

Purchase Order Quality Clauses

Section II: Quality Rider Provisions – The following are Quality Riders and are applicable as identified on the individual Purchase Order(s);

001 Quality System

See Section I: General Quality Assurance Requirements Applicable to All Purchase/Subcontract Orders.

002 Government/Customer Right of Access

See Section I: General Quality Assurance Requirements Applicable to All Purchase/Subcontract Orders.

003 SV In-Process Source Inspection

If listed as a separate line item on the PO, in-process Source Inspection will be performed by SV Microwave. Notification of Source Inspection dates shall be made through SV Purchasing and shall allow a minimum of two working days for allocated travel of SV Quality Representative.

004 SV Final Source Inspection

If listed as a separate line item on the PO, Final Source Inspection will be performed by SV Microwave. The Supplier shall permit inspection of this order by an SV Quality Representative. Notification of Source Inspection dates shall be made through SV Purchasing and shall allow a minimum of two working days for allocated travel of SV Quality Representative.

005 First Article

If listed as a separate line item on the PO, First Article Inspection will be performed and results delivered to SV Microwave with the product.

The “First Article” shall be done in accordance with AS9102, current revision published at the time of the inspection.

One (1) legible and reproducible copy of the Supplier’s Inspection Report shall accompany the “First Article” submitted. This report shall contain, as a minimum, the following:

If the product on which the “First Article” report was made changes in any way, a new report is required. The new “First Article” report may cover only the changed items and those items affected by the change. Specific details on those items proposed for inspection shall be submitted with the request for the abbreviated “First Article”.

Inspection performed on a prototype product is not considered to be a “First Article” and cannot be used in lieu of one without written concurrence of SV Microwave.

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006 Part Substitution Not Permissible

See Section I: General Quality Assurance Requirements Applicable to All Purchase/Subcontract Orders.

007 Traceability of Materials – General

See Section I: General Quality Assurance Requirements Applicable to All Purchase/Subcontract Orders.

008 Lot Control

See Section I: General Quality Assurance Requirements Applicable to All Purchase/Subcontract Orders.

009 Limited Life /Temperature or Light Sensitive Material

If parts have limited life or are Temperature or Light Sensitive, the supplier shall, in addition to the prescribed identification of the deliverable items, label each container with the date from which the specified life period begins. Any other special handling, storage, or identification requirements shall also be described on the container. These identification requirements shall be recorded on any required certifications and on the shipping documents for the material. The manufacturer's batch or lot number shall be marked on each unit package. Upon receipt of this material at SV, a minimum of 75% of its shelf life must remain.

010 Static Sensitive Devices – Handling, Packaging and Marking

If parts are static sensitive, the seller shall implement an electrostatic discharge (ESD) program in accordance with ANSI/ESD S20.20. Product packaged for shipping shall be labeled to alert all handlers that the devices require special handling.

011 Material/Parts/Wire Identification

See Section I: General Quality Assurance Requirements Applicable to All Purchase/Subcontract Orders.

12 Certificate of Conformance

See Section I: General Quality Assurance Requirements Applicable to All Purchase/Subcontract Orders.

013 Deleted

014 Original Manufacturer's Certificate of Conformance

Each shipment shall be accompanied by a legible Certificate of Conformance stating that the product ordered complies with the requirements of the Purchase Order and shall also be accompanied by a Certificate of Conformance by the original Manufacturer of the product being procured. The Certificate of Conformance shall include as a minimum;

- a. Manufacturer's name and address
- b. Part Number, Revision, Lot Number/Date Code

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015 Material Certs

See Section I: General Quality Assurance Requirements Applicable to All Purchase/Subcontract Orders.

016 Calibration – NIST

See Section I: General Quality Assurance Requirements Applicable to All Purchase/Subcontract Orders.

017 Inspection Records

If listed as a separate line item on the PO, each shipment shall be accompanied by a legible and reproducible copy of an actual inspection report, identifiable with the items shipped. The report shall be authenticated with the signature of the authorized Seller representative performing the inspection and must ensure conformance to the specification requirements.

018 Best Commerical Packaging

See Section I: General Quality Assurance Requirements Applicable to All Purchase/Subcontract Orders.

019 Individual Packaging

If listed as a separate line item on the PO, parts shall be adequately packaged to prevent damage during handling and shipment. Parts shall be individually wrapped, bagged, or otherwise protected to prevent part-to-part contact/damage when packaged within a larger pack. The Supplier shall be responsible to determine the method of packaging to assure adequate protection during transit.

020 Deleted

021 DFAR Compliance

See Section I: General Quality Assurance Requirements Applicable to All Purchase/Subcontract Orders.

022 Single Lot Traceability

If listed as a separate line item on the PO, all product shipped on each line item of each PO, must be from a single lot traceability of raw material(s)/plating. Multiple raw material traceabilities must be approved by SV prior to shipping.

- Single Lot Traceability on Chips is defined as all chips of the same value, produced during the time period that the current PO is open and active and which was produced using procedures/processes that were at the current revision(s) as stated on the PID documents. All chips must be shipped and certified as a complete lot.

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023 Plating Requirements

Plating Thicknesses: A minimum of 5 plating thickness readings (XRF) must be recorded and sent with each plated lot. Thicknesses must be reported on all layers of plating, including any under plating.

Adhesion Test: One piece will be crushed by the plater and analyzed for adhesion of the plating to each underplate layer and to the base material. This sample will be packaged separately, identified as "Crust Test" and delivered with the parts.

Center Pin Coverage: The socket contact ID must meet the minimum required plating thickness to a depth of .040 inch minimum, or 40% of the depth if the total socket is less than .100. The plating on non-significant surfaces in the ID shall be of sufficient thickness to ensure plating continuity and uniform utility and protection. This plating may consist of a nickel underplate only, unless the SV plating specification states otherwise.

AMS 2700 Passivation (NADCAP Only)

The Copper Sulfate test will be performed by the plater in lieu of other specified corrosion tests. Samples shall be segregated, identified as destruct samples and delivered with the parts.

024 ITAR Notice

See Section I: General Quality Assurance Requirements Applicable to All Purchase/Subcontract Orders.

025 Counterfeit Material Avoidance

See Section I: General Quality Assurance Requirements Applicable to All Purchase/Subcontract Orders.

026 Silver Coated Copper Wire – Corrosion Control (SV WI QA 009.1.1)

All Purchase Orders with a "J" suffix in the Purchase Order number are required to be delivered to SV Microwave per the following:

- All cable/wire supplied will have a 2 year shelf life (from the date of manufacturer). Any deviation to this must be approved by SV prior to shipping.
- All cable/wire supplied must have 80% of the 2 year shelf life (from date of manufacturer) when received at SV.
- All cable/wire supplied must be from a single lot. If single lot cannot be shipped, an additional 3 ft of cable must be delivered for every lot of cable and each lot must be shipped separately and identified with a separate lot number.

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- All cable/wire (shielded and unshielded) received must be in a sealed package containing desiccant.
 - Bagging material, if used, must be polyethylene.
 - Continuous lengths of cable/wire must have ends sealed using heat shrinkable caps or an equivalent method for preventing ingress of water (liquid and/or vapor).
- All cable/wire will be inspected for evidence of “red plague” at SV Incoming Inspection. If any is found, material will be returned to supplier(s).

027 Foreign Object Debris (FOD)

- Supplier(s) must have an active, documented Foreign Object Debris process with the intention of preventing introduction of Foreign Objects into any item delivered under this Purchase Order (PO).
- The Supplier must use appropriate methods and practices to assure timely removal of residue/debris generated, if any during the manufacturing process.
- The documented program should be sufficient depending on the probability of the design of the product to allow for entrapment.

028 Conflict Minerals Reporting

See Section I: General Quality Assurance Requirements Applicable to All Purchase/Subcontract Orders.

029 Calibration

Reports received from an outside Calibration Laboratory must contain the following:

1. Certification Number
2. Date of Certification
3. Identification Number
4. Accuracy of Standards
5. Nominal Value
6. Deviation from Nominal
7. Corrections
8. Traceability to NIST
9. Statements of meeting BS/EN/ISO/IEC17025-2005 and/or ANSI/Z540.1
10. Calibration Sources
11. Calibration assigned value statement of uncertainty
12. Environmental Conditions

If above criteria is not met, SV will issue a Non-Conformance.