



## FASTON 250 REC 0.504INCH HSG NYLON Material Evaluation

### 1. INTRODUCTION

#### 1.1 Purpose

Testing was performed on the TE Connectivity **FASTON 250 REC 0.504INCH HSG NYLON BLK** to evaluate a new material

#### 1.2 Scope

This report covers the electrical, mechanical, and environmental performance of FASTON 250 REC 0.504INCH HSG NYLON BLK. The specimens listed in Table 1 of paragraph 1.4 were subject to the test sequence outlined in Table 2 of paragraph 1.5. Testing was performed at the Shanghai Electrical Components Test Laboratory during 11Nov2017 to 11Jan2018. The associated test number is TP-17-02994.

#### 1.3 Conclusion

Based on the test results, all specimens meet the specification. See summary of testing for more details. 4-521253-8, 5-521253-1, 1-1969232-x and 1-521771-1 parts are qualified based on similarity to 1969295 parts.

#### 1.4 Test Specimens

Specimens with the following part number as Table 1 were used for this test. Refer to table 1 for test specimen identification information.

Table 1-specimens list

Test Group	Part No	Description	Qty.	Comments
1	1969295-1	.250 PL EXII & FASTON 250 HSG 2P NYLON NAT	6	

#### 1.5 Test Sequence

Specimens identified in table 1 were subjected to the test sequence outlined in Table 2.

Table 2-Test sequence

Test	Test Group
	1
	Test Sequence
Examination of Product	1,3
GWT 750C°	2

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. SUMMARY OF TESTING**

2.1 GWT 750°C

Refer to table 3 for GWT 750 °C test result, no physical damage shown in the test process, find detail information as below. And refer to figure 3 for typical GWT 750°C test visual check record.

Table 3 – GWT 750°C test result

Sample No	Examination	Initial	Final					Judgment
			Ti (sec)	Te (sec)	Flame Height (cm)	Drops (yes/no)	Light tissue paper burns (yes/no)	
1	GWT 750°C	No physical damage	0	0	0	NO	NO	Meet Spec.
2	GWT 750°C	No physical damage	0	0	0	NO	NO	Meet Spec.
3	GWT 750°C	No physical damage	0	0	0	NO	NO	Meet Spec.



Figure 3 – visual check for GWT 750°C test

**3. TEST PROCEDURES**

3.1 Examination of Product

Visual Inspection: appearance, and function of specimens pursuant to the applicable inspection plan.

Requirements: Meets requirements of product drawing and no physical damage.

Test Method: EIA-364-18 B

3.2 GWT 750°C test

Specimens, wooden board and wrapping tissue were preconditioned under the condition of 25°C and 50% R.H. for 24h.

- Execute visual check before test, and take picture.
- Clamp test specimen with fixture in a suitable manner.
- Edit test procedure according to test method then perform test.

Test Condition:

- The extremity of the wire was positioned horizontally and brought into contact with the specimen with a force between 0.85N and 1.05N for a period of 30s.
- Penetration depth was less than 7mm, and wrapping tissue was positioned at a distance of (200±5) mm below the place where the glow-wire was applied to the specimen.



**4. CALIBRATION**

4.1 Calibration Statement

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

4.2 Equipment List

Equipment Name	Calibration Number
Glow Wire Tester(HY-GLT-1)	E-00586

**5. VALIDATION**

Requested by:

\_\_\_\_\_ / \_\_\_\_ / \_\_\_\_

Product Engineer  
TE Connectivity India Pvt Ltd.

Prepared by:

\_\_\_\_\_ / \_\_\_\_ / \_\_\_\_

Test Engineer  
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Approved by:

\_\_\_\_\_ / \_\_\_\_ / \_\_\_\_

Manager  
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