°C	NA
Random Vibration	Weight limits	Max G Level	Max force
	10 – 150 lbs.	80 – 30	5200 lbs.
Sine Vibration	10 – 150 lbs.	<80 - 38	6000 lbs.
Inspection Camera	Keyence VHX-7000		

EQUIPMENT SPECIFICATIONS

Epoxy Die Attach		
Ablebond 84-1 LMI Silver Epoxy	Epoxy die Attach station, Microscope 10x-60x, Controlled Curing Oven	
Ablebond 85-1 Gold Epoxy	Epoxy die Attach station, Microscope 10x-60x, Controlled Curing Oven	
Silver Epoxy Paste ME8456	Epoxy die Attach station, Microscope 10x-60x, Controlled Curing Oven	
EPO-TEK H74 Non-Conductive Epoxy	Epoxy die Attach station, Microscope 10x-60x, Controlled Curing Oven, Scale MDL EK 200G	
Ablefilm ECF561E (sheet)	Epoxy die Attach station with hot plate adjustable to 60C, compression tool, Controlled Curing Oven	

About Stellant Systems

Stellant Systems is a premier manufacturer of critical spectrum and RF power amplification products to the space, defense, medical, science and industrial markets for both domestic and international customers. Stellant has 5 domestic manufacturing facilities and approximately 1100 employees. For more information, visit <u>StellantSystems.com</u>.



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