

UEC RF Microwave Quality Clauses

PLEASE RETAIN THIS PAPER FOR REFERENCE ON FUTURE ORDERS.

Q1 GENERAL QUALITY ASSURANCE REQUIREMENTS

Paragraphs A through P applies.

A. **Quality System:**

The supplier should maintain a quality system and provide inspection which is adequate to ensure that all materials delivered against this procurement document meet all specified requirements.

Inspection: The supplier's quality system is subject to UEC RF Microwave audit verification at any time during fulfillment of this order. The supplier shall maintain an inspection system adequate to ensure that supplies shipped on this order meet all the applicable requirements. The system should also provide for the maintenance of records and data for all inspections and tests performed and shall make these records available for examination and verification by UEC RF Microwave upon request. Product acceptance by the supplier shall be performed 100% on supplied product. Sampling inspection or other statistical techniques may not be used for product acceptance by the supplier unless approved by UEC RF Microwave.

Resubmittal of Rejected Items: Any item rejected by UEC RF Microwave and subsequently resubmitted by the supplier shall be clearly identified as a resubmitted item, indicating the procurement document number and UEC RF Microwave rejection document number on the supplier's certificate of conformance.

Notification of Facility Change: Supplier shall not use nor relocate any UEC RF Microwave approved production, manufacturing, and/or processing facilities during performance of the work specified in the procurement document. UEC RF Microwave Buyer shall be notified in writing prior to performance against the procurement document and afforded an opportunity to examine and approve any such facility changes for compliance with procurement quality requirements.

Changing Test Facility: Supplier shall not change a test facility nor use another test facility to meet specification/drawing requirements without prior written approval from the UEC RF Microwave Buyer if a specific test facility was previously approved by UEC RF Microwave as provided for in the procurement document.

Change of Management/Ownership: Supplier shall notify the UEC RF Microwave Buyer in writing when a significant change in management or ownership has occurred.

- B. UEC RF Microwave / UEC RF Microwave Customer Right of Entry:** UEC RF Microwave, UEC RF Microwave customers and applicable Regulatory Agencies reserve the right of access to relevant areas of all facilities and the ability to review all pertinent records. UEC RF Microwave, and its' customers reserve the right to inspect any or all the work in this order at the supplier's location. In addition, the supplier's quality and manufacturing processes are subject to review by authorized UEC RF Microwave representatives at any time during production.
- C. Workmanship**
All items on this order shall be fabricated and finished in a thorough, high quality, workmanship-like manner. Particular attention should be given to cleaning, absence of blemishes and foreign material, identification, and general appearance.
- D. Technical and Non-Technical Requirements & Deviations**
All technical and non-technical requirements, as outlined or defined by the pertinent drawing and or material specification, shall be specifically and strictly adhered to by the approved supplier. No deviations from the specified requirements are permitted without either a revision to the procurement document or written approval from the UEC RF Microwave Buyer. The supplier shall notify in writing and obtain written approval from the UEC RF Microwave Buyer for proposed changes in the design or processes of their products, whenever such changes affect applicable UEC RF Microwave orders.
- E. Inspection at UEC RF Microwave**
All material is subject to sampling or 100% inspection at UEC RF Microwave. Discrepancies found within a sample can cause rejection and return of an entire shipment. Acceptance of incoming material does not preclude discovery and return of discrepant material at a later date.
- F. Approved Suppliers**
UEC RF Microwave maintains a list of approved suppliers. These suppliers are qualified by audit results. All suppliers are subject to continuing performance measures based on both conformance to requirements and delivery performance. Late shipments or the shipment of discrepant material will affect a supplier's approval rating and can cause disqualification. Unacceptable performance will be communicated to the supplier for appropriate corrective action(s). Product Acceptance is based on received lots accepted compared to total received lots.
Accepted Lots/Total Lots received.
On-Time Delivery performance is based on the date each shipment of product is received versus PO delivery date.
On-Time/Total Lots received.

G. Non-Conforming Material

It is up to the Supplier to Notify UEC RF Microwave of any known non-conforming processes, products or services prior to shipment. Determination of approval for dispositions is necessary. Shipment of non-conforming material may cause the generation of a Supplier Corrective Action Request (SCAR), which must be answered promptly and satisfactorily. Failure to do so can cause removal from the Approved Supplier List.

H. General Compliance

The supplier shall certify that all materials, processes and/or items supplied under this order are as specified. One copy of each certification document specified below shall accompany each shipment. Certifications shall be signed by a responsible member of the supplier's firm. Each certification shall identify the UEC RF Microwave procurement document and shall identify the part, serial number and lot number of the items covered by the certification. Material received without certification will be rejected and returned at supplier's expense.

I. Calibration

The supplier shall maintain a calibration system in accordance with MIL-STD-45662, "Calibration System Requirements" or ANSI/NCSL Z540.3, "Requirements for the Calibration of Measuring and Test Equipment"

J. Limited Shelf-Life Material

The supplier shall identify all materials and articles, which have definite characteristics of quality degradation with age and/or environment. The supplier shall affix this information directly on the material container or article. The supplier shall identify the container with **part number, lot number, start date** of useful life and the date on which **useful life is expended**. When environment is a factor in determining useful life, the identification shall include the **storage conditions** (i.e., temperature, humidity, etc.) required to achieve the stated Life. A minimum of 75% of the applicable material/article shelf life shall remain upon receipt of the material by UEC RF Microwave or the material is subject to rejection and return to the supplier.

K. Quality Records and/or Data

Objective evidence of chemical and physical reports, certifications, inspections, tests, engineering changes and other quality and/or engineering data shall be retained and subjected to review at any time by UEC RF Microwave for not less than ten (10) years after final payment on the procurement document, unless otherwise requested by UEC RF Microwave. Documents shall be destroyed after the ten (10) year retention period.

L. Packaging

Unless otherwise specified by the item drawing, specification or procurement document, packaging shall meet the following requirements:

The supplier is responsible for assuring that all items are delivered without damage or deterioration and are efficiently and economically packed for the method of transportation and type of handling involved. Unit and intermediate packaging should be employed as necessary to prevent damage or deterioration.

M. Identification

Each shipping container and intermediate package shall be identified with:

- Procurement document number
- Part Number/Drawing Number and Revision (when applicable)
- Quantity
- Manufacturer name (if known)
- Manufacture date (if known)
- Serial number (when applicable)
- Lot number (when applicable)
- Cure date (when applicable)
- Expiration dates (when applicable)
- Static sensitive warning (when applicable)
- Cautionary Handling Instructions (when applicable)

N. MSDS

Material Safety Data Sheets shall be included in each shipment of materials or chemicals that contain an MSDS.

O. FOD

The seller shall establish and maintain an effective Foreign Object Damage (FOD) Prevention Program to reduce FOD using NAS412 as a guideline.

The material supplied on this purchase order shall be manufactured in an environment that is free of foreign objects. Material supplied shall be free of foreign objects. The Seller's program shall utilize effective FOD prevention practices. The program shall be proportional to the sensitivity of the design of the product(s) to FOD, as well as, to the FOD generating potential of the manufacturing methods.

P. Quality Flow Down To Sub-Tier Sellers

The seller's Quality System shall assure all relevant Purchase Order requirements are flowed down to their sub-tier suppliers. The seller's **sub-tier** suppliers are responsible **for complying** with the same specifications and requirements specified on the Purchase Order.

Q. Acceptance and Approvals by Supplier

Supplied products/services must meet requirements of Purchase Order, Engineering Drawings and specifications. **Suppliers** shall perform all electrical, visual, mechanical inspections and tests set forth in the applicable specification or drawing. Seller shall also provide the data and results of such tests and inspections as evidence of product acceptance and release by the supplier.

R. Competence

Suppliers should ensure workers assigned to work on UEC RF Microwave product are competent and or qualified (such as certified solder assembly operators and inspectors).

S. Communications and Modifications

For communications with UEC RF Microwave, Supplier should utilize direct email correspondence. Suppliers are directed to contact UEC RF Microwave at the email address RFPurchasing@UEC-Corp.com

In the event changes, modifications, or issues arise, approval is required prior to shipment. Changes to Purchase Order, Specifications or to designs are not permitted without documented authorization from UEC RF Microwave.

T. Personnel Awareness

Supplied **products are** part of a larger integrated system and can have an effect after delivery. The Suppliers organization shall ensure individuals are aware of their contribution to product or service **conformance**, contribution to product safety and the importance of ethical behavior.

U. Conflict Minerals

Seller recognizes, in relation to the Conflict Minerals provision (Section 1502) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the “Act”), the risks associated with sourcing “Conflict Minerals” (tin, tantalum, tungsten and gold) from the Democratic Republic of the Congo and adjoining countries. To the extent required herein, Seller commits to comply with the Act. If requested by the Buyer, Seller shall (1) complete the reasonable country of origin inquiry (RCOI) of Conflict Minerals; and (2) perform reasonable due diligence of its supply chain to determine if Conflict Minerals sourced from the DRC countries directly or indirectly support human rights violations. Seller shall take all other measures, as are necessary to comply with the Act, its regulations and amendments, as applicable.

Q2 Certificate of Compliance

Supplier shall submit with each shipment a Certificate of Compliance, which certifies that the material or parts furnished have been manufactured in accordance with UEC RF Microwave drawing and revision as specified on the procurement document. The certification must specifically contain:

- 1)** UEC RF Microwave Part Number/Drawing No. and Revision (when applicable)

- 2) UEC RF Microwave procurement document number
- 3) MIL-SPEC number (when applicable)
- 4) Serial Number
- 5) Lot information
- 6) Signature by suppliers authorized quality representative.

In addition, the supplier must state in the certification that objective evidence sufficient to substantiate the Certificate of Compliance is on file and is available for UEC RF Microwave review. One (1) reproducible copy of the Certification of Compliance shall be supplied to UEC RF Microwave concurrently with each delivery of article(s). Certificate of Compliance from distributors shall comply with all the above requirements.

Q3 Dimensional Data

Recorded findings on all critical dimensions shall be submitted. Critical dimensions are defined as those dimensions, which would have an adverse effect on the next higher assembly if tolerances are not maintained.

Q4 Physical, Chemical or Raw Material Test Report

Each shipment must be accompanied by a legible and reproducible copy of a physical or chemical test report identifiable with specification test requirements and material submitted. These reports must contain the signature of a representative responsible for the agency performing the test and must assure conformance to specification requirements.

Q5 Special Process Certification

The supplier shall be responsible for conformance of their outside manufacturer and/or processors to the applicable specifications. Each shipment shall be accompanied by a legible and reproducible copy of certification to the applicable specifications such as those specifications regarding but not limited to, **heat treat, chemical treat, plating, welding**, etc. Certifications must show specification number, revision letter, and quantities affected by this certification, also the agency performing the outside service, for example, **NADCAP** - National Aerospace and Defense Contractors Accreditation Program, IPC, SAE, etc..

Q6 Traceability

All items supplied under this procurement document shall be traceable to the raw materials used. Raw materials shall also be traceable to the items supplied to UEC RF Microwave. If not supplied with the material, the information shall be made available to UEC RF Microwave upon request.

Q7 ESD Sensitive Material

All components which are Electro-Static Discharge (ESD) and/or electromagnetic forces (EMF) sensitive must be processed and packaged in accordance with ANSI/ESD S20.20 "Electrostatic Discharge Control Program" or, or MIL-STD-1686, "Protection of Electrical and Electronic Parts, Assemblies and Equipment".

Q8 Wafer Qualification

Where deemed necessary, Semiconductor samples will be evaluated at UEC RF Microwave, and upon approval of the wafer qualification, a percentage of the wafer, (as defined by the UEC RF Microwave Purchasing Department and the supplier) shall be reserved and held by the Supplier, for purchase.

Q9 Off-The-Shelf/Catalog Item

Inspection Data: One (1) copy of the item drawing of applicable catalog page shall accompany parts for receiving identification and inspection.

Q10 Test and Inspection Data

Inspection measurements and/or electrical test results of items on this procurement document shall be taken and included with each procurement document shipment. Actual data to be recorded shall be as specified in the detail specification/drawing. The supplier should ensure that products failing to meet performance requirements are not shipped to UEC RF Microwave. As a minimum test data shall include:

- 1) UEC RF Microwave Part number/Drawing number and revision
- 2) UEC RF Microwave procurement document number
- 3) Supplier Acceptance Test procedure number (as applicable) and revision date
- 4) Characteristic(s) measured
- 5) Date and test completion
- 6) Evidence of test acceptance by supplier's quality function

Q11 Inspection and Test Instructions

The supplier shall prepare and maintain written instructions for inspections and tests performed on the procurement document. The instructions shall include identification of the item to be inspected or tested, measuring and test equipment to be used, details of inspection and test operations to be performed, and the criteria for determining conformance or non-conformance to procurement document requirements.

- A) One legible and reproducible copy of each instruction shall be submitted to the UEC RF Microwave for approval prior to use.

- B) The instructions shall be available on file for review by UEC RF Microwave and Government agencies. Changes to the approved Inspection and Test Instructions shall be submitted for approval prior to incorporation.

Q12 Inspection and Test Plan

The supplier shall prepare and maintain an inspection and test plan including a product flow chart of operation sequences, inspection and test points, and process control points for the items to be fabricated on this procurement document. The type of inspection or test at each point must be sufficiently described and identified. One copy of each original inspection and test plan or revision to it shall be submitted to the UEC RF Microwave Buyer for approval prior to the start of fabrication.

Q13 UEC RF Microwave First Article Inspection

This order is subject to the approval of a First Article sample at UEC RF Microwave. Supplier shall deliver one sample, which represents, in all aspects, the items to be delivered, and await approval before shipping the remainder of the order. Manufacture of the remainder prior to the First Article Approval is at risk of the supplier.

Q14 Supplier First Article Inspection

The supplier shall create or select a first article inspection sample and perform a complete inspection to all drawing requirements. The First Article Inspection Report shall accompany the product upon delivery and the part the first article was performed on shall be appropriately identified in the delivery. When specified in procurement document, the First Article Report shall be prepared in accordance with AS9102 – “Aerospace First Article Inspection Requirement” or UEC RF Microwave-approved equivalents.

Q15 Source Inspection-UEC RF Microwave

Items covered by this procurement document require inspection and/or test by UEC RF Microwave at the supplier's plant. The supplier shall give a minimum of a 48-hour notice to Buyer prior to required inspection. UEC RF Microwave source inspection and/or test does not relieve supplier of any of the requirements of the procurement document, and UEC RF Microwave reserves the right to accomplish final acceptance at UEC RF Microwave facility.

Q16 Source Inspection-Government

Government inspection at the supplier's facility will be required prior to shipment. Upon receipt of this order, promptly notify the government representative who services your facility for appropriate inspection planning. The supplier shall give a minimum of 72-hour notice prior to required inspection. Evidence of Government Source Inspection approval is required with each shipment.

Q17 Workmanship (with applicable paragraph(s) below)

Unless stated on purchase agreement or engineering specification, the following shall apply.

- A)** All items assembled and soldered shall be compliant with the requirements of J-STD-001 Class 2
- B)** All items assembled and soldered shall be compliant with the requirements of J-STD-001 Class 3.
- C)** All items supplied shall be compliant with the requirements of IPC A610 Class 2.
- D)** All items supplied shall be compliant with the requirements of IPC A610 Class 3.
- E)** Copies of certifications shall be available upon request.

Q18 Inspection System MIL-I-45208

The supplier's Inspection System shall provide and maintain a system that conforms to the requirements of MIL-I-45208, "Inspection System Requirements" or ISO 9003, "Quality Systems – Model for Quality Assurance in Final Inspection and Test". Compliance with the provision of this clause in no way relieves the supplier of the final responsibility to furnish acceptable supplies or services as specified herein. The system shall be subject to audit by UEC RF Microwave.

Q19 Quality System MIL-Q-9858, ISO 9001

The supplier's Quality System shall provide and maintain a system that conforms to the requirements of MIL-Q-9858, "Quality Program Requirements", ISO 9001, and "Quality Systems – Model for Quality Assurance in Design/Development, Production, Installation and Servicing". Compliance with the provision of this clause in no way relieves the supplier of the final responsibility to furnish acceptable supplies or services as specified herein. The system shall be subject to audit by UEC RF Microwave.

Q20 Calibration Services

The supplier of calibration services shall provide certification that such services were accomplished utilizing standards traceable to National Institute of Standards and Technology, derived from accepted values of natural, physical constants or been derived by the ratio type of self-calibration techniques and their system is compliant to MIL-STD-45662 or ANSI Z540.3.

Q21 Equipment Requiring Calibration

This clause applies to equipment purchased to perform an acceptance test of deliverable hardware or to measure/verify a process parameter as specified in a procedure used to manufacture deliverable hardware. The supplier shall deliver the following information to UEC RF Microwave.

- Certification of current calibration status of these items.
- Identification of the calibration items and parameters.
- Methods/Procedures for calibration of these items.
- Recommended calibration recalls intervals for these items.

This information is subject to review and approval by the UEC RF Microwave prior to acceptance of equipment shipped under this clause.

Q22 Inspection and Test Plan

The supplier shall prepare and maintain an inspection and test plan including a product flow chart of operation sequences, inspection and test points, and process control points for the items to be fabricated on this procurement document. The type of inspection or test at each point must be sufficiently described and identified. One copy of each original inspection and test plan or revision to it shall be submitted to the UEC RF Microwave Buyer for approval prior to the start of fabrication.

Q23 Configuration Management

The supplier shall employ a configuration management program to demonstrate that the purchased item conforms to controlled documentation. It is intended that the supplier implement only the degree and depth of configuration control necessary to establish approved baseline definition, control changes to the baseline, and record the status of the changes to ensure compatibility with the UEC RF Microwave specification and applicable drawing. The supplier shall ensure adequate configuration management practices are in place at their subtler suppliers to ensure that part design, material, and processes do not change from original part design and procedures.

Q24 Configuration Control

Prior to the start of production, may review, at the supplier's site, all documentation to be used to produce the items described in the UEC RF Microwave specification and/or source control drawing. This includes process documentation and inspection/test procedures. After reviewing the documents, a list will be established with the document titles and current revisions. The document list shall be submitted to the UEC RF Microwave Buyer for approval. The documents on this list will be considered the baseline. Changes to any of the documents on this list must be submitted in writing to the UEC RF Microwave Buyer for approval as follows:

Class I changes (changes that affect deliverable hardware form, fit or function): Proposed Class I technical and manufacturing changes to the baseline shall be submitted for approval following establishment of the approved baseline. Proposed Class I changes shall be submitted to UEC RF Microwave as Engineering Change Proposals (ECP's) via appropriate change forms before action is taken to implement the changes with UEC RF Microwave approval. The ECP shall include a brief title of the proposed change and date, description, justification and impact.

Class II changes (changes not affecting deliverable hardware form, fit or function): Proposed Class II changes shall be submitted to UEC RF Microwave for classification concurrence following establishment of the approved baseline. The proposed change shall include a brief title of the proposed change and date, description, justification and impact.

Definitions of Class I and II changes and those changes not requiring UEC RF Microwave change approval or classification concurrence shall be provided in the supplier's Quality Assurance Manual. The supplier's Quality Assurance Manual shall be submitted to the UEC RF Microwave Buyer for approval prior to submission of any changes.

Q25 ITAR / EAR

The attached Technical Data/Software may be covered by United States Export Regulations any export/transfer/disclosure of the technical data to a foreign person, must be licensed by one of the Regulatory Divisions United States Department of State or the United States Department of Commerce. Licensing to occur prior to disclosure or transfer to the foreign person, whether in the United States or abroad.

These items are controlled by the U.S. government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s) either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.

Q26 Counterfeit Parts

Suppliers shall prevent the use of counterfeit parts. If suspect/counterfeit parts are furnished under this purchase order or are found in any of the goods delivered hereunder, such items will be impounded by UEC RF Microwave. The supplier shall promptly replace the suspect/counterfeit parts with parts acceptable to the UEC RF Microwave and the supplier shall be liable for all costs relating to the removal and replacement of said parts. UEC RF Microwave reserves all contractual rights and remedies to address grievances and detrimental impacts caused by suspect/counterfeit parts. To further mitigate the possibility of the inadvertent use of counterfeit parts, the supplier shall only purchase components and parts procured directly from the Original Component Manufacturer (OCM)/Original Equipment Manufacturer (OEMs), or through the OCM authorized distributor chain. Procurement through an Independent or non-franchised distributor or broker is strictly forbidden without prior written authorization from UEC RF Microwave. Reference document SAE AS5553, "Counterfeit Electronic Parts; Avoidance, Detection, Mitigation and Disposition".

Q27 Overseas Drop Ship Requirements (added by buyers on PO)

Each Shipment overseas must include the following:

- Packing Slip
- Invoice
- Copy of actual Air Waybill (AWB)

In addition to including the documents with the shipment, please e-mail all the above to the appropriate UEC RF Microwave buyer and Supplier.

Q28 Specialty Metals

(Applies only on shipments made to UEC RF Microwave United States locations)
Compliance to DFAR 252.225-7014 "Preference for Domestic Specialty Metal" is necessary when providing any items containing specialty metals as listed in the document.

Q29 Pure Tin Prohibition

Pure tin (>97% by volume) is unacceptable as a base material, coating, plating, or termination for any product procurement referencing this clause.

Q30 RoHS Compliance

UEC RF Microwave, Inc., services in the military and aerospace market and therefore cannot accept products processed with Lead Free Solder unless specifically authorized by UEC RF Microwave.

For parts that UEC RF Microwave specifically requires RoHS compliance the following applies:

The Reduction of Hazardous Substances (RoHS) Directive 2002/95/EC of the European Parliament and the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment has been adopted. Article 4 requires from 1 July 2006, new electrical and electronic equipment put on the market shall not contain the following elements or substances:

- 1) lead
- 2) mercury
- 3) cadmium
- 4) hexavalent chromium
- 5) polybrominated biphenyls (PBB)
- 6) polybrominated diphenyls ether (PBDE)

A) RoHS Compliance Plan: If the supplier is not currently RoHS compliant, the supplier shall report to the UEC RF Microwave buyer the implementation plan to eliminate the listed elements/substances and the target date for incorporation. The Certification of Compliance shall declare the restricted element/substances used in the materials, processes or products furnished in this order.

B) RoHS Full Compliance: Suppliers which are currently in Full RoHS Compliance shall include a statement in the Certification of Compliance that the materials, parts or products furnished on this order are RoHS Compliant.

Q31 (unused)

Q32 Designated Sources

Suppliers shall use UEC RF Microwave designated product or process sources or other approved external providers. Applicable NADCAP process suppliers for special processes are acceptable for use.