Product
Specification

TE Connectivity Optic Clip, type 1

DESIGN OBJECTIVES
The product described in this document has not been fully tested to ensure conformance to the requirements outlined below. Therefore, TE Connectivity (TE) makes no representation or warranty, express or implied, that the product will comply with these requirements. Further, TE may change these requirements based on the results of additional testing and evaluation. Contact TE Engineering for further details.

1. SCOPE

1.1. Content

This specification covers performance, tests and quality requirements for TE Connectivity Optic Clip, type 1.

1.2. APPLICABLE DOCUMENTS

The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the latest revision of the document applies. In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

1.3. Tyco Electronics Documents

- 114-32053: Application Specification
- 501-19190: Qualification Test Report.
- 2213194 Product Drawing.
- TE Connectivity Specification 109-1: General requirements for Test Specifications.

1.4. Commercial Standards

- EIA-364: Electrical Connector/Socket Test Procedures Including Environmental Classifications

2. REQUIREMENTS AND TESTING PROCEDURE.

SAMPLE PREPARATION

The samples for testing must be selected at random from the current production and shall be in accordance with relevant drawings. All samples shall be stored during 1 day at 50% Relative Humidity.

SAMPLE COMPOSITION

Each test group shall consist of 3 optic clips.

2.1. Ratings

Operating temperature -40 to ≤ 105 °C

2.2. Performance and Test Description

Product is designed to meet the mechanical and environmental performance requirements specified in Par. 2.3 below. Unless otherwise specified, all tests shall be performed at ambient environmental conditions per EIA-364.

2.3. Test Requirements and procedures.

1. PRODUCT EXAMINATION		
TEST	***REQUIREMENT***	***PROCEDURE***
1.1 Product Confirmation	The product shall meet the requirements of related drawings.	Visual, dimensional and functional inspection, according to the Quality Inspection Plan.
1.2 Visual Examination	The product shall not have visible marks of damage, break or defect before and after the execution of the tests.	EIA-364-18.

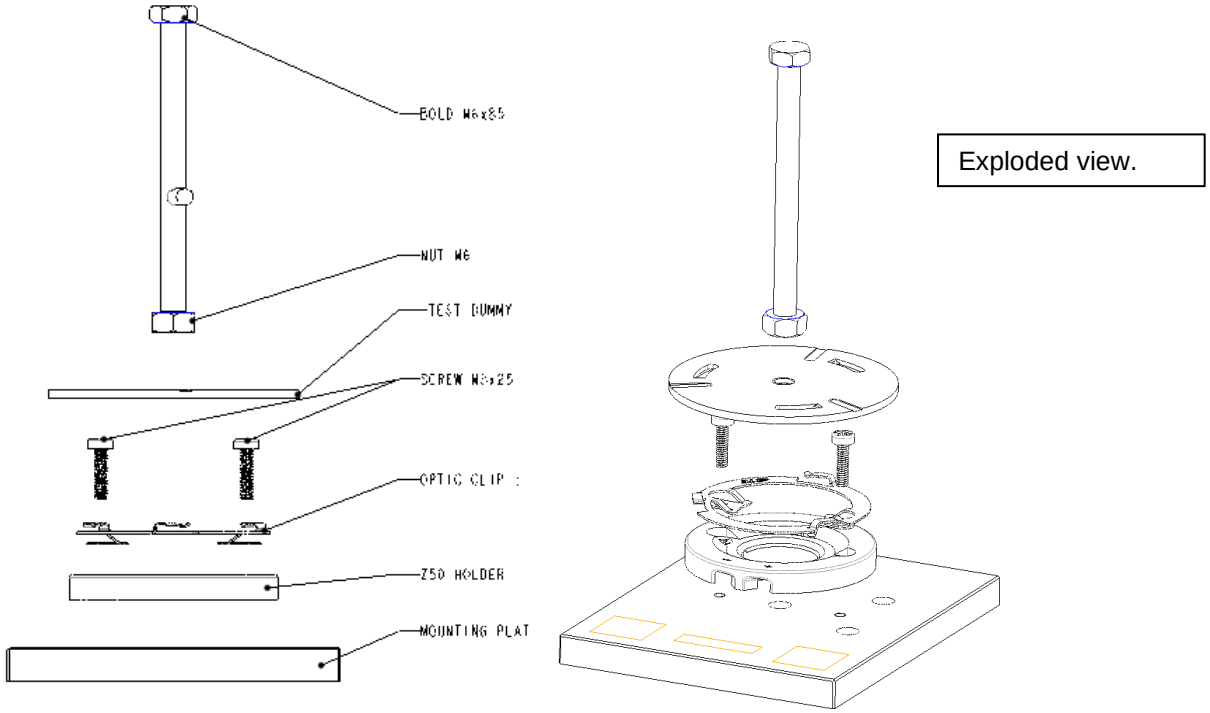
2. MECHANICAL REQUIREMENTS		
TEST	***REQUIREMENT***	***PROCEDURE***
2.1 Determine actual clamp force withstand values at 4 different locations. (See picture 2)	Sidewards force 1N min. at 0.2 mm. max. offset of mating position. (probe pos. 1) *(This represents actual 0.32mm. max. displacement at bold head location, length distance from mating position 81mm.)* 2N at 0.2 mm. max. offset of mating position. (probe pos. 2) 2N at 0.2 mm. max. offset of mating position. (probe pos. 3) 1.5N at 0.2 mm. max. offset of mating position. (probe pos. 4)	EIA-364-13. Measure force necessary to lift the test jig at a maximum rate of 12.7 mm per minute max. 0.2 mm. offset of mating position in axial direction. (Probe positions 2,3,4) Measure force necessary to push the test jig at a maximum rate of 12.7 mm per minute max. 0.2 mm. offset of mating position. (Probe positions 1)

Note 2. Must meet visual requirements, show no physical damage, and meet requirements of additional tests as specified in the Product Qualification Test Sequence show in figure chapter 3.

3. QUALIFICATION TEST SEQUENCES.

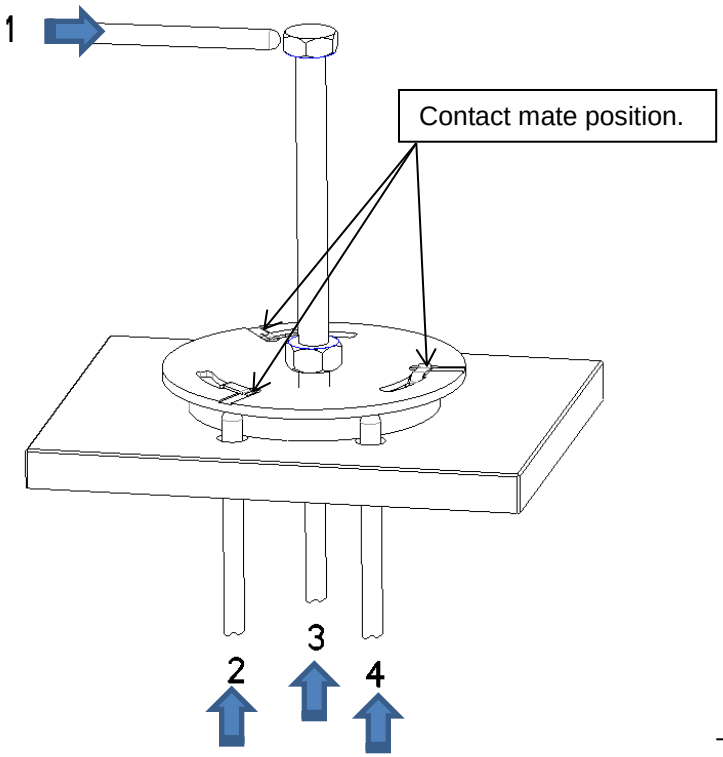
	SAMPLE DESCRIPTION	TEST GROUP	
		A	
	Optic clip type 1	3	
TEST	**DESCRIPTION**	**TEST SEQUENCE**	
1.2	Visual examination	1,3	
2.1	Clamp force	2	

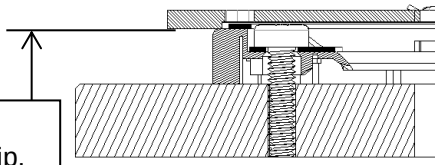
Picture 1. Test-jig part description:



Exploded view.

Picture 2. Test-jig setup and measure positions:





Picture 3.
Mating position clip.

Measurement position probe 1:

Press between 2 clips approximate at bold head as shown. (Bold head position appr. 81mm distance from mating position)

Measurement position probe 2:

Press direct below contact mate position.

Measurement position probe 3:

Press in center off dummy probe.

Measurement position probe 4:

Press between 2 contact mate positions