



NOTE

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.

MAG-MATE* Poke-In Tab Housing

1. SCOPE

1.1. Content

This specification covers performance, tests, and quality requirements for MAG-MATE* Poke-in tab housing 2825529-1 designed to accept MAG-MATE Poke-in Tab terminal PN 62896-1.

1.2. Qualification

When tests are performed on the subject product line, procedures specified in Figure 1 shall be used. All inspections shall be performed using the applicable inspection plan and product drawing.

1.3. Qualification Test Results

Successful qualification testing on the subject product has been completed. Results of the test are documented in qualification test report 501-64017.

1.4. Revision Summary

Revisions to this specification include:

- Initial release of specification
- Release to Active state – Rev A

2. APPLICABLE DOCUMENTS AND FORMS

The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the latest edition 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.

2.1. TE Connectivity Specifications

114-2050	Application Specification
501-64017	Qualification Test Report

2.2. Commercial Standards and Specifications

IEC 60512	International Standard – Connectors for Electronic Equipment – Tests and Measurements
EIA-364	Electrical Connector/Socket Test Procedures Including Environmental Classifications

2.3. Reference Documents

109-1	General Requirements for Testing
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3. REQUIREMENTS

3.1. Design and Construction

Product shall be of the design, construction, materials and physical dimensions specified on the applicable product drawing.

3.2. Materials

Materials used in the construction of this product shall be as specified on the applicable TE drawing.

A. Housing: PBT 10% GF

3.3. Ratings

A. Voltage Rating: 240VAC

B. Temperature Rating: -20°C to +130°C

3.4. Performance Requirements and Test Description

The product should meet the electrical, mechanical and environmental performance requirements specified in Figure 1. All tests shall be performed at ambient environmental conditions otherwise specified.

3.5. Test Requirements and Procedure Summary

Test Description	Requirement	Procedure
Examination of product	Meets requirements of product drawing	EIA-364-18 Visual, dimensional and functional per applicable inspection plan
Electrical		
Dielectric withstanding voltage	1.0 kilovolts AC at sea level. 60 second hold.	EIA-364-20 and IEC 60512-4-1 Test between adjacent terminals of mated sample.
Mechanical		
Contact retention in housing (closed condition)	22N minimum per contact	TE spec 109-30-1. Apply axial load to crimped contacts in housing by gripping the wire.
Connector engaging force into Mating part (with terminals)	70N maximum	TE spec 109-35. Measure force necessary to engage Poke-in connector into Mag-Mate cavity block geometry specified in Application specification 114-63017.
Connector separating force from the mating part (with terminal)	30N minimum	TE spec 109-35. Measure force necessary to separate Poke-in connector from Mag-Mate cavity block geometry specified in Application specification 114-63017.
Environmental		
Heat resistance	No signs of blistering, delamination or degradation of physical properties.	EIA-364-17 Subject connector to 163°C for 6 hours.
Thermal Shock	No signs of blistering, delamination or degradation of physical properties.	EIA-364-32 Subject terminations to 25 cycles between -65°C and 125°C Specimens shall be mated with stator part with terminals.

Figure 1



NOTE

Shall meet visual requirements, show no physical damage, and meet requirements of additional tests as specified in the Product Qualification and Requalification Test Sequence shown in Figure 2.

3.6. Product Qualification and Requalification Test Sequence

TEST OR EXAMINATION	TEST GROUP (a)				
	1	2	3	4	5
	TEST SEQUENCE (b)				
Examination of product	1, 3	1, 3	1, 4	1, 3	1, 3
Dielectric withstand voltage	2				
Contact retention in housing		2			
Connector engaging force into Mating part			2		
Connector separating force from the mating part			3		
Thermal shock				2	
Heat Resistance					2

Figure 2



NOTE

(a) See paragraph 4.2.

(b) Numbers indicate sequence in which tests are performed.

4. QUALITY ASSURANCE PROVISIONS

4.1. Test Conditions

Unless otherwise specified, all the tests shall be performed in any combination of the following test conditions shown in Figure 4.

Temperature	15°C – 35°C
Relative Humidity	45% – 75%
Atmospheric Pressure	86.6 – 106.6 kPa

Figure 4

4.2. Qualification Testing

A. Specimen Selection

Specimens shall be prepared in accordance with applicable instruction sheets and shall be selected at random from current production. Each group shall consist of 6 device under test and assembled with standard MAG-MATE terminal and cavity. All terminals shall be terminated in accordance with specification 114-2050.

B. Test Sequence

Qualification inspection shall be verified by testing specimens as specified in Figure 2.

C. Acceptance

1. Requirements put on test samples, as indicated in the requirements portion of Figure 1, exist as either the upper or lower statistical tolerance limit (95% confidence, 99% reliability). All samples tested in accordance with this specification shall meet the stated tolerance limit.
2. Failures attributed to equipment, test setup, or operator deficiencies shall not disqualify the product. When product failure occurs, corrective action shall be taken, and samples resubmitted for qualification.

4.3. Requalification Testing

If changes significantly affecting form, fit or function are made to the product or manufacturing process, product assurance shall coordinate requalification testing, consisting of all or part of the original testing sequence as determined by development/product, quality and reliability engineering.

4.4. Quality Conformance Inspection

The applicable quality inspection plan shall specify the sampling acceptable quality level to be used. Dimensional and functional requirements shall be in accordance with the applicable product drawing and this specification.