

RECEPTACLE, POSI-LOCK, .110 SERIES

1. INTRODUCTION

1.1 Purpose

Testing was performed on RECEPTACLE, POSI-LOCK, .110 SERIES 1Pos connectors to determine its conformance related to the performance requirements. Scope of the test is to evaluate the performance with two resin material V0 105 C and V0 130 C.

1.2 Scope

This report covers the electrical and mechanical performance of RECEPTACLE, POSI-LOCK, .110 SERIES 1Pos connectors. Testing was performed at the Shanghai Electrical Components Test Laboratory between Jan. 23, 2019 and Jan. 24, 2019. The associated test number is TP-19-00023.

1.3 Conclusion

All part numbers listed in Table 1 confirmed to the performance requirements.

1.4 Test Specimens

Specimens with the following part numbers were used for test:

Table 1

P/N	Description	Quantity (pcs)	Note
1969534-1	POSITIVE LOCK .110 HOUSING RECEPTACLE	5	V0 105 C
1969534-1	POSITIVE LOCK .110 HOUSING	5	V0 130 C
1742975-1	POSITIVE LOCK 110 REC 22-18 AWG TPBR	10	/

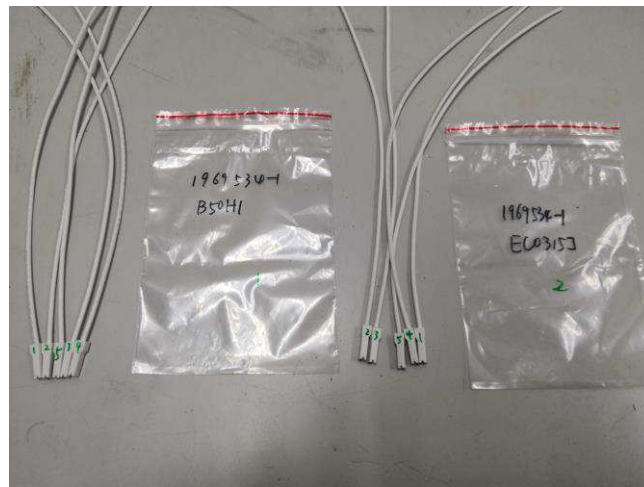


Fig.1

1.5 Test Sequence

The specimens listed in Table 1 were subjected to the test sequences listed in Table 2.

Table 2

Test Item	Test Group (a)
	1
	Test Sequence (b)
Dielectric Withstanding Voltage	2
Contact Insertion Force	1
Contact Retention Force	3

Note: a). Test group defined per customer requirement
 b). Numbers indicate sequence in which tests are performed.

1.6 Environmental Conditions

Unless otherwise stated, the following environmental conditions prevailed during testing:
 Temperature: 15°C to 35°C
 Relative Humidity: 25% to 75%

2. TEST PROCEDUES

2.1 Dielectric Withstanding Voltage

Hold at 3.4 KV AC at sea level for 1 minute. Test between adjacent contacts and between housing and closest contacts in a mated connector.
 Requirement: 1-minute hold without a creep discharge or flashover.
 Current Leakage: 5 mA (maximum)
 Test Method: EIA-364-20, Method A, Condition 1.

2.2. Contact Insertion Force

Measure the force required to insert contact into housing. Operation Speed: 25.4 mm/min.
 Requirement: 18N Maximum
 Test Method: EIA-364-05.

2.3. Contact Retention Force

Measure the axial force required to remove contact from the housing with and without a TPA accessory. Operation Speed: 25.4 mm/min.
 Requirement: 67N Minimum
 Test Method: EIA-364-29.

3. SUMMARY OF TESTING

3.1 Dielectric Withstanding Voltage
 Test result are shown in Table 3.

Table 3

Group	Quantity	Condition		Requirement	Results
1	5	Initial	V0 105 C	No breakdown or flashover.	Meet spec.
1	5	Initial	V0 130 C	No breakdown or flashover.	Meet spec.

3.2. Contact Insertion Force
Test result are shown in Table 4.

Table 4

Unit: N

Group	Quantity	Condition		Requirement	Results
1	5	Initial	V0 105 C	18 (max.)	Meet spec.
1	5	Initial	V0 130 C	18 (max.)	Meet spec.

3.3. Contact Retention Force
Test result are shown in Table 5.

Table 5

Unit: N

Group	Quantity	Condition		Requirement	Results
1	5	Initial	V0 105 C	67 (min.)	Meet spec.
1	5	Initial	V0 130 C	67 (min.)	Meet spec.

4. CALIBRATION

4.1 Calibration Statement

All equipment containing a calibration number is calibrated and traceable through TE Connectivity (TE).

5. VALIDATION

Requested by:

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