

Rev B

TIMER CONNECTOR 24 POS, RIGHT HAND, GEN III

1. INTRODUCTION

1.1 Purpose

Testing was performed on TIMER CONNECTOR 24 POS, RIGHT HAND, GEN III connectors 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 TIMER CONNECTOR 24 POS, RIGHT HAND, GEN III connectors. Testing was performed at the Shanghai Electrical Components Test Laboratory between Jan. 22, 2019 and Jan. 23, 2019. The associated test number is TP-19-00028.

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			
770197-2	TIMER CONNECTOR 24P HSG R/H NAT PA66 V-2	5	V2 GWT			
1-770197-2	TIMER CONNECTOR 24P HSG R/H NAT PA66 V-0	5	V0 GWT			
770642-1	TIMER CONNECTOR TERMINAL 20-14 AWG PTPBR	50	/			



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 Group (a)		
Test Item	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°CRelative 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	Con	dition	Requirement	Results
1	5	Initial	V2 GWT	No breakdown or flashover.	Meet spec.
1	5	Initial	V0 GWT	No breakdown or flashover.	Meet spec.



3.2. Contact Insertion Force

Test result are shown in Table 4.

Table 4

	Unit: 1							
Group	Quantity	Cond	dition	Requirement	Results			
1	5	Initial	V2 GWT	18 (max.)	Meet spec.			
1	5	Initial	V0 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 GWT	67 (min.)	Meet spec.
1	5	Initial	V0 GWT	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

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