250 ASSY. TAPING AND REEL TAB

1. SCOPE

1.1. Content

This specification defines performance, tests, and quality requirements for 250 ASSY. TAPING AND REEL TAB series. Applicable product descriptions and part numbers are specified in Appendix 1.

1.2. Qualification

When tests are performed on the subject product line, procedures specified in 3.5 shall be used. All inspections shall be performed using the applicable inspection plan and product drawing. All contacts must be crimped to comply with applicable Application Specification using the appropriate TE Applicator or Hand Tool as specified in the document.

2. APPLICABLE DOCUMENTS

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 (TE) Documents

114- 2115	Application Specification
501- 106425	Qualification Test Report
TE Product Drawings (Customer Drawings)	

2.2. Industry Documents

UL 310	Standard for Electrical Quick Connect Terminals
EIA-364	Electrical Connector/Socket Test Procedures Including Environmental Classifications
IEC 60251	Standard for Connectors for Electronic Equipment

2.3. Reference Documents

109-197	Test Specification (TE Test Specifications vs. EIA and IEC Test Methods)

3. REQUIREMENTS

3.1. Design and Construction

Product shall be of the design, construction, 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 product drawing.

Contact: Copper Alloy
Tabs (for test purposes): Copper Alloy, complies with UL 310 Para 5.2
Wire (for test purposes): Complies with UL 310 Para 7.3, 600-volt rating

3.3. Ratings

Voltage: 600 volts AC
Current: 3 – 20 Amps; Temperature: -40°C to 105°C

3.4. Performance and Test Description

Product is designed to meet the electrical, mechanical, and environmental performance requirements specified in 3.5. Unless otherwise specified, all tests shall be performed at ambient environmental conditions.

3.5. Test Requirements and Procedures Summary

<table>
<tr><th>Test Description</th><th>Requirement</th><th>Procedure</th></tr>
<tr><td>Initial Examination of Product</td><td>Meets the requirements of product drawing; no defective abnormalities such as cracks, breakage, damages, loose of parts, rust and fusion that are detrimental to connector functions, shall be present.</td><td>EIA-364-18
Visually and tactually inspect parts for appearance in accordance with applicable Q.I.P (Quality Inspection Procedure) and product drawing for presence of stated defects.</td></tr>
<tr><td>Final Examination of Product</td><td>After testing, no physical damage such as cracks, breakage, damages, loose of parts, rust and fusion that are detrimental to connector functions, shall be present.</td><td>EIA-364-18
Visually and tactually inspect parts for appearance in accordance with applicable Q.I.P (Quality Inspection Procedure) and product drawing for presence of stated defects.</td></tr>
<tr><td colspan="3">Dimensional</td></tr>
<tr><td>Tab and taping dimension</td><td>Meet product customer drawing</td><td>2358709CD and UL-310 dimensional requirement</td></tr>
<tr><td colspan="3">Electrical</td></tr>
<tr><td>Termination Resistance</td><td>Initial: 3 milliohms (mΩ) maximum
Final: 6 milliohms (mΩ) maximum</td><td>EIA-364-23
Subject the circuit (including the mated contacts, assembled in housings) to 1A (DC) current. After temperature has stabilized, probe 2 points on the mated tab contact that with one point 75 mm from the wire crimp. Calculate resistance after deducting bulk wire resistance. See Figure 1.</td></tr>
<tr><td>Temperature Rising</td><td><table><tr><th>Wire Size (AWG)</th><th>Test Current (Amps)</th><th>Temperature Rise (°C)</th></tr><tr><td>24</td><td>3</td><td>30</td></tr><tr><td>22</td><td>3</td><td>30</td></tr><tr><td>20</td><td>5</td><td>30</td></tr><tr><td>18</td><td>7</td><td>30</td></tr><tr><td>16</td><td>10</td><td>30</td></tr><tr><td>14</td><td>15</td><td>30</td></tr><tr><td>12</td><td>20</td><td>30</td></tr></table></td><td>UL 310 and IEC 60512-5-1
Measure the temperature rise above ambient created by the energizing current. Measurement must be taken at a place where there is no influence from air convection. Stabilize temperature at a single current level until 3 readings at 5 minute intervals are within 1°C. The probing point shall be soldered to stabilize the measurement reading.</td></tr>
</table>

Mechanical		
solderability	a surface is considered solderable if 95% of the soldered area is covered with a smooth, bright, uniform coating of adherent solder (TEC-109-11, item 6)	TEC-109-11 Temperature 245+/-5℃
Pull out force	15N Max	Test method should follow 2358709 PD

Environmental		
Salt Spray	Final Termination Resistance: 6 mΩ (maximum)	EIA-364-26, Condition A Subject mated connectors to 5% salt concentration for 96 hours. Measurement is taken after removing the salt. Specimens dried per the specification.

NOTE1
Shall meet the visual requirements, show no physical damage, and met requirements of additional tests as specified in the Product Qualification and Requalification Test Sequence.

When test request receptacle, 175022-1/175024-1 should be used as reference.

3.6 Product Qualification and Requalification Test Sequence

TEST OR EXAMINATION	TEST GROUP (a)			
	1	2		
	TEST SEQUENCE (b)			
Examination of Product	1,7		1,3	
Termination Resistance	2,5			
Temperature Rising	3,6			
Salt Spray	4			
solderability		1		
Pull out force			2	
Tab and taping dimension				1

(a) See paragraph 4.2.A.

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

(c) Prepare samples in accordance with UL 310. Fit must be sufficient to produce good thermal contact and void of free movement between thermocouple and contact. Thermocouple lead must have strain relief suitable to protect interface.

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.

Temperature	15-35℃
Relative Humidity	45-75%
Atmospheric Pressure	86.6-106.7KPa

4.2. Qualification Testing

A. Specimen Selection

The test specimens to be employed for tests shall conform to the requirements specified in the applicable product drawings. The crimped contacts shall be prepared in accordance with the requirements of specific terminal's applicable Specification and are to be selected at random from current production.

B. Applicable Wires

The wires to be used for crimping the samples for performance testing shall conform to the requirements specified in specific terminal's Application Specification.

C. Test Sequence

Qualification inspection shall be verified by testing specimens as specified in 3.6.

4.3. Re-Qualification Testing

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

4.4. Acceptance

Acceptance is based on verification that the product meets the requirements of 3.5. Failures attributed to equipment, test setup, or operator deficiencies shall not disqualify the product. If product failure occurs, corrective action shall be taken and specimens re-submitted for qualification. Testing to confirm corrective action is required before re-submittal.

4.5. 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.

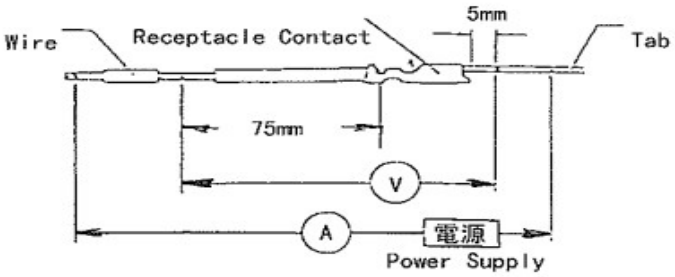

Figure 1: Termination Resistance Measurement Method

Appendix 1

Tape and reel Tab Series Part Number List

Terminal Orientation	Series	Terminates To	Part Number	Description
Straight	.250	PCB	2358709-1	.250 ASSY. TAPING AND REEL TAB
Straight	.250	PCB	2358709-2	.250 ASSY. TAPING AND REEL TAB
Straight	.250	PCB	2348072-X	.250 series fold TAB

单击下面可查看定价，库存，交付和生命周期等信息

>>TE Connectivity(泰科)