Description: **MULTIPLE CAVITY PLUG FOR 60 AND 94 POSITIONS CONNECTOR**

DESIGN OBJECTIVES

The product described in this document has not been fully tested to insure conformance to the requirements outlined below. Therefore AMP Incorporated makes no representation or warranty, expressed 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.

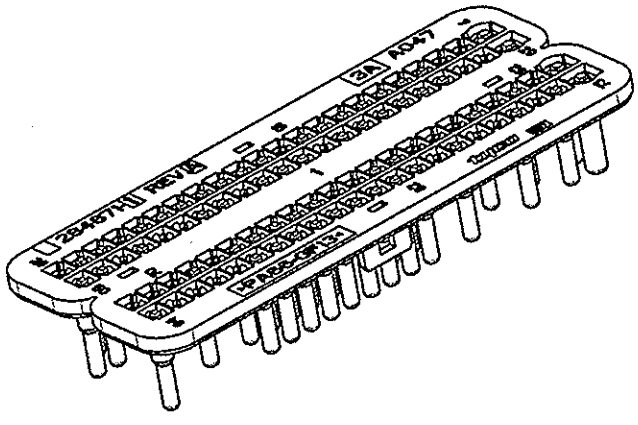
Contact AMP Engineering for further details.

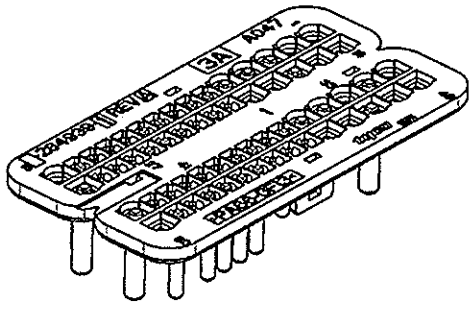
Il prodotto descritto in questa specifica non è stato ancora completamente provato per garantirne la conformità ai requisiti indicati nel documento. Perciò l'AMP non può al momento fornire assicurazione sulla conformità del prodotto a questi requisiti.

L'AMP si riserva inoltre la facoltà di modificare i requisiti della specifica sulla base dei risultati di addizionali prove e valutazioni.

Per ulteriori informazioni si prega di contattare l'Ufficio Tecnico.

MULTIPLE CAVITY PLUG FOR 60 AND 94 POSITIONS CONNECTOR





Product Code : 0532 G.P.L. : 400 P. : 041173

rev letter	rev. record	DR	Date	CHK	Date
A	First issue ET00-0073-04	M.P.	19/04/2004	O.C.	19/04/2004

DR. DATE APVD DATE

LOC I

INDEX

0.1 CONTENTS

This specification covers the requirements for product performance, test methods and quality assurance provision for the multiple cavity plug for 60 and 94 positions connector P/N 284742 and 284743.
The parts are listed in the following table :

Description	Part number
Multiple cavity plug for 60 positions connector	284939
Multiple cavity plug for 94 positions connector	284871

0.2 APPLICABLE DOCUMENTS

Product drawings have to be considered part of this specification. In case of conflicts between specification and referenced documents, this specification shall take precedence.

0.3 AMP SPECIFICATIONS

109-5000 Test Specification, General Requirements for Test Methods
108-20235 Product Specification for 154 positions header and receptacle connectors for engine management

0.4 STANDARD AND SPECIFICATIONS

FIAT General Specification for Connectors 9.91320/02

0.5 DESIGN AND CONSTRUCTION

Product shall comply with design, construction and physical dimensions specified in the applicable product drawing.

0.6 RATINGS

TEMPERATURE RATING: -40°C TO +125 °C

0.7 QUALITY ASSURANCE PROVISION

A. SAMPLES PREPARATION

The test samples to be used for the test shall be prepared by random selection from the current production.
No sample shall be reused, unless otherwise specified.

B. TEST CONDITION:

All the test shall be performed under any combination of the following test condition, unless otherwise specified:

- Room temperature: 23±5°C
- Relative humidity: 45÷70%
- Atmospheric pressure: 860÷1060 mbar

0.8 TEST REQUIREMENTS AND PROCEDURES

#	Test	Procedures	Requirements
		PRODUCT EXAMINATION	
1.1	Visual aspect	Visual Inspection	Compliance with relevant drawings
1.2	Dimensions and tolerances		Following relevant drawings
1.3	Marking	Visual Inspection	Supplier's indications must be clear and legible
1.4	Materials and coverings		Following relevant drawings
		MECHANICAL REQUIREMENTS	
2.1	Multiple cavity plug assembly force	With correspondent female counterpart housing (P/N 2-1355123-3 for 60 pos. connector and 3-1355136-3 for 94 pos. connector) assembled moving the cavity mask with an operating speed of 50 mm/min	≤ 80 N for multiple cavity plug for 60 positions connector (60% plugs loaded). ≤ 130 N for multiple cavity plug for 94 positions connector (60% plugs loaded).
2.2	Polarization effectiveness	Assembled connectors must withstand without mating the counterpart with the incorrect polarization	No uncoupling of cavity mask for a force ≤ 180 N
		ENVIROMENTAL REQUIREMENTS	
3.1	Accelerating aging	On mated connector submitted to the following cumulative tests: A- 5 cycles composed of: 2 hrs at 125°C ±2°C 2 hrs at –30°C ±2°C B- 5 cycles composed of 2 hrs at 125°C ±2°C 2 hrs at 40°C ±2°C and 90-95% r.h. 2 hrs at –30°C ±2°C C-200 hrs at 125°C	No deformation, scraping or breaking; color variations are allowed on plastic material
3.2	Waterproofs test of connection with peripheral gasket. (IP x.4)	Test according to IEC 529 par. 14.2.4 Duration : 4 hours Samples mated with relevant counterpart This test must be carried out after cumulative aging test (par. 3.1)	No water infiltration inside the connector
3.3	High pressure washing test (on connection fully loaded and closed). (9K)	Test according to DIN 40050 index 9K Duration : 30 sec for each nozzle. Samples: mated with relevant counterpart. Submit the connection completely loaded with terminals, fixed with tie, to the cumulative action of the four nozzle. This test must be carried out after cumulative ageing test (par. 3.1)	No water infiltration inside the connector

TABLE I
PRODUCT QUALIFICATION TEST SEQUENCE
TEST GROUPS

ITEM	DESCRIPTION	A	B	C
1.1	Visual aspect	1,5	1,3	1,3
1.4	Materials and coverings			
2.1	Cavity mask assembly force	2		
2.2	Polarization effectiveness		2	
3.1	Accelerating aging	3		
3.2	Waterproofs test of connection with peripheral gasket (IPx.4)	4		
3.3	High pressure washing test (9k)			2