

FASTON 187 FLAG INSL POD NYLON LP NAT

1. INTRODUCTION

1.1 Purpose

Testing was performed on FASTON 187 FLAG INSL POD NYLON LP NAT to determine its conformance related to the performance requirements.
 Scope of the test is to evaluate the performance with two resin material V2 Nylon GWT and V0 Nylon GWT.

1.2 Scope

This report covers the electrical and mechanical performance of FASTON 187 FLAG INSL POD NYLON LP NAT. Testing was performed at the Shanghai Electrical Components Test Laboratory between Feb. 25, 2019 and Feb. 26, 2019. The associated test number is TP-19-00027.

1.3 Conclusion

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

1.4 Test Specimens

The plastic specimens were moisturized per spec. 118-1030 before test. Specimens with the following part numbers were used for test:

Table 1

P/N	Description	Quantity (pcs)	Note
1-480487-4	FASTON 187 FLAG INSL POD NYLON LP NAT	5	V2 Nylon GWT
480487-4	FASTON 187 FLAG INSL POD NYLON LP NAT	5	V0 Nylon GWT
42486-1	FASTON 187 TERMINAL-FLAG REC 20-16AWG BR	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: 80N 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	V2 Nylon GWT	No breakdown or flashover.	Meet spec.
1	5	Initial	V0 Nylon GWT	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	V2 Nylon GWT	18 (max.)	Meet spec.
1	5	Initial	V0 Nylon GWT	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	V2 Nylon GWT	80 (min.)	Don't meet spec.
1	5	Initial	V0 Nylon GWT	80 (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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