

**Grace Inertia 6.5/7.92 WTB Connector**

**1. INTRODUCTION**

1.1 Purpose

The purpose of this test is to evaluate the performance of Grace Inertia 7.92 2Pos WTB Connector. Testing was performed on below products to determine its compliance with the requirements of 108-5990 Rev. B and customer requirements.

1.2 Scope

This specification covers the electrical and environmental performance for Grace Inertia 6.5/7.92 WTB Connector. Testing was performed at TE Connectivity Shanghai Electrical Test Laboratory (Building ID 554) between 2021-07-14 and 2021-07-19.

The associated test number is TP-21-01822.

1.3 Conclusion

Based on the test results, all samples meet the requirement according to customer requirement. The results in this report only effect on the sampling specimens.

1.4 Test Specimens

Specimens with the following part numbers were used for test:

Test Group	Part No.	Description	Qty. (pcs)	Comments
1	1747052-3	GIC7.92 2POS_HEADER ASSY BLUE	10	/
	1747050-3	GIC7.92 2POS PLUG HSG.BLUE	10	/
	1376348-1	5MM PKC Rec M_UL1007 20AWG	50	/

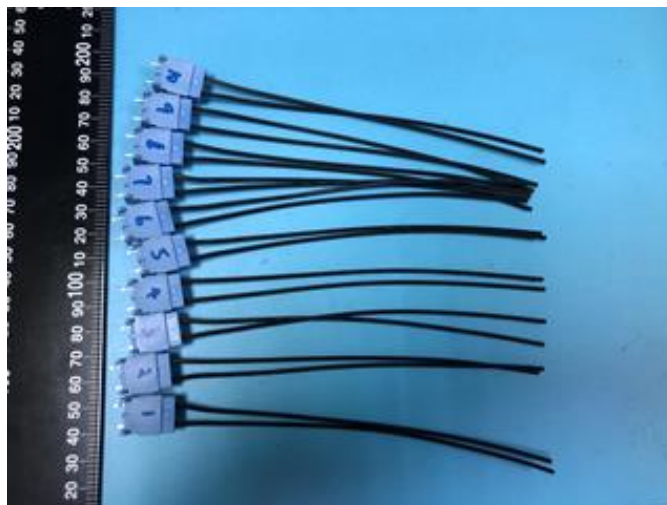


Fig. 1 Typical Specimen

1.5 Test Sequence

Test Item	Test Group
	1
	Test Sequence
Examination of Product	1,4
Low Level Contact Resistance	2,5
Low Temperature	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 PROCEDURES AND REQUIREMENTS**

**2.1 Examination of Product**

Visual Examination. There shall be no corrosive influence on the performance and no physical damage that would impair product performance.

Test Method: ECIA EIA-364-18B-2007

**2.2 Low Level Contact Resistance**

Measure and record the contact resistance with a test current of 100 milliamperes maximum and 20 millivolts open circuit (source) voltage maximum.

Requirement: 10 mΩ Max. initial  
 20 mΩ Max. final

Test Method: ECIA EIA-364-23C-2006

**2.3 Low Temperature**

Mated/Unmated specimens were exposed to a temperature of -40 °C for 96 hours.

Requirement: No evidence of physical damage was visible.

Test Method: 108-5990 Rev. B and customer requirements.

**3. SUMMARY OF TEST**

Group	SN	Description	Test Item	Qty(pcs)	Test Result				Requirement	Conclusion	View	
					Max	Min	Avg	Unit				
1	1	/	Examination of Product	10	No physical damage				/	No physical damage	Meet Spec	<a href="#">View</a>
	2	/	Low Level Contact Resistance	10	1.29	0.75	0.98	mΩ	10 mΩ Max.	Meet Spec	<a href="#">View</a>	
	3	/	Low Temperature	10	No physical damage				/	No physical damage	Meet Spec	<a href="#">View</a>
	4	/	Examination of Product	10	No physical damage				/	No physical damage	Meet Spec	<a href="#">View</a>
	5	/	Low Level Contact Resistance	10	1.30	0.76	0.98	mΩ	20 mΩ Max.	Meet Spec	<a href="#">View</a>	

#### 4. VALIDATION

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