

**MIL-PRF-38534  
HYBRID MICROCIRCUIT CERTIFICATION**

FOR

CLASSES K and H  
IS HEREBY AWARDED TO

**INTERNATIONAL RECTIFIER AEROSPACE & DEFENSE  
2520 Junction Avenue  
San Jose, CA 95134**

THIS CERTIFICATION IS VALID UNTIL TERMINATED BY WRITTEN NOTIFICATION FROM DLA LAND AND MARITIME. REFERENCE DLA LAND AND MARITIME LETTER VQ(VQH-12-024039) FOR DETAILS PERTAINING TO THIS CERTIFICATION.

A handwritten signature in black ink, appearing to read "Samuel E. Merritt".

**SAMUEL E. MERRITT**  
Director, Operations Support Directorate  
DLA Land and Maritime



DEFENSE LOGISTICS AGENCY  
LAND AND MARITIME  
POST OFFICE BOX 3990  
COLUMBUS, OH 43218-3990

January 4, 2013

Mr. Bo Rains  
Manager, Quality & Product Assurance  
International Rectifier  
2520 Junction Avenue  
San Jose, CA 95134

Dear Mr. Rains:

Re: Certification, Hybrid Microcircuits MIL-PRF-38534, FSC 5962, VQ (VQH-12-024039)

Your hybrid facility at the above address was sample audited the week of January 10-12, 2012 for compliance with MIL-PRF-38534 Classes H and K. An acceptable level of confidence has been established that compliance with these requirements exists. Therefore, International Rectifier Corporation's Classes H and K certification is continued effective December 21, 2012.

This certification is for the following:

- a. Quality Management Plan: *Hi Rel Business Unit Quality Management System Manual QSP 01 revision E.*
- b. Conversion of Customer Requirements: *Contract Review and Conversion of Customer Requirements QAP-3.2.1 revision Wand QSP 13 revision H Customer Contract Conversion*
- c. Controlled documentation baseline for processing MIL-PRF-38534 devices: *Manufacturing Flow Chart for Hybrids Processed per MIL-PRF-38534 HPP-8002-0044 revision AB.*

This certification is valid until terminated by written notification from the qualifying activity. The normal period of certification is two years from the date of the audit and, if warranted, may be withdrawn by DLA Land and Maritime-VQH at any time. Your facility may be re-audited on a drop-in basis at any time.

All screening, qualification, conformance, and periodic inspection must be performed at a facility which has a DLA Land and Maritime-VQ letter of Laboratory Suitability for the applicable test method and condition. QML manufacturers shall notify the qualifying activity immediately after learning of a potential issuance of a GIDEP alert, problem advisory or major quality/reliability problem affecting QML products. This includes failure to perform screening or sample testing (including inspection) in accordance with MIL-PRF-38534. Failure to provide notification may be grounds for removal from QML-38534.

This certification is valid until terminated by written notification from the qualifying activity. The normal period of certification is two years from the date of the validation. This certification may be withdrawn by DLA Land and Maritime-VQH at any time if warranted. Your facility may be re-audited on a drop in bases at any time.

If you have any questions concerning this letter, please contact Miss Schneider at (614) 692-0585.

Sincerely,

A handwritten signature in cursive script, appearing to read "Joe Embrey".

*for* JOSEPH GEMPERLINE  
Chief  
Sourcing and Qualifications Division



DEFENSE LOGISTICS AGENCY  
LAND AND MARITIME  
POST OFFICE BOX 3990  
COLUMBUS, OH 43218-3990

January 4, 2013

Mr. Bo Rains  
Manager, Quality & Product Assurance  
International Rectifier  
2520 Junction Avenue  
San Jose, CA 95134

Dear Mr. Rains:

Re: Laboratory Suitability, Hybrid Microcircuits MIL-PRF-38534, FSC 5962, VQH-13-025608

Based on a sample audit and review of your test methods the week of January 10 – 12, 2012 a satisfactory confidence level of Laboratory Suitability has been demonstrated. Therefore, your facility at the above address is considered suitably equipped to perform testing on military devices for the following test methods of MIL-STD-883:

TEST	METHOD	CONDITION
Insulation Resistance	1003	600Vdc, 100nA
Life Test	1005	A-D, 125°C, Tc, Air
Stabilization Bake	1008	C (150°C), F
Salt Atmosphere	1009	N/A
Temperature Cycling	1010	C
Seal	1014	A1, A2, A4, C1, Appendix A Procedure CH
Burn-In	1015	A-D, 125°C, Ta, Air
Constant Acceleration	2001	A-E, 3000g (Y1 Axis)
Solderability	2003	N/A
External Visual	2009	N/A
Internal Visual (Monolithic)	2010	B, S
Bond Strength	2011	D
Real-Time X-Ray	2012	N/A
Internal Visual Mechanical	2014	N/A
Resistance to Solvents	2015	N/A
Physical Dimensions	2016	N/A



Internal Visual (Hybrid)	2017	H, K
Die Shear	2019	N/A
PIND	2020	A, B
Non-Destruct Bond Pull	2023	N/A
Internal Visual (Passive)	2032	H, K
*Internal Visual (Transistors)	2072	N/A
*Internal Visual (Diodes)	2073	N/A

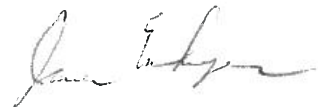
\*Test Methods in MIL-STD-750

All screening, conformance inspection, periodic inspection, and qualification tests must be performed by a facility that has been issued Laboratory Suitability by DLA Land and Maritime-VQ for the applicable test method and condition.

This Laboratory Suitability is valid until withdrawn by this Center. This Laboratory Suitability is subject to the conditions stated in DoD 4120.24-M and SD-6.

If you have any questions, please contact Miss Schneider at (614) 692-0585.

Sincerely,



JAMES ESCHMEYER  
Chief  
Hybrid Devices Branch