



GIC 3.5W 2P PLUG & CAP (GWT) NAT

1. INTRODUCTION

1.1 Purpose

Testing was performed on GIC 3.5W 2P PLUG & Cap (GWT) NAT to determine its conformance to the customer requirements.

1.2 Scope

This report covers the Glow Wire End Products Test performance of GIC 3.5W 2P PLUG & Cap (GWT) NAT. GWEPT 750°C testing was performed at the Shanghai Electrical Components Test Laboratory on May.04 2016 and the associated test number is TP-16-01965. GWEPT 850°C was performed at the Shanghai Electrical Components Test Laboratory on Nov.7th 2018, The associated test number is TP-18-03074.

1.3 Conclusion

Based on the test results, all samples meet the requirement according to IEC 60335-1:2016 and IEC 60695-2-11:2014

1.4 Test Specimens

Specimens with the following part numbers were used for test:

Test Request No.	Housing P/N	Position	Qty	Part Description	Material
TP-16-01965 (GWEPT 750°C)	1-1565081-1	2P	6pcs	GIC 3.5W 2P PLUG(GWT)	2136403-1
	1-1565085-1	2P	6pcs	GIC 3.5W 2P CAP(GWT)	2136403-1
TP-18-0307 (GWEPT 850°C)	1-1565081-1	2P	3pcs	GIC 3.5W 2P PLUG(GWT)	2136403-1
	1-1565085-1	2P	3pcs	GIC 3.5W 2P CAP(GWT)	2136403-1

1.5 Test Sequence

Test Item	Test Group (a)	
	1	2
	Test Sequence(b)	
Visual examination	1	1
Glow Wire End Product 750°C Test	2	
Glow Wire End Product 850°C Test		2
Sample Size	Total 12 pcs	Total 6 pcs

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. Visual examination

All specimens were visually examined for evidence of physical damage detrimental to product performance (visually inspected under a stereomicroscope, at a 10x magnification, with suitable illumination).
 Test method: IEC 60512-1-1, Test 1a.

2.2. Glow Wire End Product Test

Thermal stabilization of specimens: 24 h at (15-35) °C and (45-75) %RH.
 Test condition: The extremity of the wire is positioned horizontally and brought into contact with the sample with a force between $0.95 \pm 0.1N$ for a period of 30s. Test temperature: 750°C and 850°C, Time of glow tip application T_a : 30s
 Requirements: No flame or $T_e - T_i \leq 2s$ for 750°C, $T_e \leq T_a + 30s$ for 850°C.
 Test Method: IEC 60335-1, 2013 and IEC 60695-2-11, 2014.

3. SUMMARY OF TESTING

3.1. Initial Examination of Product

All specimens were visually examined and no evidence of physical damage detrimental to product performance was observed.

3.2. Glow Wire End Product Test

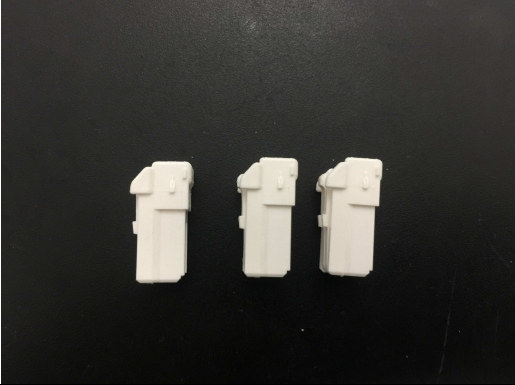

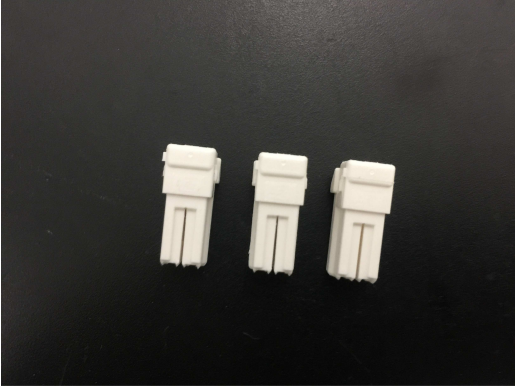

Glow wire end product test results of 750°C see Table 1.

Table 1

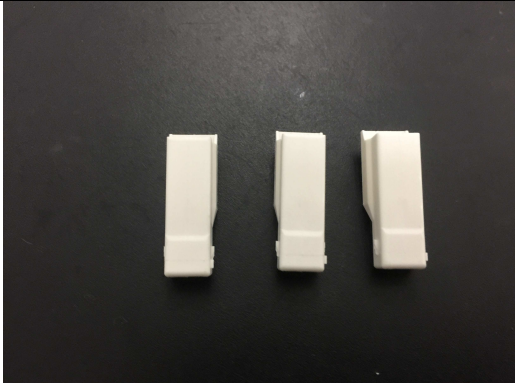

Test Samples	Quantity	Condition	Point of glow tip application	Ti (sec)	Te (sec)	Flame Height (mm)	Drops (yes/no)	Light tissue paper burns (yes/no)	Judgment
1-1565081-1	6 pcs	Initial (GWEPT 750°C)	A1	0	0	0	no	no	Meet spec
			A2	0	0	0	no	no	Meet spec
			A3	0	0	0	no	no	Meet spec
			B1	0	0	0	no	no	Meet spec
			B2	0	0	0	no	no	Meet spec
			B3	0	0	0	no	no	Meet spec
1-1565085-1	6 pcs		A1	0	0	0	no	no	Meet spec
			A2	0	0	0	no	no	Meet spec
			A3	0	0	0	no	no	Meet spec
			B1	0	0	0	no	no	Meet spec
			B2	0	0	0	no	no	Meet spec
			B3	0	0	0	no	no	Meet spec

Sample Pictures (GWEPT 750°C):

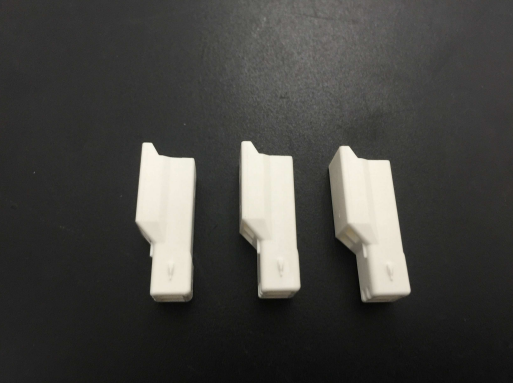

Test 1: 1-1565081-1 GIC 3.5W 2P PLUG (GWT)

Description of pre-test: Normal	Description of post-test: Damage
Test photo of pre-test: A 	Test photo of post-test: A 
Test photo of pre-test: B 	Test photo of post-test: B 

Test 2: 1-1565085-1 GIC 3.5W 2P CAP (GWT)

Description of pre-test: Normal	Description of post-test: Damage
Test photo of pre-test: A 	Test photo of post-test: A 

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Description of pre-test: Normal		Description of post-test: Damage	
Test photo of pre-test: B		Test photo of post-test: B	
			

3.3. Glow Wire End Product Test



Glow wire end product test results of 850°C see Table 2.

Table 2



Test Samples	Quantity	Condition	Point of glow tip application	Ti (sec)	Te (sec)	Flame Height (mm)	Drops (yes/no)	Light tissue paper burns (yes/no)	Judgment
1-1565081-1	3 pcs	Initial (GWEPT 850°C)	A1	0.9	33.1	50	no	no	Meet spec
			A2	0.8	31.5	40	yes	no	Meet spec
			A3	0.8	36.3	50	yes	no	Meet spec
1-1565085-1	3 pcs		A1	1.0	33.6	40	yes	no	Meet spec
			A2	1.0	33.8	40	no	no	Meet spec
			A3	1.1	31.7	40	no	no	Meet spec

Sample Pictures GWEPT 850°C :

Test 3: 1-1565081-1 GIC 3.5W 2P PLUG (GWT)

Description of specimens pre-test: Normal (1565081-1)	Description of specimens post-test: Damage
	
<p>Visual check picture: Before test</p>	<p>Visual check picture: After test</p>

Test 4: 1-1565085-1 GIC 3.5W 2P CAP (GWT)

Description of specimens pre-test: Normal (1565085-1)	Description of specimens post-test: Damage
	
<p>Visual check picture: Before test</p>	<p>Visual check picture: After test</p>

4. CALIBRATION

4.1 Calibration Statement

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

No.	Test Item	Equipment Code	Equipment Application	Calibration Effective Period	Serial No.
1	Examination of Product	/	Visual observation	/	/
2	Glow Wire End Product Test 750°C	GW-V	Glow Wire Tester	2017-03-29	E-00118
	Glow Wire End Product Test 850°C	HY-GLT-1	Glow Wire Tester	2019-09-20	E-00586



5. VALIDATION

Requested by:

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