

# VOLTAGE MULTIPLIERS, INC.

## QUALITY SUPPLEMENT TO PURCHASE ORDERS

The requirements of this supplement apply to the purchase order to which it is attached / referenced, to the extent applicable. Acceptance of the purchase order by the vendor constitutes acceptance of this supplement as a part of the purchase order without claim for additional costs. As used herein, the words “vendor” and “supplier” are synonymous.

### EXPORT/IMPORT/ITAR COMPLIANCE

**Warning:** Information furnished to seller under this purchase contract may contain data subject to U.S. Export Laws and Regulations. Seller is advised that such data may not be exported or re-exported to foreign persons, employed by or associated with, or under contract to seller or seller’s lower-tier suppliers, without the prior written consent of Voltage Multipliers, Inc., and under the authority of an export license or applicable license exemption. If such data is marked as export controlled, seller shall indemnify and hold buyer harmless from and against any and all claims, liabilities and expenses resulting from sellers failure to comply with the Export Laws and Regulation of the United States

### 1.0 REQUIREMENTS APPLICABLE TO ALL PURCHASED ASSEMBLIES, PARTS AND MATERIALS

1.1 **SUPPLIER RESPONSIBILITY:** Suppliers of products and services to VMI are responsible for conformance to all requirements of documents listed on the purchase directly or by reference on a listed document. Purchase orders which list VMI drawing numbers will also indicate the applicable revision level. The applicable revision of the other documents shall be the issue in effect as of the purchase order date unless otherwise stated. By delivery of items on this order, the supplier certifies that all items delivered comply with all requirements of the applicable specifications. Furthermore, the supplier shall make available to the buyer all inspection results or test data necessary to support evidence of such compliance.

1.2 **MANDATORY REQUIREMENTS:** Suppliers are cautioned to examine carefully all referenced documentation that in total describes the product or service, the quality, the records and the controls that are required for adequate conformance. The requirement of listed and supplementary documents are mandatory to the extent they are applicable to the product or service furnished unless specified exemption in writing is obtained for the Purchasing Department of VMI. Parts and materials furnished as part of the delivered item or, in the case of distributors, furnished as the delivered item shall have been purchased in a manner to insure conformance to the applicable specifications and are subject to adequate controls.

1.2.1 **COUNTERFEIT PREVENTION REQUIREMENT:** Counterfeit Item is defined to include, but is not limited:

- An item that is an illegal or unauthorized or substitute of an Original Equipment Manufacturer (OEM) or Original Component Manufacturer (OCM) item.
- An item that does not contain the proper external or internal materials or components required by the OEM or OCM or that is not constructed in accordance with OEM or OCM design, but is represented as such.
- An item that has not successfully passed all OEM or OCM required testing, verification, screening and quality control but that Seller represented as having met or passed such requirement.
- An item with label or other marking intended, or reasonably, likely, to mislead a reasonable person into believing anon-OEM or OCM item is a genuine OEM or OCM item when it is not.

Authorized Distributor is a distributor with OEM or OCM contractual agreement to stock, repackage, sell and distribute OEM or OCM product. Seller is not authorized to deliver any item procured from sources other than OEM or OCM without prior written authorization.

Seller shall maintain Counterfeit Risk mitigation process.

When procuring from an independent distributor with customer approval, Seller must submit following:

- Results of authentication test and analysis conducted .
- Traceability with identification, date code /lot code.
- Identification of traceability to source for any remarked or resurfaced material.

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1.2.2 CONFLICT MATERIALS REQUIREMENTS: VMI is legally obligated to report and perform the due diligence requirements found in the Dodd Frank Wall Street Reform and Consumer Protection Act of 2010, Section 1502. This translates into a requirement for VMI to determine the origin of the conflict materials (tantalum, tin, tungsten and gold – 3T’s and G) contained within any product they manufacture and supply. VMI must engage with all sellers within its supply chain to determine the presence and origin of any conflict materials. Conflict minerals verified to have come from scrap or recycled sources of conflict materials are considered “Conflict Free”. U.S. Publically traded suppliers registered with the SEC\* that are unable to make a conflict mineral determination for any reason require an independent private sector audit and shall submit their SEC required reports to the SEC and to VMI.

\*SEC website - <http://www.sec.gov/rules/final.shtml>

1.3 INSPECTION SYSTEM: Where a MIL, ISO or AS specification for an inspection/Quality System are not invoked by one of the clauses, the supplier’s inspection shall provide for the following as a minimum:

- a) Control of product quality
- b) Inspection and acceptance prior to shipment and records showing such action.
- c) Drawing control and raw material control.
- d) Use of ANSI/ASQC Z1.4-2003, or equivalent, sampling plan when sampling in lieu of 100% inspection is applied.
- e) Control of nonconforming materials.
- f) Corrective action for in-house or customer reported defects including timely response to a customer request for corrective action response,
- g) Handling, packaging and shipping to preclude damage.

1.4 STORED MATERIALS: Material shall be stored and retrieved using the First In First Out system (FIFO).

1.5 HAZARDOUS MATERIAL: Mercury Free Products/Ozone Depleting Chemicals. Product shall be free of ozone depleting chemicals (with the exception that solder does contain lead) and not contain functional mercury or be contaminated with mercury.

Material Safety Data Sheet. The supplier will supply with product a safety data sheet for the specified product purchased by VMI. The Material Safety Data Sheet (MSDS) shall conform to OSHA’s hazard communication standard 29 CFR 1910.9200.

1.6 CALIBRATION SYSTEM REQUIREMENTS: The supplier must maintain a calibration system in accordance with MIL-STD-45662, ISO10012-1, or NCSL A540.1 to control the accuracy of devices used to verify the acceptability of materials, equipment or services in the performance of this contract.

1.7 SURVEILLANCE: During purchase order performance, VMI, its customer and/or regulatory agency may visit the supplier’s facilities to monitor the items being manufactured for VMI to determine and verify the quality of work, records and material(s). The representative may audit both the product and the Quality/Inspection system to determine compliance with quality and/or regulatory requirements. VMI will provide advance notification of such visits, whenever possible, to avoid disruption of planned schedules.

1.8 CERTIFICATE OF CONFORMANCE: A C of C is required with each shipment. VMI reserves the right to require objective quality evidence to support the C of C when the quality of the material furnished is suspect for any reason.

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- 1.9 **DISTRIBUTORS:** are not expected to have on file data or records normally retained by the manufacturer. Distributors will satisfy the requirements for quality records by retaining records showing procurement in accordance with the referenced specifications and obtaining upon request by VMI, the objective quality evidence from the product manufacturer.
- 1.10 **PURCHASE ORDER CHANGES:** Only the Purchasing Department of VMI is authorized to negotiate a purchase order change or to agree to waiver any purchase order requirement.
- 1.11 **NONCOMFORMING MATERIAL:** The supplier shall not ship or make any unauthorized repairs to product with the intent of delivering material that does not fully meet the purchase order or product specification requirements. The Supplier shall notify VMI of potential nonconformances prior to shipment. Authorization to ship nonconforming material may be approved with prior notification and approval from VMI.
- 1.12 **PRODUCT OR PROCESS CHANGES:** Changes to product design, materials or processes, which effect form, fit, function, performance, quality, reliability or safety shall not be implemented without written approval of VMI.
- 1.13 **SELLER SUB-TIER SUPPLIES:** Seller shall flow-down to Sub-tier suppliers, the applicable quality requirements in the Purchase Order including all Key Characteristics, where applicable.
- 1.14 **SUPPLIER RECORDS:** Records that are created by and/or retained by the supplier that supports product delivered to VMI shall be controlled in such a manner to remain legible, readily identifiable and retrievable. Records of product quality shall be retained by the supplier for a minimum of 5 years unless otherwise stated on the purchase order.

**2.0 REQUIREMENTS APPLICABLE TO SPECIFIC CATEGORIES OF PARTS, ASSEMBLIES, CASTINGS AND RAW MATERIALS**

- 2.1 **ELECTRONIC COMPONENTS, PARTS, ASSEMBLIES AND HARDWARE:** Solvent and heat resistance requirements: The part and its markings shall not be adversely affected during or as a result of wave or dip solders consisting of fluxing with a QPL approved RMA flux and wave or dip soldered with exposure for no more than 10 seconds to 500°F. Resistance to solvents shall meet the requirements of MIL-STD 202, Method 215 if no other specification for resistance to solvents is stated.
- 2.2 **PRINTED WIRING BOARDS:** Solder plate reflow and manufacturing logo: The P.C. board manufacturer shall etch or stamp in permanent ink his logo or other identification on each P.C. board under this purchase order.
- 2.3 **AGE SENSITIVE MATERIAL:** Applies to synthetic rubber (elastomeric) products, potting compounds, shrinkable tubing, epoxies, age sensitive adhesives, sealants, compounds and paints. C of C for age-sensitive materials shall contain the following as a minimum: date of manufacture, shelf life expiration and storage conditions to achieve shelf life, if not stated on the material package. To be acceptable, product shall have a minimum of 75% of its total shelf life remaining when received by VMI.
- 2.4 **MIL-SPEC COMPONENTS:** When components are being order by the MIL specification part number, the requirements of the applicable MIL specification are invoked even when the specification number is not included on the purchase order.

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QUALITY ASSURANCE CLAUSES**

**NOTE: CLAUSES APPLICABLE ONLY WHEN SPECIFICALLY REFERENCED BY CLAUSE LETTER ON THE PURCHASE ORDER.**

CLAUSE (A)	GOVERNMENT SOURCE INSPECTION. Government Inspection is required prior to shipment from your facility. Upon receipt of the order , promptly notify the Government Representative who normally services your plant so that appropriate planning for Government Inspection can be accomplished. In the event the representative or office cannot be located, our purchasing agent should be notified immediately. A reproducible copy of Government Source Inspection shall be submitted with each shipment.
CLAUSE (B)	VOLTAGE MULTIPLIERS, INC. FIELD INSPECTION. VMI Field Inspection is required prior to shipment from your facility. Notify VMI Purchasing forty-eight (48) hours in advance of the time VMI Field Inspection will be required, and prior to notification of the Government Representative when Clause A is invoked concurrent with Clause B.
CLAUSE (C)	CERTIFICATE OF CONFORMANCE (C of C). The seller is required to furnish a C of C with each lot shipped.
CLAUSE (D)	SERIALIZED DATA. Serialized Test/Inspection data is required for the serialized product being supplied. The data forms shall show applicable limits and measured data. The forms shall be signed by the suppliers cognizant quality representative(s).
CLAUSE (E)	EVIDENCE OF QUALIFICATION TESTING. The supplier is required to furnish objective evidence that the items comparable to those being supplied have successfully completed qualification tests required by the applicable specifications.
CLAUSE (F)	FIRST ARTICLE INSPECTION. The seller shall deliver First Article for inspection and acceptance by VMI. The supplier shall be released for Production upon written authorization by VMI purchasing upon acceptance of the First Article delivered.
CLAUSE (G)	MIL-I-45208. The Inspection System Specification MIL-I-45208 is deemed applicable to this purchase order. If the nature of the material to be supplied or the supplier's organization makes any section of MIL-I-45208 inappropriate, the supplier shall request exemption by VMI Quality Assurance through VMI Purchasing.
CLAUSE (H)	AGE SENSITIVE MATERIAL. Applies to synthetic rubber (elastomeric) product, potting compounds, shrinkable tubing, epoxies, age sensitive adhesives, sealants, compounds and paints. A C of C for age-sensitive materials shall contain the following as a minimum: date of manufacture, shelf life expiration date and storage conditions to achieve shelf-life, if not stated on material package. To be acceptable, product shall have a minimum of 75% of its total shelf life remaining when received by VMI.
CLAUSE (I)	ELECTRONIC COMPONENTS, PARTS, ASSEMBLIES AND HARDWARE. Solvent and heat resistance requirements: The part and its markings shall not be adversely affected during or as a result of wave or dip solders, consisting of fluxing with a QPL approved RMA flux and wave or dip soldered with exposure for no more than 10 seconds to 500°F. Resistance to solvents shall meet the requirements of MIL-STD-202, Method 215 if no other specification for resistance to solvents is stated.
CLAUSE (J)	SOLDERABILITY. The material/component purchased shall have a solderable finish that conforms to the solderability requirements of MIL-STD-202, Method 208, as a minimum.
CLAUSE (K)	QUALITY MANAGEMENT SYSTEM: (a) The supplier shall maintain a QMS that is in accordance with ISO9001:2008. (b) The supplier shall maintain a QMS system in accordance with AS9100.

## **Revision History**

Rev. C, 11-2-09

Quality Supplement to Purchase Orders

Pg. 1, Added Export Clause

Added para. 1.4 and 1.5

Pg. 2, Added para. 1.6

Change requested by J. Bean Reason: Process update

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Rev. D, 9-10-13 Added Para 1.2.1 COUNTERFEIT PREVENTION REQUIREMENT:

Change requested by J. Bean Reason: Incorporate requirements for flow down of counterfeit prevention.