



Reference 2Q4 2137407 Rev 18

Prototype Inspection/Verification Requirements

Dimensional results

Supplier shall provide evidence that dimensional verification, as required by the design record (2D Drawing) and/or the Prototype Control Plan, has been completed and results indicate compliance with specified requirements. Unless otherwise specified, the minimum dimensional verification shall include:

Sampling Inspection Plan

Sampling inspection plans shall consider the process used to make the parts and the associated risks. Sampling requirements, including inspection method will be determined by Osram engineering. General requirements are:

- 100% Inspection for all dimensions on a minimum of 6 parts for each unique manufacturing process, such as: cavities, molds, patterns or dies; shall be completed for each batch/lot.
- Capability studies on all Special Characteristics (SC) and Critical Characteristics (CC), minimum of 30 parts, for each unique manufacturing process, such as: cavities, molds, patterns or dies. If order quantities are less than 30 pieces, 100% inspection is needed for all SC's and CC's. 100% inspection is also required for characteristics not meeting minimum 1.67 Ppk.
- Sampling inspection on selected characteristics should comply with the table below. The Inspection Quantity shall be evenly distributed throughout the batch/lot size and shall include the first and last part manufactured.

Batch/Lot size	< 65	66-110	111-180	181-300	301-500	501-800	801-1300
Inspection Quantity	4	5	7	10	15	20	25

- The supplier shall indicate the date of the design record, change level, and any authorized engineering change document not yet incorporated in the design record (sketches, tracings, cross sections) to which the part was made. The report shall also include date parts were made and measured.

Submitted samples shall be identified (serialized) to allow traceability back to the dimensional inspection report.

A tracing shall be included when an optical comparator is necessary for inspection.

Note: All dimensions (except reference dimensions), characteristics, specifications and notes included in the design record and/or Prototype Control Plan should be listed in a convenient format with the actual results recorded. A ballooned drawing(s) shall accompany the report.

Material Rest Results

- The supplier shall perform tests for all part(s) and product material(s) when chemical, physical, mechanical and metallurgical requirements are specified by the design record and/or Prototype Control Plan. The minimum requirement for all suppliers shall be to provide a copy of the Material Certification data for all parts

The supplier shall indicate the design record change level of the parts tested, the number of parts tested, and the change level of the specifications.

Any deviation noted in the Dimensional Results and Records of Material Performance Test Results must be Approved by the responsible Osram Engineer prior to shipment of product