

**FF 250 TAB HSG 1P NYLON NAT**

**1. INTRODUCTION**

1.1 Purpose

Testing was performed on FF 250 TAB HSG 1P NYLON NAT 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 FF 250 TAB HSG 1P NYLON 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-19-00026.

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     |
|----------|-----------------------------|------------------|----------|
| 521289-1 | FF 250 TAB HSG 1P NYLON NAT | 5                | V0 105 C |
| 521289-1 | FF 250 TAB HSG 1P NYLON NAT | 5                | V0 130 C |
| 62556-3  | Terminal                    | 5                | /        |



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   | 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 | 80 (min.)   | Meet spec. |
| 1     | 5        | Initial   | V0 130 C | 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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