6.35 E- SPRING contact receptacles and tabs sleeves

1. INTRODUCTION

1.1 Purpose

Testing sleeves 6.35 E- SPRING contact receptacles and tabs sleeves to determine its conformance to the requirements of Tyco electronics AMP Product Specification 108-22149 Rev. E.

1.2 Scope

This report covers the electrical and mechanical performance of the 6.35 E- SPRING contact receptacles and tabs sleeves manufactured by the Tyco Electronics AMP España S. A. The testing was performed between September 14, 2001 and September 12, 2003.

1.3 Conclusion

6.35 E-SPRING contact receptacles and tabs sleeves P.N 2-336524-3, 1-336524-1, 1-336524-2, 336524-1, 336524-2 meet the electrical and mechanical, performance requirements of Tyco Electronics AMP Product specification 108-22149 Rev. E.

1.4 Product Description

6.35 E-SPRING contact receptacles and tabs sleeves part numbers 2-336524-3, 1-336524-1, 1-336524-2, 336524-1, 336524-2 have been manufactured from polyamide 6/6 V0 and polyamide 6/6 V2.

1.5 Test Samples

The test samples were randomly selected from normal current production lots, all part numbers were used for test.

1.6 Qualification Test Sequence

	TEST GROUPS	
	1	2
Quantity of samples	308	100
TEST OR EXAMINATION	Test Sequence	
Product examination	1	1
Contact insertion force	2	
Terminal retention force inside the sleeve	3	
Insulation resistance		2

2. SUMMARY OF TESTING

2.1 Examination of product – All Groups

All samples submitted for testing were selected from normal current production lots. They were inspected and accepted by the Quality Assurance Department.

2.2 Contact Insertion force – Group 1

Contact insertion forces were less than 18.7 N. (20N max.)

2.3 Termination retention force values inside the sleeve – Group 1

Retention forces inside the sleeve values were higher than 64.0 N. (60N min.)

2.4 Insulation resistance – Group 2

Insulation resistance values were higher than 2.2E+11 ohm. (>10E+6 ohm)

3. TESTS METHODS

3.1 Examination of product (Reference Standard: IEC 60512, test 1a, 1b)

Product drawings and inspections plans were used to examine the samples. They were examined visually and functionally.

3.2 Contact Insertion forces (Reference Standard: IEC 60512 test 15a)

Fixing the sleeve into a support by pulling cable at rate of 25mm /min and in distance of 15mm from the insulation crimp. The terminal must remain free to pivote during the insertion. Samples must contain a humidity degree between 1 and 2% of their weight.

3.3 Termination retention force values inside the sleeve (Reference Standard: IEC 60512 test 15d)

Measure the extraction force pulling the cable at a rate of 25mm/min. After making the insertion test, the samples have been stored in room conditions (temperature between 21 and 25 ºC and relative humidity between 45 and 55%) at least 24 hours before making the extraction test.

3.4 Insulation resistance (Reference Standard: IEC 60512 test 3a)

500Vcc during 1 minute applied between inserted terminal and metallic wrapper in contact with sleeve external wall.