

# QUALIFICATION TEST REPORT

## 認定試験報告書

501- 5015

Rev. 0

Product Specification : 108-5319 Rev.  
 Reference Test Report No. : TR-91019  
 Date : 21-JAN-1991  
 Classification : UNRESTRICTED

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### 3 Pos .250 SERIES TAB RECEPTACLE INTERLOCK CONNECTOR.

#### 1. Introduction

1.1 Testing was performed on the 3 Pos .250 Series Tab Receptacle Interlock Connector. to determine if it meets the requirements of AMP Specification, 108-5319, Rev.

#### 1.2 Scope

This report covers the electrical, mechanical and environmental performance requirements of the 3 Pos .250 Series Tab Receptacle Interlock Connector.

The qualification testing was performed between 10-SEPT, 1990 and 10-JAN, 1991.

#### 1.3 Conclusion

The 3 Pos .250 Series Tab Receptacle Interlock Connector meets the electrical, mechanical and environmental performance requirements of Product Specification, 108-5319, Rev.

#### 1.4 Product Description

AMP .250 Series Housing Lance Connectors are an improved, easy-to-handle tab and receptacle connector incorporating outstanding feature of the AMP-FASTON products which enjoy wide acceptance in the consumer industry. One of the main feature of these connectors is that a retention lance mechanism is built into the housing. Consequently, there is no Possibility of contacts being tangled with each other, making connector assembling operations much easier and faster.

#### 1.5 Test Samples

Samples were taken randomly from current production. The following samples were used :

Q'ty	Part Number	Description
107	176773-1	3Pos. Cap-Housing
107	176774-1	3 Pos. Plug-Housing
160	170384-2	.250 Series · Receptacle
301	170032-5	.250 Series · Receptacle
40	170258-2	.250 Series · Receptacle
160	170349-2	.250 Series · Tab
301	170340-3	.250 Series · Tab
40	170341-3	.250 Series · Tab

## 2. Product Qualification Test Sequence

Test Items	Sample Groups (a)							
	1	2	3	4	5 (b)	6	7	8
	Test Sequence (c)							
Confirmation of Product	1	1	1	1	1	1	1	1
Termination Resistance (Low Level)	2				2, 4	2, 4	2, 4	2, 4
Dielectric Strength		2						
Insulation Resistance	3							
Vibration					3			
Contact Retention Force				2				
Crimp Tensile Strength			2					
Humidity (Steady State)						3		
Temperature Life							3	
Resistance to Cold								3

(a) See para.

(b) Number indicate the sequence in which the tests are performed.

(c) Discontinuities shall not take place in this test group during test.

## 3. Test Results

Para. No.	Test Items	Requirements per Product Specification 108-5319	Judgement
1	Confirmation of Product	Inspect visually per applicable Quality Inspection Plan (QIP)	Acceptable
<b>Electrical Performance</b>			
2	Termination Resistance (Low Level)	10 mΩ max.	Acceptable
3	Insulation Resistance	100 MΩ min.	Acceptable
4	Dielectric Strength	2.2 VAC (50 Hz) 1 minute Current Leakage: 5 mA max.	Acceptable

Para. No.	Test Items	Requirements per Product Specification 108-5319	Judge- ment		
<b>Physical Performance</b>					
5	Vibration	33 Hz (Y&X Axes. 100 Hrs each) 4.5 G, Amplitude 2 mm No electrical discontinuity greater than 100 $\mu$ sec. shall occur.	Accept- able		
6	Contact Retention Force	6.0 kg min.	Accept- able		
7	Crimp Tensile Strength	Wire Size		Accept- able	
		mm <sup>2</sup>	AWG		kg MIN.
		0.3	22		8
		0.5	20		9
		0.75	18		13
		1.25	16		18
		2.0	14	23	
		3.0	12	30	
<b>Environmental Performance</b>					
8	Humidity (Steady State)	Termination Resistance (Low Level) (Final)	Accept- able		
9	Temperature Life	120 °C 120 hours 10 m $\Omega$ max.	Accept- able		
10	Resistance to Cold	-50 °C 120 Hrs. 10 m $\Omega$ max.	Accept- able		