



INSPECTION • ANALYSIS • TESTING

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Attn: Mechanical/Environmental Group  
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### Mechanical and Environmental Testing Submission Form

Client: \_\_\_\_\_ Date: \_\_\_\_\_  
 Company: \_\_\_\_\_ P.O. No.: \_\_\_\_\_  
 Address: \_\_\_\_\_ Rel No.: \_\_\_\_\_  
 \_\_\_\_\_ Tel: \_\_\_\_\_  
 E-mail: \_\_\_\_\_ Fax: \_\_\_\_\_  
 ORS Quote No: \_\_\_\_\_

Package Description: \_\_\_\_\_ # of Samples: \_\_\_\_\_  
 (Manufacturer, Part No., Date Code, etc.)

Do samples require ESD precautions during analysis?  
 Will samples be used for Flight production (lot Screening)

Test Standard: \_\_\_\_\_ Condition: \_\_\_\_\_  
 Approximate Dimensions: W: \_\_\_\_\_ H: \_\_\_\_\_ L: \_\_\_\_\_  
 Approximate weight: \_\_\_\_\_ is Basing required: Yes  No   
 Custom packages may require drawings  
 ESD Class \_\_\_\_\_

### METHODS OF ANALYSIS

#### Environmental Testing \* DLA Testing

<input type="checkbox"/> Accelerated Bias Aging	<input type="checkbox"/> Steam Aging	<input type="checkbox"/> Temperature Humidity Bias/Non Bias/ Cycled
<input type="checkbox"/> Autoclave Testing	<input type="checkbox"/> Temperature Cycling Testing*	<input type="checkbox"/> High/Low/Power Temperature Storage
<input type="checkbox"/> Damp Heat Storage	<input type="checkbox"/> Temperature Humidity Testing	<input type="checkbox"/> High Temperature Operating Life
<input type="checkbox"/> Cyclic Moisture Resistance*	<input type="checkbox"/> Temperature Storage Testing	<input type="checkbox"/> Power Temperature Storage
<input type="checkbox"/> Highly Accelerated Stress Test (HAST)	<input type="checkbox"/> Thermal Shock Testing*	<input type="checkbox"/> High Temperature Reverse Bias
<input type="checkbox"/> Moisture Sensitivity Level Testing (MSL)	<input type="checkbox"/> Stabilization Bake*	<input type="checkbox"/> High Temperature Gate Bias
<input type="checkbox"/> Preconditioning Test	<input type="checkbox"/> Damp Heat	<input type="checkbox"/> Intermittent Life

#### Mechanical and Electrical Testing

<input type="checkbox"/> Solderability Testing* <input type="checkbox"/> SnPb <input type="checkbox"/> Pb Free	<input type="checkbox"/> Semiconductor Parametric Testing and Characterization
Precondition time: Steam: _____ Bake: _____	<input type="checkbox"/> Solder Heat Resistance Test (SHRT)*
<input type="checkbox"/> Fiber Integrity Testing	<input type="checkbox"/> Constant Acceleration Testing*
<input type="checkbox"/> Mechanical Shock Testing*	<input type="checkbox"/> Transportation Testing
<input type="checkbox"/> Particle Impact Noise Detection (PIND)*	<input type="checkbox"/> Variable Frequency Vibration Testing*
<input type="checkbox"/> Random Vibration Testing*	<input type="checkbox"/> Resistance to Solder Heat*
<input type="checkbox"/> Resistance to Solvents Testing*	<input type="checkbox"/> Vibration Fatigue
<input type="checkbox"/> Parametric Testing	<input type="checkbox"/> External Visual
<input type="checkbox"/> Transportation Vibration	

#### Analytical Testing

X-Ray  SEM/EDS  Hermeticity  
 Acoustic Microscopy  Physical Dimensions

**Return Shipment**  
 UPS:  Red  Blue  Ground  
 Fed Ex:  Pr. 1  Std.  Econ.  
 Acct. #: \_\_\_\_\_

**Additional Instructions or Restrictions**  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## 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
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, B and C
Vibration, Variable Frequency	2007	A
Resistance to Solvents	2015	
Particle Impact Noise Detection (PIND)	2020	A and B
Random Vibration	2026	I – II
Resistance to Solder Heat	2036	A, B, I, J, and K

Mil-Std 750 Test	Method	Condition
Temperature Cycling	1051	
Liquid Thermal Shock	1056	
Moisture Resistance	1021	

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These test procedures are used exclusively for testing of devices in accordance with current versions of Mil-Std 883 and Mil-Std 750 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](http://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.