2 POS. HOUSING FOR 1,6 MM TAB

DESIGN OBJECTIVES

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

1. SCOPE

1.1 Content

This specification covers the performance, tests and quality requirements for the AMP* 2 Pos. Housing for 1,6 mm Tab, PN 336003-1 & 336187-1.

1.2 Qualification

When tests are performed on the subject product line, the procedures specified in AMP 109 Series Specification shall be used. All inspections shall be performed using the applicable inspection plan and product drawing.

2. APPLICABLE DOCUMENTS

The following documents form a part of this specification to the extent specified herein. 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, the specification shall take precedence.

2.1 AMP Documents

A. 109-1 : General Requirements for Test Specifications

B. 109 Series : Test Specifications as indicated in Figure 1

3. REQUIREMENTS

3.1 Design and Construction

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

3.2 Materials

Housing : PBT 20%GF Black

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3.3 Performance and Test Description

Housings shall be designed to meet the electrical, mechanical and environmental performance requirements specified in Figure 1.

3.4 Test Requirements and Procedures Summary

TEST DESCRIPTION	REQUIREMENT	PROCEDURE
Examination of Product	Meets requirements of product drawing 336003	Visual, dimensional and functional per applicable inspection plan
ELECTRICAL		
Insulation Resistance	50 megohms minimum initial.	Test between adjacent contacts of mated connector assemblies; AMP Spec 109-28-2 .
MECHANICAL		
Mating Force	50 N maximum initial.	Measure force necessary to mate connector assembly with locking latches, incorporating free floating fixures at rate of 25 mm/minute; AMP Spec 109-42, cond A, calculate force per contact.
Unmating Force	50 N minimum final.	Measure force necessary to unmate connector assembly with locking latches removed, at rate 25 mm/minute, AMP Spec 109-42, cond A , calculate force per contact.
Contact Insertion Force	40 N maximum per contact	Measure force to insert contact into housing; AMP Spec 109-41.
Contact Retention	100 N minimum	Apply axial load to crimped contacts; AMP Spec 109-30 except grip wire.

End Figure 1

3.5 Terminal Test and Sequences

TEST OR EXAMINATION	Test Group (a)					
	1	2	3	4	5	6
	Test Sequence (b)					
Examination of product	1,3	1	1			
Insulation Resistance	2					
Mating Force		2				
Unmating Force		3				
Contact Insertion Force			2			
Contact Retention			3			

(a) See paragraph 4.1.A
(b) Numbers indicate the sequence in which tests are performed

Figure 2

4. QUALITY ASSURANCE PROVISIONS

4.1 Qualification Testing

A. Sample Selection

Connector housings and contacts shall be prepared in accordance with application Instruction Sheets. They shall be selected at random from current production. Test group 1 Shall consist of 10 housings. Test group 2 shall consist of 10 Tab housings to be tested, 10 Rec housings as counter part, 20 Tabs and 20 Receptacles. Test group 3 shall consist of 10 Tab housings and 20 Tabs.

B. Test Sequence

Qualification inspection shall be verified by testing samples 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.

4.2 Requalification Testing

Requalification shall be established by the cognisant divisional engineering function and may consist of all or any part of the overall qualification program provided that it is conducted within the required time period.

4.3 Quality Conformance Inspection

The applicable AMP quality inspection plan will 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.