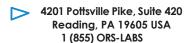


#### INSPECTION • ANALYSIS • TESTING



Attn: Mechanical/Environmental Group SUBMIT FORM: Mech-Enviro@orslabs.com

# **Mechanical and Environmental Testing Submission Form**

Client:	Date:
Company:	P.O. No.:
Address:	Rel No.:
	Telephone:
E-mail:	Billing Email:
ORS Quote No:	-

Package Description:	# Of Samples:	Do samples require ESD precautions during analysis?  Will samples be used for Flight production (Lot Screening)
Test Standard:Approximate Dimensions: W:Approximate Weight:Custom Packages May Require Draw ESD Class	Bias Required: Yes No	

### METHODS OF ANALYSIS

## **Environmental Testing**

\* DLA Testing

Accelerated Bias Aging Steam Aging Temperature Humidity Bias/Non Bias Autoclave Testing Temperature Cycling Testing\* Powered Temperature Cycle Cyclic Moisture Resistance\* Temperature Humidity Testing High Temperature Operating Life Highly Accelerated Stress Test (HAST) Temperature Storage Testing Powered Temperature Storage Moisture Sensitivity Level Testing Thermal Shock Testing\* High Temperature Reverse Bias (MSL) Preconditioning Test Stabilization Bake\* High Temperature Gate Bias Salt Atmosphere Testing\* Damp Heat Intermittent Operating Life

## **Mechanical and Electrical Testing**

Solderability Testing\* SnPb Pb Free Test Condition: Semiconductor Parametric Testing Fiber Integrity Testing Constant Acceleration Testing\* Mechanical Shock Testing\* **Transportation Testing** Particle Impact Noise Detection (PIND) Variable Frequency Vibration Testing\* Resistance to Solder Heat\* Random Vibration Testing\* External Visual Resistance to Solvents Testing\* Surface Roughness **Electrical Testing** 

## **Analytical Testing**

X-Ray SEM/EDS Hermeticity

Acoustic Microscopy Physical Dimensions

## Return Shipment

## **Additional Instructions or Restrictions**

Form: LOG-9-F09 Revision 2

#### **DESCRIPTION OF TEST METHODS**

### ORS APPROVED DLA LAND AND MARITIME SUITABLE TEST METHODS

Mil-Std 883 Test	Method	Condition
Moisture Resistance	1004	
Stabilization Bake	1008	A, B, C and D
Salt Atmosphere	1009	A, B, C and D
Temperature Cycling	1010	A, B, C, D and F
Thermal Shock	1011	A, B and C
Constant Acceleration	2001	A, B, C, D, E and F
Mechanical Shock	2002	A and B
Solderability	2003	A and B
Vibration, Variable Frequency	2007	A
Resistance to Solvents	2015	
Random Vibration	2026	I – II
Resistance to Solder Heat	2036	A, B, I, J, and K

JEDEC Test Standards	Method	Condition
Biased Highly Accelerated Stress Test	JESD22-A110	A and B
Unbiased Highly Accelerated Stress Test	JESD22-A118	A and B

These test procedures are used exclusively for testing of devices in accordance with current versions of Mil-Std 883 per the conditions of "Suitability" status granted by DLA Land and Maritime. No variations are permitted to the procedure nor to the device test conditions. Furthermore, all tests performed are subject to inclusion in ORS' annual retention report submitted to DLA Land and Maritime. All records regarding these tests are subject to audit and inspection by the U.S. Government.

### SOME IMPORTANT REMINDERS

Please provide a valid Purchase Order and, if requested by your company, a Release Number.

Please be sure to specify "Additional Instructions or Restrictions" that should be followed during sample handling, testing or shipment.

Unless otherwise requested, test reports will be sent electronically and samples will be returned via UPS Ground.

Please refer to the ORS terms and conditions of Quotation and Sale at www.orslabs.com/terms-conditions-sale.

All shipping and handling fees associated with the transportation of samples to and from our testing facility, as well as special courier fees for expediting test reports, are the responsibility of the client.

Devices subjected to Radioisotope Hermetic Seal testing may be retained by ORS until suitable background levels are achieved before devices may be returned to the client.

All shipping and handling fees associated with the transportation of samples to and from our testing facility, as well as special courier fees for expediting test reports, are the responsibility of the client.

On-site visits are encouraged and we welcome your personal involvement during sample analysis.

Please contact our Sales department for pricing information.

For technical information, please contact the Mechanical or Environmental Test Group at (855) ORS-LABS.