

DESIGN OBJECTIVES

This product described in this document has not been fully tested to insure conformance to the requirements outlined below. Therefore, AMP do Brasil makes no representation or warranty, express or implied, that the product will comply with these requirements. Further, AMP do Brasil 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 FFC Splice (PN's: 881780, 880668). This contact is for use in Flex Film circuit of Automotive Panel, in the assembly of components.

1.2. QUALIFICATION

When tests are performed on the subject product line, the procedures specified in AMP 109 series specifications 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, this specification shall take precedence.

2.1. AMP DOCUMENTS

- A. 109-1 Rev C: General Requirements for Test Specifications
- B. 109 Series : Test Specifications as indicated in Table 1. (Comply with MIL-STD-202 Rev 01 Apr 80, MIL-STD-1344 Rev 31 Oct 73 and EIA RS-364 Rev 17 Aug 71).
- C. Corporate Bulletin 401-76 Rev A: Cross-reference between AMP Test Specifications and Military or Commercial Documents.

AMP SECURITY CLASSIFICATION:

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				Elias A. Sfeif	AP	108-37027	0
				SHEET	TITLE		
				01 OF 06	FFC SPLICE CONTACT		

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

A. Contact: Bronze Pretin 112-16-2
Brass Pretin 112-16-2

3.3. PERFORMANCE AND TEST DESCRIPTION

The product is designed to meet the electrical, mechanical and environmental performance requirements specified in Table 1. All tests are performed at ambient environmental conditions per AMP Specification 109-1 Rev C unless otherwise specified.

3.4. TEST REQUIREMENTS AND PROCEDURES SUMMARY

TEST DESCRIPTION	REQUIREMENT	PROCEDURE
Examination of Product	Meets requirements of product drawing	Visual, dimensional and functional according to quality inspection plan
ELECTRICAL		
Termination Resistance, Dry Circuit	25 milliohms max. initial 50 milliohms max. final	Subject the splice applied with a component in Flex Film circuit to 20 mv open circuit at 100 ma; see AMP Spec 109-6-1 Rev F; Fig. 1; See note (a)
MECHANICAL		
Vibration Sinusoidal High Frequency	No electrical discontinuities greater than 1 microseconds	Subject the splice applied with a component in Flex Film circuit to 10 G's between 10-500-10 Hz, transversed in 15 min, 2 hours in each of 3 mutually perpendicular planes; AMP Spec 109-21-1 Rev D; See Fig. 2.
Termination Resistance (Specified Current)	Millivolt Drop: 3 mv/A max. (initial) 8 mv/A max. (final)	Measure by applying 1 A at 12 V DC to splice applied in Flex Film circuit, by probing at 3 mm apart from contact, after temperature becomes stabilized; Fig 1; See note (a); AMP Spec 109-25 Rev B

TABLE 1 (CONT.)

TEST DESCRIPTION	REQUIREMENT	PROCEDURE
Crimp Tensile	12 N min.	Determine crimp tensile at a rate of 25 mm/min; AMP Spec 109-16 Rev A
Corrosion, Salt Spray	Terminal Resistance, Dry Circuit	Subject mated contact to 5 % solution, 48 h; AMP Spec 109-24; cond B; Rev 0
Thermal Shock	Terminal Resistance, Dry Circuit	Subject wire and mated contact to 5 cycles -40 oC to 105 oC ; AMP Spec 109-22 Rev A
Humidity, Temperature Cycling	Terminal Resistance, Dry Circuit	Subject mated contact to 10 days humidity-temperature cycles between 25 oC and 65 oC at 95 % RH; AMP Spec 109-23-3 Rev B

TABLE 1 (END)

Note (a): Termination resistance shall be obtained by calculation after deducting the resistance of 3 mm component leg and the resistance of 3 mm flex film used for the termination.

3.5 CONTACT TEST AND SEQUENCE

Test or Examination	Test Group				
	1	2	3	4	5
Examination of Product	1,5	1,5	1	1,5	1,5
Termination Resistance, Dry Circuit		2,4		2,4	2,4
Vibration	3				
Termination Resistance, Specified Current	2,4				
Crimp Tensile			2		
Corrosion Salt Spray				3	
Thermal Shock		3			
Humidity-Temperature Cycling					3

4. QUALITY ASSURANCY PROVISIONS

4.1. QUALIFICATION TESTING

Contacts shall be selected a random from current production. A minimum of five contacts shall be used for each test group.

If a contact is to be qualified, testing shall be conducted on minimum and maximum sizes that are under current production.

4.2. REQUALIFICATION TESTING

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

4.3. ACCEPTANCE

Acceptance is based on verification that the product meets the requirements of Table 1. Failures attributed to equipment, test set-up, or operator deficiencies shall not disqualify the product. When product failure occurs, corrective action shall be taken and samples resubmitted for qualification. Testing to confirm corrective action is required before resubmittal.

5. MATING PART INFORMATION

The contacts meet the requirements of Table 1, since all the following information are respected.

- Wire diameter of resistor legs: 0,5 to 0,8 mm
- Film thickness: 0, 25 mm max.
- Maximum weight of component: 0,5 g

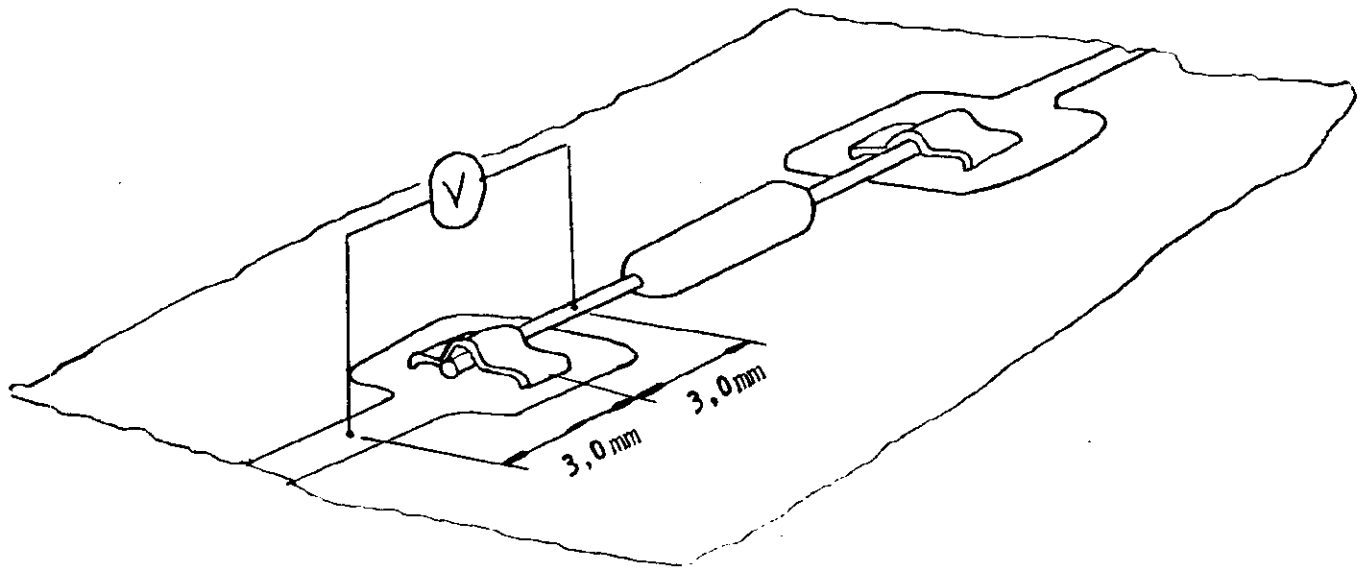


FIGURE 1 - TERMINATION RESISTANCE

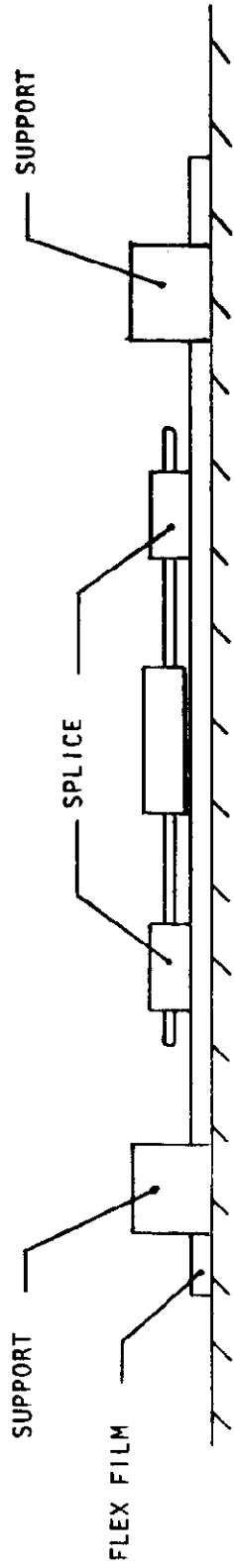


FIGURE 2 - VIBRATION SCHEME