

DIVERSE ELECTRONICS PRODUCT INSPECTION POLICIES & PROCEDURES

Diverse Electronics is a strong proponent of best industry practices to help minimize risk and prevent issues as it serves the North American electronic component market.

An **ERAI** member since 1993 and **ISO 9001:2015**-certified, Diverse Electronics is pleased to also have a comprehensive inspection policy in place as an **IDEA** standards practitioner. **IDEA**, the *Independent Distributors of Electronics Association*, is dedicated to responsible procurement initiatives for the global supply chain. Diverse, in its ongoing efforts to meet or exceed industry standards, adheres strictly to **IDEA 1010-B** inspection policies and standards for all its incoming product.

Warehouse staff complete annual training to remain up-to-date and knowledgeable on new inspection techniques and latest industry developments. In addition, warehouse staff are trained to handle all components according to the latest ESD S20.20 standards, following a verification checklist also applicable to all incoming products.



Incoming Product Verification Responsibility

The QC Department (*Quality Control*) is responsible for performing incoming inspection and parts verification while being fully knowledgeable on industry packaging, packing and shipping processes and protocols. Only trained and qualified personnel are permitted to perform Receiving, QC, and Inspection Verification processes and standards.

Product Verification Procedures

Upon verification at Diverse Electronics' Receiving Department, products and packaging are photographed, and paperwork validated. Any issues with parts, packaging, or paperwork (possible tampering, shipping damage, etc.), are immediately identified, noted and entered into the inspection system with relevant photographs, paperwork and product specifications for quick and easy reference, and readily available for the next verification stage.

Standard procedure dictates that all packages are opened and parts verified per industry and customer requirements, as well as manufacturer specifications. Exceptions to this standard procedure are permitted only upon the request of the customer and as authorized by the Director of Quality or Operations Manager.

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Verification of Packaging Requirements

Following the initial inspection, parts then proceed to the official visual inspection, which includes verification of each of the following steps:

- Ensuring there are no cracks or damage to the product casing
- Ensuring that packaging is clearly marked with content, and there are no typographical errors, identifying and noting any discrepancies
- Verification of and ensuring that ESD and MSL-sensitive devices are packaged appropriately, per industry standard packaging
- Verification of tubes, reels, and trays, ensuring damage-free, correct packaging

Verification Requirements for Parts

At the product review stage, parts are required to undergo the following verification procedures:

- Look for and identify any typographical errors on parts, labels and packaging
- Ensure packaging is consistent and parts are uniform, facing the same direction
- Ensure the Part Number, Date Code, and Manufacturer match the Purchase Order
- Verify that the Manufacturer Name, Logo, and Part Number match the Manufacturer spec sheet
- Confirming the country of origin is consistent throughout same lot/date codes
- Verify that parts have not been altered in any way, checking for additional coatings, blacktopping, and/or ghost markings
- Look for and identify any part surface anomalies, including scratches or sanding marks
- Verify there are no missing pins or leads, and are all consistent and uniform
- Ensure that pins/leads are not scratched, marked, bent or straightened as if having been removed from a circuit board
- Verify there is no solder on parts or leads
- Confirm there is no corrosion, tarnishing or oxidation on parts or leads

Completion of Verification Process Identification of Status

Upon the completion of each analysis stage, any anomalies or inconsistencies are photographed, noted and logged, with each stage being assigned a Pass/Fail score.

Diverse Electronics maintains strict controls, processes and guidelines for its Pass/Fail criteria. Products identified as non-conforming, suspect or fail are identified as such and placed in Quarantine. Quarantined parts are then processed per Diverse Electronics' Operating Procedures for the Control of Non-Conforming and Suspect Parts.

Diverse Electronics uses these systematic identification stages and parameters in its *Inspection Checklist* for all trained, authorized employees, ensuring consistent, accurate, and complete inspections and an inspection policy designed to aid in preventing issues and minimizing risk.

