ONEIDA RESEARCH SERVICES, INC.

INSPECTION • ANALYSIS
8811 American Way, Suite 100
Englewood, CO 80112
(855) ORS-LABS
Attn: Component Testing Group
E-mail: component@orslabs.com

Component Analysis Submission Form

Client: _____ Date: _____

Company: _____ P.O. No.: _____

Address: _____ Rel No.: _____

_____ Tel: _____

E-mail: _____ ☐ Expedite Service (Surcharge Will Apply)

ORS Quote No.: _____

Package Type(s): # of Samples:

☐ Will samples be used for Flight production (lot screening)?

☐ Do samples require ESD precautions during analysis?

ANALYSIS REQUESTED

(Discussion of analysis is recommended prior to quotation and submission)

☐ Destructive Physical Analysis (DPA) per Mil-Std or Customer Specification
Mil-Std: _____
Test Method: _____
Client SOW: _____

☐ Failure Analysis
(Consultation required prior to analysis.)

☐ Surface/Material Analysis

☐ Construction Analysis

☐ Other

METHODS OF ANALYSIS

- ☐ Internal Vapor Analysis (IVA®, HR-IVA®)*
- ☐ Radioisotope Leak Testing (Kr-85)*
- ☐ Helium Fine/Perfluorocarbon Gross Leak
- ☐ Combined He/O_2 Dry Gross and Fine Leak (HSHLD®)*
- ☐ Optical Microscopy
- ☐ Fluorescence Microscopy
- ☐ Field Emission SEM (FeSEM)
- ☐ Scanning Electron Microscopy (SEM)
- ☐ Energy Dispersive X-ray Spectroscopy (EDS)
- ☐ IPC-A-600 Inspection Services
- ☐ GC/MS
- ☐ X-Ray Fluorescence (XRF)
- ☐ Real Time X-ray Radiography
- ☐ Leak Site Identification
- ☐ Dye Impregnation/Penetrant
- ☐ SEM Metallization Inspection
- ☐ Plasma/Chemical I.C. Deprocessing
- ☐ Chemical/Mechanical Decapsulation
- ☐ Cross-Sectional Analysis
- ☐ High/Low Temperature Storage
- ☐ Thermal Cycling
- ☐ Passive Device DPA:
  - ☐ Capacitor
  - ☐ Connector
  - ☐ Contacts
  - ☐ Magnetic Device
- ☐ Other:

***Analysis performed to DLA approved test methods must be included in the ORS retention log to DLA Land and Maritime as part of the Laboratory Suitability program.**

☐ Request phone consultation upon receipt.

REPORT FORMAT

☐ Electronic Report (.pdf file format) ☐ Images Only

Return Shipment

UPS: ☐ **Red** ☐ **Blue** ☐ **Ground**

Fed Ex: ☐ **Pr. 1** ☐ **Std.** ☐ **Econ.**

Other:

Acct. #: _____

Additional Instructions or Restrictions

See reverse side for additional information

DESCRIPTION OF TEST METHODS

ORS APPROVED DLA LAND AND MARITIME SUITABLE TEST METHODS

Mil-Std 883 Test	Method	Condition
Seal	1014	A1, A2, A5, B1, B2, B1/B2 and B3
External Visual	2009	N/A
Internal Visual (Monolithic)	2010	A, B
Radiography	2012	Non-Film (Digital)
Physical Dimensions	2016	N/A
Internal Visual (Hybrid)	2017	H and K
SEM	2018	N/A
PIND	2020	A, B
Internal Gas Analysis	1018	N/A
Bond Strength	2011	Condition D
Die Shear	2019	N/A
Internal Visual (Passive)	2032	H and K

Mil-Std 750 Test	Method	Condition
Internal Gas Analysis	1018	N/A
Seal	1071	A, B, G1, G2, H1, H2, H3
Die Attach Integrity	2017	Condition A
Bond Strength (Destructive Bond Pull)	2037	Condition D
Physical dimensions	2066	
PRE-CAP visual, power MOSFET'S	2069	
Visual and mechanical examination	2071	
Internal Visual transistor (PRE-CAP) inspection	2072	
Visual inspection for die (semiconductor diode)	2073	
DECAP Internal Visual Design Verification	2075	
Radiography	2076	Non-Film (Digital)
SEM	2077	N/A
PIND	2052	A, B
Destructive Physical Analysis for wire bonded devices	2102	

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.
- 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.
- 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.
- 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 Component Testing Group at (855) ORS-LABS.