



EN/SASO IEC 62680-1-3 Test Report

25T04N001523-001-COM

For

Type-C Plug Connector

Company Name: Guangdong Jinshengxin Industry Share Co.,Ltd.

TYPE-C/16P MALE/180° SMT/H=10.5/TID

CERTIFIED/SMALL FORCE/LCP

Product Name: BLACK/TERMINAL C7035/CONTACT AREA

AU-PLATED 15U" SOLDER AREA TIN-PLATED

60"/ SHELL SUS304

Model Number: JSX-TC16MA-0012

Hardware Version: A0

Issued Date: 2025-08-14

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of SAICT.

Test Laboratory:

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
25T04N001523-001-COM	A0	First release	2025-08-14

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1. Test Laboratory

1.1. Testing Location

Location: SAICT

Address: Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China 518000

1.2. Testing Environment

Normal Temperature: 15-35°C

Relative Humidity: 25-85%RH

Atmospheric pressure 86-106kPa

1.3. Project Data

Testing Start Date: 2025-07-16

Testing End Date: 2025-08-13

1.4. Signature

Su Kun

Prepared this test report

Wang Yang

Reviewed this test report

Wei Ming

Approved this test report

2. Client Information

2.1. Applicant Information

Company Name: Guangdong Jinshengxin Industry Share Co.,Ltd.

Address: No. 21, Xintai Road, Yangyong, Dalang Town, Dongguan City,
Guangdong Province

City: Dongguan

Country: China

Telephone: 0769-82913101

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2.2. Manufacturer Information

Company Name: Guangdong Jinshengxin Industry Share Co.,Ltd

Address: No. 21, Xintai Road, Yangyong, Dalang Town, Dongguan City,
Guangdong Province

City: Dongguan

Country: China

Telephone: 0769-82913101

Email: raoweimin@jsxconn.cn



3. Unit Under Test (UUT) Information

3.1. About UUT

Description: USB 2.0 Type-C Plug Connector
Brand Name: Guangdong Jinshengxin Industry Share Co.,Ltd
TYPE-C/16P MALE/180° SMT/H=10.5/TID
Marketing Name: CERTIFIED/SMALL FORCE/LCP BLACK/TERMINAL
C7035/CONTACT AREA AU-PLATED 15U" SOLDER AREA
TIN-PLATED 60"/ SHELL SUS304
Model Number: JSX-TC16MA-0012
Hardware Version: A0

3.2. Sample Coding

Test Group	Number of Plug/Receptacle	Qty of Specimen
Group A-1	UT01aa to UT10aa	10 pcs
Group A-2	UT11aa to UT20aa	10 pcs
Group A-3	UT21aa to UT30aa	10 pcs
Group A-4	UT31aa to UT50aa	20 pcs
Group A-7	UT51aa to UT60aa	10 pcs
Group B-5	UT69aa to UT71aa	3 pcs
Group B-6	UT72aa to UT74aa	3 pcs
Group B-7	UT75aa to UT89aa	15 pcs



4. Reference Documents

1. EN IEC 62680-1-3:2022, Universal serial bus interfaces for data and power_Part 1-3Common components-USB Type-C(r) cable and connector specification
2. SASO IEC 62680-1-3:2023, Universal serial bus interfaces for data and power-Part 1-3: Universal Serial Bus interfaces-Common components- USB Type-CTM cable and connector specification

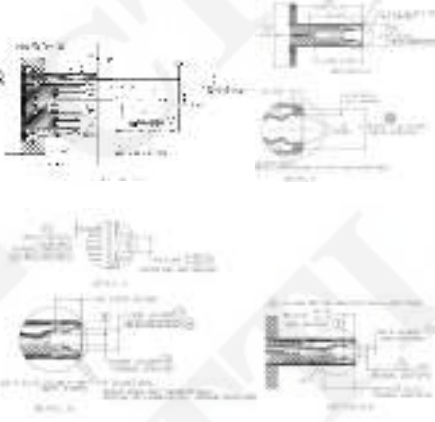

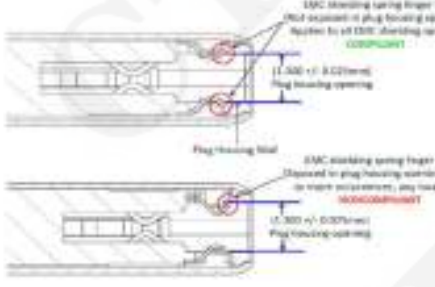
Note:The requirements of the standards SASO IEC 62680-1-3 is the same as EN IEC 62680-1-3.

5. USB Type-C Compliance Requirements

5.1. DC Electrical

Clause	Test Item	Test Procedure	Requirement
3.7.8.1	Low Level Contact Resistance (LLCR)	EIA 364-23 The low level contact resistance (LLCR) measurement is made across the plug and receptacle mated contacts and does not include any internal paddle cards or substrates of the plug or receptacle. The test boards shall be provided with the connectors to be tested. • Measure at 20 mV (max) open, circuit at 100 mA.	The following requirements apply to the power and signal contacts: • 40 mΩ (max) initial for VBUS, GND and all other contacts. • 50 mΩ maximum after initial measurement.
3.7.8.2	Dielectric Withstanding Voltage	EIA 364-20 Applicable to both receptacle and plug. • Measurement per Method B.	The dielectric shall withstand 100 VAC (RMS) for one minute at sea level after the environmental stress defined in Table 4-8, Test Group A-7.
3.7.8.3	Insulation Resistance	EIA 364-21 Applicable to both receptacle and plug. See Table 4-8 Test Group A-7.	A minimum of 100 MΩ insulation resistance is required between adjacent contacts of unmated and mated connectors.
3.7.8.4	Contact Current Rating	A current of 5 A shall be applied collectively to VBUS pins (i.e., pins A4, A9, B4, and B9) and 1.25 A shall be applied to the VCONN pin (i.e., B5) as applicable, terminated through the corresponding GND pins (i.e., pins A1, A12, B1, and B12). A minimum current of 0.25 A shall also be applied individually to all the other contacts, as applicable.	The temperature rise of the outside shell surface of the mated pair above the VBUS and GND contacts shall not exceed 30°C above the ambient temperature.

5.2. Mechanical

Clause	Test Item	Test Procedure	Requirement
3.2.1	Critical Dimensions		
3.2.1	EMC Shielding Spring Inspection		Tip of EMC Shielding spring finger not exposed in plug housing opening.
3.8.1.1	Insertion force	<p>EIA 364-13</p> <p>The insertion force test shall be done at a maximum speed of 12.5 mm (0.492") per minute.</p>	<p>Within the range from 5 N to 20 N.</p> <p>This requirement does not apply to the plugs that are used for direct docking without a cable.</p>
3.8.1.2	Extraction force	<p>EIA 364-13</p> <p>The extraction force test shall be done at a maximum speed of 12.5 mm (0.492") per minute.</p>	<p>Within the range of 8 N to 20 N, measured after a preconditioning of five insertion/extraction cycles (i.e., the sixth extraction). After an additional twenty-five insertion/extraction cycles, the extraction force shall be measured again (i.e., the 32nd extraction) and the extraction force shall be within:</p> <ul style="list-style-type: none"> a) 33 % of the initial reading, and b) within the range of 8 N to 20 N. <p>The extraction force shall be within the range of 6 N to 20 N after 10,000 insertion/extraction cycles. This requirement does not apply to the plugs that are used for direct docking without a cable.</p>
3.8.1.3	Durability	<p>EIA 364-09</p>	<p>10,000 cycles minimum. Low level contact resistance and dielectric withstanding voltage shall be checked to be within spec</p>



			after the 10,000 durability cycles according to Table 4-8, Test Group A-7.
3.8.1.7	Wrenching Strength-a	A moment of 0-0.75 Nm (e.g., 50 N at 15 mm from the edge of the receptacle) is applied to a plug inserted in the test fixture in each of the four directions. A single plug shall be used for this test. Some mechanical deformation may occur. The plug shall be mated with the continuity test fixture after the test forces have been applied to verify no damage has occurred that causes discontinuity or shorting. The continuity test fixture shall provide a planar surface on the mating side located 6.20 ± 0.20 mm from the receptacle Datum A, perpendicular to the direction of insertion.	No damage has occurred that causes discontinuity or shorting.
3.8.1.7	Continuity	A moment of 0-0.75 Nm (e.g., 50 N at 15 mm from the edge of the receptacle) is applied to a plug inserted in the test fixture in each of the four directions. A single plug shall be used for this test. Some mechanical deformation may occur. The plug shall be mated with the continuity test fixture after the test forces have been applied to verify no damage has occurred that causes discontinuity or shorting. The continuity test fixture shall provide a planar surface on the mating side located 6.20 ± 0.20 mm from the receptacle Datum A, perpendicular to the direction of insertion.	No discontinuities or shorts allowed.
3.8.1.7	Wrenching Strength-b	a moment of 2.0 Nm is applied in the up and down directions and a moment of 3.5 Nm is applied in the left and right directions.	The plug all shall disengage from the test fixture or demonstrate mechanical failure



5.3. Environmental

Clause	Test Item	Test Procedure	Requirement
3.8.2	Temperature life	EIA 364-17, Method A. 105° C without applied voltage for 120 hours. 105° C without applied voltage for 72 hours when used as preconditioning.	Low level contact resistance meets spec before and after the Temperature Life test.
3.8.2	Vibration	EIA 364-28 Test Condition VII, Test Letter D	No evidence of physical damages and no discontinuity longer than 1 microsecond. Low level contact resistance meets spec before and after the Vibration test.
3.8.2	Cyclic temperature and humidity	EIA 364-31	Low level contact resistance meets spec before and after the Cyclic Temperature and Humidity test.
3.8.2	Thermal shock	EIA 364-32, Test Condition I 10 Cycles -55°C and +85°C.	No evidence of any physical damage. Low level contact resistance meets spec before and after the Thermal Shock test.
3.8.2	Mixed flowing gas	EIA 364-65, Class II A Samples should be placed in an environmentally controlled 'test chamber' that is monitored by a gas analyzing system for controlled concentrations of the specified gas mixture. Test coupons shall also be used and the weight gain reported. Test duration is 7 days.	Low level contact resistance meets spec before and after the Mixed Flowing Gas test.
3.8.2	Thermal disturbance	Cycle the connector or socket between 15 °C ±3 °C and 85 °C ± 3 °C, as measured on the part. Ramps should be a minimum of 2 °C per minute, and dwell times should insure that the contacts reach the temperature extremes (a minimum of 5 minutes). Humidity is not controlled. Perform 10 such cycles.	Low level contact resistance meets spec before and after the Thermal disturbance test.



6. Test Procedure

For the DC electrical, Mechanical and Environmental compliance requirements of Type-C connector, refer to the grouping and test methods in the EIA364.1000.01 standard to implement the test.

Group A-1	
No.	Test Item
A-1-1	Low level contact resistance
A-1-2	Durability (preconditioning)
A-1-3	Temperature life
A-1-4	Low level contact resistance
A-1-5	Re-seating
A-1-6	Low level contact resistance
Group A-2	
No.	Test Item
A-2-1	Low level contact resistance
A-2-2	Durability (preconditioning)
A-2-3	Thermal shock
A-2-4	Low level contact resistance
A-2-5	Cyclic temperature and humidity
A-2-6	Low level contact resistance
A-2-7	Re-seating
A-2-8	Low level contact resistance
Group A-3	
No.	Test Item
A-3-1	Low level contact resistance



A-3-2	Durability (preconditioning)
A-3-3	Temperature life (preconditioning)
A-3-4	Low level contact resistance
A-3-5	Vibration
A-3-6	Low level contact resistance
Group A-4	
No.	Test Item
A-4-1	Low level contact resistance
A-4-2	Durability (preconditioning)
A-4-3	Temperature life (preconditioning)
A-4-4	Low level contact resistance
A-4-5	Mixed flowing gas
A-4-6	Low level contact resistance
A-4-7	Thermal disturbance
A-4-8	Low level contact resistance
A-4-9	Re-seating
A-4-10	Low level contact resistance
Group A-7	
No.	Test Item
A-7-1	Dielectric withstanding voltage
A-7-2	Low level contact resistance
A-7-3	Durability (preconditioning)
A-7-4	Insertion force
A-7-5	Extraction force



A-7-6	Durability
A-7-7	Extraction force
A-7-8	Durability
A-7-9	Extraction force
A-7-10	Low level contact resistance
A-7-11	Dielectric withstanding voltage
A-7-12	Insulation Resistance
Group B-5	
No.	Test Item
B-5-1	Critical Dimensions
B-5-2	EMC Shielding Spring Inspection
Group B-6	
No.	Test Item
B-6-1	Contact Current Rating
Group B-7	
No.	Test Item
B-7-1	Wrenching Strength-a
B-7-2	Continuity
B-7-3	Dielectric withstanding voltage
B-7-4	Wrenching Strength-b



7. Test Result Summary

Test Item	Clause	Result
EMC Shielding Spring Inspection	3.2.1 (4)	Pass
Critical Dimensions	3.2.1 (8)	Pass
Low level contact resistance	3.7.8.1	Pass
Dielectric withstanding voltage	3.7.8.2	Pass
Insulation Resistance	3.7.8.3	Pass
Contact Current Rating	3.7.8.4	Pass
Insertion force	3.8.1.1	Pass
Extraction force	3.8.1.2	Pass
Durability	3.8.1.3	Pass
Re-seating	3.8.1.3	Pass
Temperature life	3.8.2	Pass
Thermal shock	3.8.2	Pass
Cyclic temperature and humidity	3.8.2	Pass
Vibration	3.8.2	Pass
Mixed flowing gas	3.8.2	Pass
Thermal disturbance	3.8.2	Pass
Wrenching Strength-a	3.8.1.7	Pass
Continuity	3.8.1.7	Pass
Wrenching Strength-b	3.8.1.7	Pass



8. Test Detail

8.1. Clause 3.2.1 (4) EMC Shielding Spring Inspection

B-5-2 EMC Shielding Spring Inspection				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/16	Temperature(°C)	24.2	Huang Siwei	Pass
	Humidity (RH)	71.7 %		

8.2. Clause 3.2.1 (8) Critical Dimensions

B-5-1 Critical Dimensions				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/16	Temperature(°C)	24.2	Huang Siwei	Pass
	Humidity (RH)	71.7 %		

Test data: (Unit:mm)			
B-5-1 Critical Dimensions – Plug			
Description	Sample Coding		
	UT69aa	UT70aa	UT71aa
2.EMC finger location (1.72min.)	1.7397	1.7342	1.7538
3.EMC middle finger width (0.530±0.025)	0.5290	0.5250	0.5433
4.EMC finger position tolerance (0.08 with datum A/B/C)	0.0243	0.0202	0.0129
5.Plug opening in y-direction (6.830±0.025)	6.8069	6.8092	6.8125
6.Plug width (8.25±0.03)	8.2233	8.2345	8.2321
7.Plug width (centerline) position tolerance (0.04 with datum A/B/C)	0.0146	0.0158	0.0049
8.Contact point of EMC finger (0.71~0.96)	0.9481	0.9440	0.9477
9.EMC finger contact height (0.18 min.)	0.1805	0.1824	0.1824
10.Signal contact height (Top and bottom contacts shall not touch) (0.27 min.)	0.2716	0.2709	0.2736
11.Signal contact width (0.140~0.245)	0.2017	0.2014	0.2011
12.Signal contact width position tolerance (0.08 with datum A/B/C)	0.0693	0.0744	0.0770
13.Outer EMC finger width (0.79~1.09)	0.8517	0.8472	0.8492
16.Plug thickness (2.40±0.03)	2.4106	2.4008	2.4103
17.Plug opening in thickness direction (1.300±0.025)	1.3189	1.3152	1.3167
18.Plug opening position tolerance (0.05 with datum A/B/C)	0.0150	0.0061	0.0374
19.Plug tongue opening (0.800±0.025)	0.8203	0.8180	0.8023
20.Metal opening (1.78~2.10)	1.8615	1.8394	1.8411



8.3. Clause 3.7.8.1 Low level contact resistance

A-1-1 Low level contact resistance			
Testing Period	Measure environment		Test Engineer
2025/07/23	Temperature(°C)	23.1	Huang Siwei
	Humidity (RH)	68.5 %	
Test condition	Mated; Maximum open circuit voltage 20 mV; Test current 100 mA.		
Criteria	≤40 mΩ (Initial)		

A-1-1 Low Level Contact Resistance (mΩ)												
Sample Coding	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
UT01aa	17.3	N/A	N/A	19.2	16.5	16.4	17.6	16.5	15.9	N/A	N/A	16.9
UT02aa	16.7	N/A	N/A	20.1	21.4	21.3	23.1	18.0	15.7	N/A	N/A	16.2
UT03aa	15.1	N/A	N/A	16.8	17.6	16.9	17.6	17.5	17.9	N/A	N/A	18.9
UT04aa	17.3	N/A	N/A	19.9	17.7	16.8	16.8	17.8	15.0	N/A	N/A	16.3
UT05aa	18.9	N/A	N/A	20.8	17.5	17.5	17.7	17.7	12.0	N/A	N/A	17.1
UT06aa	19.3	N/A	N/A	19.9	20.4	18.3	20.9	16.3	15.9	N/A	N/A	17.1
UT07aa	20.9	N/A	N/A	19.9	18.3	18.3	18.0	16.1	16.8	N/A	N/A	17.3
UT08aa	16.4	N/A	N/A	19.5	16.6	16.4	17.1	16.9	15.5	N/A	N/A	15.8
UT09aa	17.6	N/A	N/A	20.6	16.6	16.1	16.0	15.7	16.7	N/A	N/A	17.5
UT10aa	16.9	N/A	N/A	18.5	17.1	16.8	17.9	17.5	15.7	N/A	N/A	17.2
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT01aa	19.2	N/A	N/A	15.4	18.8	17.9	17.6	19.3	19.0	N/A	N/A	17.8
UT02aa	20.9	N/A	N/A	17.0	17.7	19.0	18.4	20.0	18.6	N/A	N/A	17.5
UT03aa	18.1	N/A	N/A	14.7	19.6	18.6	18.0	19.6	19.3	N/A	N/A	18.6
UT04aa	18.6	N/A	N/A	15.6	18.5	17.5	17.2	19.2	18.1	N/A	N/A	17.0
UT05aa	18.9	N/A	N/A	15.9	19.8	25.5	18.4	19.8	19.3	N/A	N/A	18.4
UT06aa	20.5	N/A	N/A	16.4	20.0	18.3	20.3	20.2	19.8	N/A	N/A	19.7
UT07aa	20.5	N/A	N/A	16.7	19.9	20.0	19.0	21.3	18.9	N/A	N/A	18.1
UT08aa	17.4	N/A	N/A	15.6	18.8	17.3	17.4	19.4	18.4	N/A	N/A	17.5
UT09aa	18.2	N/A	N/A	15.3	18.8	18.6	18.3	21.2	19.8	N/A	N/A	18.3
UT10aa	18.1	N/A	N/A	15.7	20.0	18.6	19.4	20.6	19.6	N/A	N/A	19.0



A-1-4 Low level contact resistance			
Testing Period	Measure environment		Test Engineer
2025/07/31	Temperature(°C)	24.0	Huang Siwei
	Humidity (RH)	63.2 %	
Test condition	Mated; Maximum open circuit voltage 20 mV; Test current 100 mA.		
Criteria	≤50 mΩ		

A-1-4 Low Level Contact Resistance (mΩ)												
Sample Coding	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
UT01aa	17.8	N/A	N/A	19.5	16.9	16.9	18.2	16.7	16.1	N/A	N/A	17.8
UT02aa	19.6	N/A	N/A	20.9	25.2	35.6	23.5	24.1	17.0	N/A	N/A	16.8
UT03aa	18.3	N/A	N/A	22.9	20.6	18.3	22.1	19.5	16.9	N/A	N/A	18.1
UT04aa	18.8	N/A	N/A	19.8	18.3	18.4	18.6	20.9	17.0	N/A	N/A	17.5
UT05aa	16.6	N/A	N/A	23.8	18.5	17.6	17.3	17.9	15.5	N/A	N/A	16.1
UT06aa	19.0	N/A	N/A	22.3	23.9	18.5	22.4	19.4	17.8	N/A	N/A	19.2
UT07aa	19.1	N/A	N/A	20.5	17.8	18.0	17.7	17.3	18.4	N/A	N/A	17.3
UT08aa	18.6	N/A	N/A	21.8	16.9	19.4	17.6	19.4	16.9	N/A	N/A	16.0
UT09aa	18.1	N/A	N/A	21.1	20.4	17.3	17.6	16.9	16.3	N/A	N/A	17.4
UT10aa	17.4	N/A	N/A	21.3	18.7	19.7	19.4	20.9	17.4	N/A	N/A	18.4
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT01aa	18.1	N/A	N/A	15.5	19.7	18.5	17.8	25.1	19.1	N/A	N/A	18.4
UT02aa	23.1	N/A	N/A	18.0	18.5	19.1	17.9	20.1	19.6	N/A	N/A	19.0
UT03aa	18.6	N/A	N/A	16.0	20.7	21.0	18.4	26.5	21.3	N/A	N/A	18.9
UT04aa	20.1	N/A	N/A	18.7	20.0	17.8	17.9	19.9	19.7	N/A	N/A	17.7
UT05aa	19.3	N/A	N/A	17.0	18.1	17.8	19.2	19.7	19.7	N/A	N/A	18.3
UT06aa	19.2	N/A	N/A	17.9	24.1	19.7	21.5	22.2	22.6	N/A	N/A	18.2
UT07aa	18.7	N/A	N/A	19.4	21.2	19.8	20.8	21.7	18.6	N/A	N/A	17.5
UT08aa	19.4	N/A	N/A	17.0	20.5	30.3	19.2	20.1	19.6	N/A	N/A	18.0
UT09aa	19.3	N/A	N/A	16.4	19.6	19.9	17.9	20.4	20.2	N/A	N/A	17.8
UT10aa	22.0	N/A	N/A	17.6	20.9	19.7	19.4	21.6	21.2	N/A	N/A	19.4



A-1-6 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/31	Temperature(°C)	23.8	Huang Siwei	Pass
	Humidity (RH)	69.9 %		
Test condition	Mated; Maximum open circuit voltage 20 mV; Test current 100 mA.			
Criteria	≤50 mΩ			

A-1-6 Low Level Contact Resistance (mΩ)												
Sample Coding	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
UT01aa	18.9	N/A	N/A	19.0	18.7	17.5	16.5	18.7	18.7	N/A	N/A	18.9
UT02aa	17.4	N/A	N/A	22.4	17.8	21.7	22.4	22.5	19.3	N/A	N/A	17.8
UT03aa	18.0	N/A	N/A	24.1	22.3	19.3	22.1	19.8	17.6	N/A	N/A	16.4
UT04aa	16.3	N/A	N/A	25.8	21.7	18.2	19.4	19.9	17.3	N/A	N/A	18.6
UT05aa	17.9	N/A	N/A	21.6	22.9	18.4	18.7	18.9	18.8	N/A	N/A	21.9
UT06aa	17.5	N/A	N/A	22.9	21.5	18.8	16.5	19.0	19.0	N/A	N/A	22.4
UT07aa	19.0	N/A	N/A	23.1	18.8	17.8	22.6	18.9	18.4	N/A	N/A	24.1
UT08aa	21.6	N/A	N/A	23.1	17.1	20.9	21.3	21.4	17.8	N/A	N/A	19.0
UT09aa	22.4	N/A	N/A	22.6	22.4	18.8	17.8	22.5	18.2	N/A	N/A	18.7
UT10aa	17.8	N/A	N/A	19.8	21.5	20.9	18.4	21.4	18.8	N/A	N/A	18.9
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT01aa	19.0	N/A	N/A	18.4	23.1	19.0	19.8	25.7	19.0	N/A	N/A	17.8
UT02aa	21.7	N/A	N/A	19.3	18.6	18.9	18.4	21.3	21.9	N/A	N/A	18.2
UT03aa	23.4	N/A	N/A	18.8	21.3	22.8	19.0	22.6	23.2	N/A	N/A	19.0
UT04aa	21.3	N/A	N/A	19.0	22.3	18.9	17.2	21.4	22.8	N/A	N/A	18.8
UT05aa	23.1	N/A	N/A	18.2	21.8	24.3	18.4	19.0	18.7	N/A	N/A	17.3
UT06aa	22.4	N/A	N/A	18.6	24.1	21.3	21.6	21.8	19.6	N/A	N/A	18.9
UT07aa	18.9	N/A	N/A	18.6	22.3	22.3	18.8	20.9	17.3	N/A	N/A	18.9
UT08aa	19.0	N/A	N/A	16.3	21.6	21.4	19.8	21.4	18.9	N/A	N/A	17.2
UT09aa	19.3	N/A	N/A	18.7	18.9	18.9	18.7	22.4	21.4	N/A	N/A	18.8
UT10aa	21.6	N/A	N/A	18.9	20.9	19.9	19.0	21.3	22.6	N/A	N/A	19.0



A-2-1 Low level contact resistance			
Testing Period	Measure environment		Test Engineer
2025/07/25	Temperature(°C)	22.3	Huang Siwei
	Humidity (RH)	78.9 %	
Test condition	Mated; Maximum open circuit voltage 20 mV; Test current 100 mA.		
Criteria	≤40 mΩ (Initial)		

A-2-1 Low Level Contact Resistance (mΩ)												
Sample Coding	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
UT11aa	18.1	N/A	N/A	19.5	18.1	17.4	18.7	16.5	16.8	N/A	N/A	18.7
UT12aa	18.8	N/A	N/A	22.8	17.2	18.0	17.6	17.1	18.0	N/A	N/A	17.7
UT13aa	17.0	N/A	N/A	18.9	16.6	16.0	16.6	16.1	16.8	N/A	N/A	16.5
UT14aa	17.1	N/A	N/A	20.7	16.4	21.3	17.7	16.3	16.3	N/A	N/A	16.8
UT15aa	17.7	N/A	N/A	20.9	17.3	17.9	17.9	16.6	15.8	N/A	N/A	17.8
UT16aa	17.9	N/A	N/A	20.8	18.6	16.7	17.5	16.6	15.3	N/A	N/A	16.2
UT17aa	16.6	N/A	N/A	32.9	16.9	17.0	16.4	15.4	16.2	N/A	N/A	19.0
UT18aa	17.6	N/A	N/A	20.1	16.7	16.6	17.3	15.7	16.1	N/A	N/A	16.5
UT19aa	17.2	N/A	N/A	20.2	19.4	19.8	19.3	18.1	17.4	N/A	N/A	17.4
UT20aa	18.5	N/A	N/A	18.7	17.7	17.2	17.8	16.6	15.9	N/A	N/A	16.6
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT11aa	18.2	N/A	N/A	15.9	20.5	20.9	22.5	24.0	18.7	N/A	N/A	18.7
UT12aa	20.3	N/A	N/A	17.1	20.2	20.3	20.0	21.7	20.0	N/A	N/A	18.6
UT13aa	17.1	N/A	N/A	15.2	19.3	19.6	17.7	20.4	18.8	N/A	N/A	17.7
UT14aa	20.4	N/A	N/A	17.0	20.6	18.8	19.0	19.9	20.1	N/A	N/A	19.1
UT15aa	17.9	N/A	N/A	15.9	19.6	19.6	18.5	20.5	19.2	N/A	N/A	18.1
UT16aa	17.6	N/A	N/A	14.9	19.2	18.1	19.4	19.6	19.3	N/A	N/A	17.9
UT17aa	17.9	N/A	N/A	14.9	19.9	17.7	18.2	19.8	19.3	N/A	N/A	17.4
UT18aa	17.7	N/A	N/A	15.4	19.8	18.6	19.6	20.2	19.8	N/A	N/A	17.9
UT19aa	18.7	N/A	N/A	15.2	20.2	19.0	20.3	20.7	21.0	N/A	N/A	18.1
UT20aa	17.9	N/A	N/A	15.4	18.9	19.3	20.2	19.7	19.0	N/A	N/A	17.5



A-2-4 Low level contact resistance			
Testing Period	Measure environment		Test Engineer
2025/07/26	Temperature(°C)	24.3	Huang Siwei
	Humidity (RH)	74.3 %	
Test condition	Mated; Maximum open circuit voltage 20 mV; Test current 100 mA.		
Criteria	≤50 mΩ		

A-2-4 Low Level Contact Resistance (mΩ)												
Sample Coding	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
UT11aa	17.4	N/A	N/A	19.7	17.2	18.0	17.2	16.4	16.6	N/A	N/A	18.2
UT12aa	17.2	N/A	N/A	19.8	16.9	17.6	16.5	17.3	15.8	N/A	N/A	16.6
UT13aa	17.2	N/A	N/A	19.3	18.0	17.6	17.8	16.6	17.2	N/A	N/A	16.8
UT14aa	18.7	N/A	N/A	20.2	17.7	18.8	18.2	17.7	16.6	N/A	N/A	18.0
UT15aa	17.2	N/A	N/A	20.4	17.6	18.3	18.6	16.6	15.8	N/A	N/A	20.6
UT16aa	17.9	N/A	N/A	22.1	19.6	18.7	18.7	17.2	16.6	N/A	N/A	16.8
UT17aa	16.4	N/A	N/A	33.2	16.6	17.5	16.9	16.1	16.4	N/A	N/A	18.9
UT18aa	17.3	N/A	N/A	20.0	17.1	16.4	19.5	16.1	15.8	N/A	N/A	18.0
UT19aa	17.3	N/A	N/A	21.4	26.3	16.7	17.1	17.8	18.1	N/A	N/A	17.3
UT20aa	17.8	N/A	N/A	18.7	18.4	18.5	19.4	20.0	16.9	N/A	N/A	17.1
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT11aa	18.8	N/A	N/A	15.4	18.7	19.1	20.4	22.3	18.7	N/A	N/A	18.3
UT12aa	18.1	N/A	N/A	16.0	18.8	18.6	18.1	20.2	19.7	N/A	N/A	17.2
UT13aa	17.7	N/A	N/A	15.6	18.6	19.3	17.2	21.1	18.5	N/A	N/A	17.8
UT14aa	18.4	N/A	N/A	15.0	20.2	18.4	19.6	21.2	20.1	N/A	N/A	18.9
UT15aa	18.2	N/A	N/A	15.5	19.8	18.6	18.4	21.1	19.0	N/A	N/A	18.0
UT16aa	17.7	N/A	N/A	15.1	21.6	19.2	19.8	19.7	18.4	N/A	N/A	18.5
UT17aa	18.4	N/A	N/A	15.7	21.9	17.9	19.2	21.1	20.6	N/A	N/A	17.8
UT18aa	18.0	N/A	N/A	15.6	21.9	19.8	21.3	21.1	20.6	N/A	N/A	17.8
UT19aa	19.6	N/A	N/A	15.4	22.1	20.1	26.8	21.4	22.2	N/A	N/A	19.0
UT20aa	23.0	N/A	N/A	15.5	19.9	22.4	22.1	20.5	20.1	N/A	N/A	18.0



A-2-6 Low level contact resistance			
Testing Period	Measure environment		Test Engineer
2025/07/31	Temperature(°C)	23.6	Huang Siwei
	Humidity (RH)	70.2 %	
Test condition	Mated; Maximum open circuit voltage 20 mV; Test current 100 mA.		
Criteria	≤50 mΩ		

A-2-6 Low Level Contact Resistance (mΩ)												
Sample Coding	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
UT11aa	18.9	N/A	N/A	19.4	17.9	18.8	15.7	15.5	19.0	N/A	N/A	16.0
UT12aa	17.5	N/A	N/A	18.8	17.5	16.0	16.4	16.4	18.3	N/A	N/A	17.1
UT13aa	18.7	N/A	N/A	17.9	19.2	19.5	16.9	17.3	16.4	N/A	N/A	18.5
UT14aa	16.9	N/A	N/A	19.7	19.8	15.4	19.6	18.8	17.4	N/A	N/A	19.8
UT15aa	16.9	N/A	N/A	19.9	19.8	18.9	19.8	16.7	18.7	N/A	N/A	19.5
UT16aa	15.1	N/A	N/A	17.7	17.6	18.1	16.1	16.4	15.3	N/A	N/A	16.9
UT17aa	16.5	N/A	N/A	16.1	19.8	19.4	17.1	19.1	19.5	N/A	N/A	17.0
UT18aa	19.3	N/A	N/A	18.9	16.9	18.9	19.0	19.5	19.3	N/A	N/A	16.4
UT19aa	17.1	N/A	N/A	16.7	19.3	16.8	18.7	18.7	17.9	N/A	N/A	15.6
UT20aa	19.8	N/A	N/A	18.3	16.8	16.7	17.1	15.9	15.5	N/A	N/A	19.7
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT11aa	16.4	N/A	N/A	18.1	15.2	18.4	16.6	15.5	19.9	N/A	N/A	17.4
UT12aa	16.0	N/A	N/A	19.0	17.6	19.1	16.3	19.5	18.7	N/A	N/A	17.6
UT13aa	19.5	N/A	N/A	16.9	17.0	18.3	19.7	19.9	17.2	N/A	N/A	17.6
UT14aa	17.5	N/A	N/A	17.7	16.4	15.7	15.2	15.8	18.4	N/A	N/A	19.2
UT15aa	19.2	N/A	N/A	19.5	15.9	15.8	18.4	16.3	18.1	N/A	N/A	17.7
UT16aa	16.3	N/A	N/A	15.8	17.8	17.4	17.7	18.7	17.0	N/A	N/A	18.6
UT17aa	18.2	N/A	N/A	15.9	19.4	15.4	19.4	19.8	16.8	N/A	N/A	19.5
UT18aa	18.8	N/A	N/A	16.0	15.8	18.0	15.7	17.9	15.4	N/A	N/A	17.7
UT19aa	18.0	N/A	N/A	18.9	18.2	17.3	19.5	19.1	15.3	N/A	N/A	18.8
UT20aa	18.9	N/A	N/A	17.4	19.4	16.1	16.3	15.4	15.9	N/A	N/A	19.5



A-2-8 Low level contact resistance			
Testing Period	Measure environment		Test Engineer
2025/07/31	Temperature(°C)	23.6	Huang Siwei
	Humidity (RH)	70.2 %	
Test condition	Mated; Maximum open circuit voltage 20 mV; Test current 100 mA.		
Criteria	≤50 mΩ		

A-2-8 Low Level Contact Resistance (mΩ)												
Sample Coding	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
UT11aa	18.9	N/A	N/A	19.4	17.9	18.8	15.7	15.5	19.0	N/A	N/A	16.0
UT12aa	17.5	N/A	N/A	18.8	17.5	16.0	16.4	16.4	18.3	N/A	N/A	17.1
UT13aa	18.7	N/A	N/A	17.9	19.2	19.5	16.9	17.3	16.4	N/A	N/A	18.5
UT14aa	16.9	N/A	N/A	19.7	19.8	15.4	19.6	18.8	17.4	N/A	N/A	19.8
UT15aa	16.9	N/A	N/A	19.9	19.8	18.9	19.8	16.7	18.7	N/A	N/A	19.5
UT16aa	15.1	N/A	N/A	17.7	17.6	18.1	16.1	16.4	15.3	N/A	N/A	16.9
UT17aa	16.5	N/A	N/A	16.1	19.8	19.4	17.1	19.1	19.5	N/A	N/A	17.0
UT18aa	19.3	N/A	N/A	18.9	16.9	18.9	19.0	19.5	19.3	N/A	N/A	16.4
UT19aa	17.1	N/A	N/A	16.7	19.3	16.8	18.7	18.7	17.9	N/A	N/A	15.6
UT20aa	19.8	N/A	N/A	18.3	16.8	16.7	17.1	15.9	15.5	N/A	N/A	19.7
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT11aa	16.4	N/A	N/A	18.1	15.2	18.4	16.6	15.5	19.9	N/A	N/A	17.4
UT12aa	16.0	N/A	N/A	19.0	17.6	19.1	16.3	19.5	18.7	N/A	N/A	17.6
UT13aa	19.5	N/A	N/A	16.9	17.0	18.3	19.7	19.9	17.2	N/A	N/A	17.6
UT14aa	17.5	N/A	N/A	17.7	16.4	15.7	15.2	15.8	18.4	N/A	N/A	19.2
UT15aa	19.2	N/A	N/A	19.5	15.9	15.8	18.4	16.3	18.1	N/A	N/A	17.7
UT16aa	16.3	N/A	N/A	15.8	17.8	17.4	17.7	18.7	17.0	N/A	N/A	18.6
UT17aa	18.2	N/A	N/A	15.9	19.4	15.4	19.4	19.8	16.8	N/A	N/A	19.5
UT18aa	18.8	N/A	N/A	16.0	15.8	18.0	15.7	17.9	15.4	N/A	N/A	17.7
UT19aa	18.0	N/A	N/A	18.9	18.2	17.3	19.5	19.1	15.3	N/A	N/A	18.8
UT20aa	18.9	N/A	N/A	17.4	19.4	16.1	16.3	15.4	15.9	N/A	N/A	19.5



A-3-1 Low level contact resistance			
Testing Period	Measure environment		Test Engineer
2025/07/24	Temperature(°C)	23.4	Su Kun
	Humidity (RH)	66.0 %	
Test condition	Mated; Maximum open circuit voltage 20 mV; Test current 100 mA.		
Criteria	≤40 mΩ (Initial)		

A-3-1 Low Level Contact Resistance (mΩ)												
Sample Coding	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
UT21aa	17.8	N/A	N/A	23.0	25.0	20.4	24.0	18.7	15.9	N/A	N/A	18.2
UT22aa	22.9	N/A	N/A	21.5	22.6	19.0	19.4	19.2	16.4	N/A	N/A	20.1
UT23aa	19.2	N/A	N/A	21.1	19.0	18.9	17.2	18.1	18.6	N/A	N/A	32.0
UT24aa	20.0	N/A	N/A	24.9	17.3	23.4	17.8	19.1	16.2	N/A	N/A	19.7
UT25aa	17.3	N/A	N/A	21.3	17.3	22.7	18.8	22.7	15.3	N/A	N/A	16.6
UT26aa	17.2	N/A	N/A	21.9	23.5	17.4	18.9	18.4	16.6	N/A	N/A	20.3
UT27aa	18.9	N/A	N/A	20.5	17.2	20.1	17.3	17.3	17.0	N/A	N/A	18.7
UT28aa	19.8	N/A	N/A	22.3	20.5	20.3	20.3	18.4	23.5	N/A	N/A	16.7
UT29aa	17.7	N/A	N/A	19.9	17.9	17.2	21.1	18.9	16.3	N/A	N/A	16.8
UT30aa	21.9	N/A	N/A	22.4	20.5	20.5	17.6	20.4	16.0	N/A	N/A	17.1
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT21aa	29.6	N/A	N/A	16.4	26.5	23.4	23.5	20.5	20.1	N/A	N/A	18.3
UT22aa	19.1	N/A	N/A	16.1	20.7	22.1	19.4	22.4	21.4	N/A	N/A	19.4
UT23aa	20.7	N/A	N/A	16.3	34.0	21.6	23.1	22.2	21.3	N/A	N/A	20.9
UT24aa	18.8	N/A	N/A	17.6	20.0	18.2	22.4	20.0	20.8	N/A	N/A	19.2
UT25aa	20.0	N/A	N/A	16.9	18.3	19.4	20.5	19.0	18.6	N/A	N/A	17.4
UT26aa	18.6	N/A	N/A	15.6	23.4	18.4	20.9	20.5	22.2	N/A	N/A	17.7
UT27aa	18.2	N/A	N/A	16.2	22.7	20.4	26.1	22.6	23.1	N/A	N/A	18.5
UT28aa	21.1	N/A	N/A	18.3	28.1	18.6	20.0	20.3	19.5	N/A	N/A	35.0
UT29aa	18.3	N/A	N/A	15.7	20.3	18.2	18.6	23.3	19.4	N/A	N/A	18.1
UT30aa	19.5	N/A	N/A	17.9	21.0	19.0	21.5	22.1	19.6	N/A	N/A	18.0



A-3-4 Low level contact resistance			
Testing Period	Measure environment		Test Engineer
2025/08/06	Temperature(°C)	23.3	Su Kun
	Humidity (RH)	68.1 %	
Test condition	Mated; Maximum open circuit voltage 20 mV; Test current 100 mA.		
Criteria	≤50 mΩ		

A-3-4 Low Level Contact Resistance (mΩ)												
Sample Coding	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
UT21aa	19.8	N/A	N/A	24.2	32.5	19.4	42.4	19.8	17.0	N/A	N/A	19.9
UT22aa	20.2	N/A	N/A	21.8	27.0	19.7	24.1	21.4	16.3	N/A	N/A	19.6
UT23aa	20.0	N/A	N/A	35.0	29.1	32.8	23.0	25.8	18.4	N/A	N/A	19.0
UT24aa	17.0	N/A	N/A	22.2	19.9	27.4	20.4	22.5	15.6	N/A	N/A	17.4
UT25aa	19.6	N/A	N/A	26.8	28.4	22.2	28.6	43.9	17.6	N/A	N/A	23.0
UT26aa	17.8	N/A	N/A	21.8	18.8	18.6	18.6	19.0	15.7	N/A	N/A	19.2
UT27aa	19.2	N/A	N/A	19.8	19.1	18.8	18.7	19.1	16.0	N/A	N/A	17.0
UT28aa	25.9	N/A	N/A	26.0	24.1	20.8	22.8	20.7	31.1	N/A	N/A	20.5
UT29aa	19.3	N/A	N/A	28.5	43.1	23.7	38.9	29.8	17.3	N/A	N/A	22.5
UT30aa	21.5	N/A	N/A	21.1	19.6	20.9	20.2	20.6	15.7	N/A	N/A	17.7
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT21aa	22.7	N/A	N/A	16.6	23.9	21.4	20.0	21.0	21.5	N/A	N/A	17.6
UT22aa	24.5	N/A	N/A	16.4	20.6	24.7	24.9	21.6	27.2	N/A	N/A	20.4
UT23aa	23.3	N/A	N/A	17.2	21.2	35.3	22.3	23.4	28.2	N/A	N/A	32.9
UT24aa	18.6	N/A	N/A	16.1	23.0	19.8	24.1	22.5	21.9	N/A	N/A	19.9
UT25aa	22.2	N/A	N/A	17.0	29.4	24.8	24.1	48.2	20.9	N/A	N/A	19.2
UT26aa	19.5	N/A	N/A	16.2	20.9	19.1	18.4	20.9	20.6	N/A	N/A	18.2
UT27aa	20.0	N/A	N/A	15.7	19.4	18.5	22.3	22.1	19.4	N/A	N/A	18.3
UT28aa	23.8	N/A	N/A	16.7	25.4	20.2	21.4	21.9	21.5	N/A	N/A	35.2
UT29aa	23.5	N/A	N/A	16.4	27.9	21.4	20.1	31.6	23.8	N/A	N/A	19.4
UT30aa	21.3	N/A	N/A	17.0	20.6	18.8	19.4	21.0	19.3	N/A	N/A	18.4



A-3-6 Low level contact resistance			
Testing Period	Measure environment		Test Engineer
2025/08/13	Temperature(°C)	24.3	Su Kun
	Humidity (RH)	71.6 %	
Test condition	Mated; Maximum open circuit voltage 20 mV; Test current 100 mA.		
Criteria	≤50 mΩ		

A-3-6 Low Level Contact Resistance (mΩ)												
Sample Coding	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
UT21aa	31.3	N/A	N/A	23.3	18.6	19.2	20.2	19.1	18.5	N/A	N/A	17.9
UT22aa	18.9	N/A	N/A	20.5	18.8	18.3	18.6	19.0	15.6	N/A	N/A	20.9
UT23aa	19.2	N/A	N/A	25.0	34.2	30.7	29.2	21.7	18.1	N/A	N/A	17.6
UT24aa	22.0	N/A	N/A	25.4	19.7	30.9	21.4	20.3	17.7	N/A	N/A	21.1
UT25aa	20.2	N/A	N/A	25.2	19.9	41.2	26.9	24.3	16.0	N/A	N/A	20.7
UT26aa	19.1	N/A	N/A	23.7	19.5	19.2	21.8	18.3	18.1	N/A	N/A	20.7
UT27aa	18.6	N/A	N/A	20.0	18.0	18.2	18.1	19.6	15.6	N/A	N/A	17.4
UT28aa	20.5	N/A	N/A	23.0	25.7	17.8	17.7	17.0	17.6	N/A	N/A	17.4
UT29aa	17.6	N/A	N/A	19.4	17.9	17.9	18.1	19.5	17.8	N/A	N/A	18.1
UT30aa	18.2	N/A	N/A	29.9	21.4	21.4	39.8	21.1	17.5	N/A	N/A	18.7
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT21aa	19.4	N/A	N/A	16.5	21.1	22.5	21.1	20.0	20.0	N/A	N/A	17.7
UT22aa	20.2	N/A	N/A	15.9	21.0	23.2	21.5	25.4	23.7	N/A	N/A	20.6
UT23aa	23.7	N/A	N/A	17.4	22.9	31.8	22.3	22.3	20.8	N/A	N/A	23.1
UT24aa	20.3	N/A	N/A	16.8	21.7	24.0	25.4	23.2	23.1	N/A	N/A	22.0
UT25aa	24.9	N/A	N/A	18.2	22.1	21.1	23.0	29.9	22.5	N/A	N/A	27.1
UT26aa	20.7	N/A	N/A	16.4	23.8	19.8	21.4	24.9	22.1	N/A	N/A	17.5
UT27aa	18.7	N/A	N/A	15.4	19.9	18.3	20.0	21.0	19.7	N/A	N/A	17.4
UT28aa	18.8	N/A	N/A	23.1	20.1	18.5	18.3	19.1	19.1	N/A	N/A	34.2
UT29aa	18.6	N/A	N/A	15.2	27.7	29.5	20.0	26.7	21.4	N/A	N/A	19.2
UT30aa	32.7	N/A	N/A	18.4	22.5	24.2	23.7	23.9	23.5	N/A	N/A	17.6



A-4-1 Low level contact resistance			
Testing Period	Measure environment		Test Engineer
2025/07/23	Temperature(°C)	24.6	Huang Siwei
	Humidity (RH)	71.3 %	
Test condition	Mated; Maximum open circuit voltage 20 mV; Test current 100 mA.		
Criteria	≤40 mΩ (Initial)		

A-4-1 Low Level Contact Resistance (mΩ)												
Sample Coding	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
UT31aa	17.1	N/A	N/A	20.6	16.7	19.0	17.1	16.7	15.9	N/A	N/A	17.7
UT32aa	16.8	N/A	N/A	20.1	16.3	16.3	16.4	16.4	15.3	N/A	N/A	17.0
UT33aa	17.8	N/A	N/A	21.4	17.7	17.4	17.0	16.8	15.4	N/A	N/A	16.4
UT34aa	17.5	N/A	N/A	20.1	17.2	17.6	17.0	17.4	15.2	N/A	N/A	16.5
UT35aa	17.4	N/A	N/A	18.9	15.9	17.0	17.0	16.7	16.8	N/A	N/A	16.2
UT36aa	17.7	N/A	N/A	19.3	18.6	18.6	18.3	17.5	16.5	N/A	N/A	16.5
UT37aa	18.9	N/A	N/A	24.2	19.7	25.2	26.2	18.1	16.2	N/A	N/A	18.4
UT38aa	17.2	N/A	N/A	19.9	15.9	17.2	17.5	16.6	15.2	N/A	N/A	16.3
UT39aa	17.4	N/A	N/A	20.2	17.1	16.8	16.6	17.6	15.9	N/A	N/A	15.4
UT40aa	16.9	N/A	N/A	19.3	15.9	16.5	15.5	16.1	16.5	N/A	N/A	17.7
UT41aa	16.0	N/A	N/A	18.2	16.3	16.2	16.3	15.9	15.9	N/A	N/A	18.0
UT42aa	16.6	N/A	N/A	19.9	17.8	17.9	16.0	17.1	15.6	N/A	N/A	16.0
UT43aa	18.2	N/A	N/A	19.7	15.9	18.1	16.0	16.2	16.2	N/A	N/A	16.0
UT44aa	17.7	N/A	N/A	18.9	16.9	16.3	16.5	15.8	15.7	N/A	N/A	16.6
UT45aa	16.9	N/A	N/A	18.4	16.1	16.7	17.2	16.4	16.6	N/A	N/A	16.8
UT46aa	18.7	N/A	N/A	19.9	18.4	17.5	18.3	16.0	16.2	N/A	N/A	16.6
UT47aa	17.6	N/A	N/A	20.0	17.2	20.1	16.7	17.2	17.3	N/A	N/A	16.9
UT48aa	17.5	N/A	N/A	19.3	16.4	16.2	16.1	16.4	15.2	N/A	N/A	16.5
UT49aa	18.6	N/A	N/A	20.2	18.3	17.6	17.1	16.6	17.1	N/A	N/A	19.1
UT50aa	16.7	N/A	N/A	18.8	16.2	16.5	15.9	15.5	15.2	N/A	N/A	15.6



A-4-1 Low Level Contact Resistance (mΩ)												
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT31aa	18.4	N/A	N/A	16.2	19.5	19.1	20.1	20.4	19.9	N/A	N/A	20.8
UT32aa	18.3	N/A	N/A	15.9	18.6	18.7	18.7	20.8	19.1	N/A	N/A	22.2
UT33aa	18.9	N/A	N/A	15.4	18.5	19.2	17.8	19.6	18.8	N/A	N/A	17.0
UT34aa	17.9	N/A	N/A	24.1	19.2	17.7	18.2	20.0	18.9	N/A	N/A	10.0
UT35aa	18.0	N/A	N/A	24.6	19.7	17.4	16.7	18.6	18.2	N/A	N/A	17.3
UT36aa	19.7	N/A	N/A	15.5	19.5	18.2	19.7	20.6	20.4	N/A	N/A	17.7
UT37aa	20.3	N/A	N/A	16.1	20.6	21.7	20.1	20.7	19.9	N/A	N/A	18.4
UT38aa	18.3	N/A	N/A	16.9	19.0	18.5	20.6	20.6	18.6	N/A	N/A	17.5
UT39aa	17.7	N/A	N/A	15.1	19.6	17.2	18.6	18.8	18.0	N/A	N/A	17.4
UT40aa	17.8	N/A	N/A	5.3	21.5	18.3	19.9	20.1	20.5	N/A	N/A	15.2
UT41aa	17.1	N/A	N/A	16.8	19.2	19.4	17.9	19.3	19.1	N/A	N/A	19.7
UT42aa	18.3	N/A	N/A	16.8	18.1	17.3	17.0	19.1	18.5	N/A	N/A	18.5
UT43aa	18.4	N/A	N/A	16.3	20.2	17.8	18.0	19.9	18.8	N/A	N/A	18.3
UT44aa	18.0	N/A	N/A	16.0	21.0	18.8	19.1	20.8	20.1	N/A	N/A	17.5
UT45aa	17.7	N/A	N/A	15.7	20.1	17.9	19.1	20.1	19.6	N/A	N/A	18.0
UT46aa	18.8	N/A	N/A	15.3	22.1	18.7	18.2	21.1	22.0	N/A	N/A	19.3
UT47aa	18.9	N/A	N/A	16.5	19.6	19.6	20.2	20.4	19.4	N/A	N/A	17.9
UT48aa	17.8	N/A	N/A	11.8	19.8	17.3	19.4	20.2	18.8	N/A	N/A	25.3
UT49aa	18.5	N/A	N/A	16.4	21.1	21.6	19.8	20.9	19.9	N/A	N/A	19.4
UT50aa	17.4	N/A	N/A	14.8	20.9	18.5	18.9	20.7	18.4	N/A	N/A	17.5



A-4-4 Low level contact resistance			
Testing Period	Measure environment		Test Engineer
2025/07/28	Temperature(°C)	25.6	Huang Siwei
	Humidity (RH)	66.3 %	
Test condition	Mated; Maximum open circuit voltage 20 mV; Test current 100 mA.		
Criteria	≤50 mΩ		

A-4-4 Low Level Contact Resistance (mΩ)												
Sample Coding	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
UT31aa	18.2	N/A	N/A	16.0	18.1	17.6	15.7	17.3	17.7	N/A	N/A	19.5
UT32aa	17.1	N/A	N/A	15.1	19.4	16.9	16.0	18.4	16.9	N/A	N/A	17.1
UT33aa	15.8	N/A	N/A	15.3	15.3	18.8	19.1	16.5	17.9	N/A	N/A	17.8
UT34aa	18.1	N/A	N/A	17.9	18.4	18.4	19.0	16.2	16.2	N/A	N/A	17.1
UT35aa	18.4	N/A	N/A	19.2	15.8	16.1	18.6	16.5	17.1	N/A	N/A	15.9
UT36aa	16.4	N/A	N/A	17.0	19.4	19.1	17.0	18.3	15.3	N/A	N/A	16.1
UT37aa	19.4	N/A	N/A	16.5	16.6	18.0	16.2	19.1	15.8	N/A	N/A	16.7
UT38aa	17.7	N/A	N/A	18.5	15.5	16.9	18.8	19.4	16.3	N/A	N/A	15.4
UT39aa	15.5	N/A	N/A	19.9	19.9	16.5	18.6	15.4	18.8	N/A	N/A	18.2
UT40aa	17.6	N/A	N/A	16.7	15.8	16.9	15.4	19.5	15.3	N/A	N/A	17.4
UT41aa	17.3	N/A	N/A	16.4	16.6	19.9	16.6	15.9	15.1	N/A	N/A	19.2
UT42aa	15.6	N/A	N/A	18.3	17.5	16.1	18.7	17.5	15.5	N/A	N/A	17.8
UT43aa	19.3	N/A	N/A	19.7	17.1	19.7	16.0	18.7	18.4	N/A	N/A	17.8
UT44aa	17.3	N/A	N/A	18.6	17.4	16.3	18.4	17.9	15.4	N/A	N/A	16.7
UT45aa	15.6	N/A	N/A	19.4	16.5	19.0	15.1	19.4	18.3	N/A	N/A	17.7
UT46aa	18.9	N/A	N/A	16.7	16.0	15.5	17.9	15.1	18.9	N/A	N/A	16.8
UT47aa	15.1	N/A	N/A	19.3	18.0	19.3	19.3	15.9	18.4	N/A	N/A	15.8
UT48aa	17.4	N/A	N/A	17.0	16.2	18.9	16.7	15.2	15.4	N/A	N/A	15.7
UT49aa	16.8	N/A	N/A	18.8	19.0	16.4	16.5	19.5	18.2	N/A	N/A	16.6
UT50aa	15.8	N/A	N/A	16.5	17.2	17.3	18.6	15.3	18.8	N/A	N/A	17.1



A-4-4 Low Level Contact Resistance (mΩ)												
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT31aa	19.0	N/A	N/A	15.5	15.1	17.0	18.5	18.8	15.4	N/A	N/A	16.3
UT32aa	18.7	N/A	N/A	18.0	18.8	15.7	15.8	17.0	15.8	N/A	N/A	18.6
UT33aa	19.8	N/A	N/A	16.8	17.7	19.9	19.4	16.0	16.2	N/A	N/A	17.0
UT34aa	18.7	N/A	N/A	15.7	18.9	20.0	18.2	17.9	17.8	N/A	N/A	17.0
UT35aa	19.1	N/A	N/A	18.1	17.4	15.2	16.2	18.6	16.6	N/A	N/A	16.6
UT36aa	18.5	N/A	N/A	18.9	17.2	18.1	17.2	15.7	17.1	N/A	N/A	18.3
UT37aa	19.2	N/A	N/A	15.2	19.8	17.6	15.8	15.9	17.9	N/A	N/A	16.6
UT38aa	19.9	N/A	N/A	18.6	19.5	18.6	18.6	15.2	15.7	N/A	N/A	16.8
UT39aa	18.2	N/A	N/A	18.1	19.2	17.0	16.8	18.4	17.9	N/A	N/A	19.6
UT40aa	16.2	N/A	N/A	17.5	17.0	18.6	15.8	17.7	19.9	N/A	N/A	17.4
UT41aa	19.3	N/A	N/A	16.0	16.0	19.7	17.9	16.0	16.1	N/A	N/A	18.4
UT42aa	16.9	N/A	N/A	16.4	17.4	17.4	18.0	19.6	16.5	N/A	N/A	18.5
UT43aa	16.0	N/A	N/A	18.8	15.1	19.9	18.6	17.0	15.8	N/A	N/A	17.0
UT44aa	16.1	N/A	N/A	17.7	18.7	17.0	17.4	15.2	19.2	N/A	N/A	15.0
UT45aa	16.9	N/A	N/A	19.4	15.8	18.4	17.2	19.9	18.8	N/A	N/A	19.8
UT46aa	17.6	N/A	N/A	16.4	18.6	17.4	15.9	18.1	19.4	N/A	N/A	15.8
UT47aa	18.6	N/A	N/A	17.3	18.5	19.3	17.8	17.1	17.9	N/A	N/A	15.1
UT48aa	18.9	N/A	N/A	19.9	15.3	19.4	18.9	19.5	19.7	N/A	N/A	17.6
UT49aa	16.0	N/A	N/A	19.7	15.4	16.3	18.9	17.1	17.0	N/A	N/A	18.4
UT50aa	16.1	N/A	N/A	17.1	18.2	19.1	17.5	19.8	19.8	N/A	N/A	17.5



A-4-6 Low level contact resistance			
Testing Period	Measure environment		Test Engineer
2025/08/05	Temperature(°C)	23.6	Huang Siwei
	Humidity (RH)	68.7 %	
Test condition	Mated; Maximum open circuit voltage 20 mV; Test current 100 mA.		
Criteria	≤50 mΩ		

A-4-6 Low Level Contact Resistance (mΩ)												
Sample Coding	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
UT31aa	18.7	N/A	N/A	21.1	18.5	17.8	18.6	18.1	16.2	N/A	N/A	17.4
UT32aa	17.9	N/A	N/A	21.8	18.9	21.8	20.9	21.6	16.3	N/A	N/A	32.4
UT33aa	18.2	N/A	N/A	20.1	18.1	18.3	17.6	16.9	15.3	N/A	N/A	16.3
UT34aa	18.1	N/A	N/A	20.1	17.4	18.1	17.0	18.9	15.4	N/A	N/A	16.9
UT35aa	18.5	N/A	N/A	20.7	18.5	18.8	17.8	18.3	16.1	N/A	N/A	19.1
UT36aa	17.4	N/A	N/A	20.2	20.8	18.6	17.5	21.1	16.5	N/A	N/A	17.8
UT37aa	17.7	N/A	N/A	19.7	18.1	18.5	17.7	17.2	16.2	N/A	N/A	17.3
UT38aa	18.2	N/A	N/A	20.1	16.5	17.9	20.1	17.1	15.8	N/A	N/A	16.4
UT39aa	20.5	N/A	N/A	22.7	18.6	18.5	18.4	20.8	16.2	N/A	N/A	17.8
UT40aa	16.9	N/A	N/A	19.8	16.4	18.3	16.9	16.8	16.0	N/A	N/A	18.3
UT41aa	16.2	N/A	N/A	18.1	16.1	15.9	16.2	15.9	16.1	N/A	N/A	17.4
UT42aa	17.2	N/A	N/A	20.9	19.5	18.3	16.5	20.6	16.1	N/A	N/A	16.2
UT43aa	17.8	N/A	N/A	19.2	16.2	17.5	16.1	16.6	16.2	N/A	N/A	16.1
UT44aa	17.3	N/A	N/A	19.3	17.1	24.2	17.4	16.7	15.8	N/A	N/A	17.6
UT45aa	17.5	N/A	N/A	18.6	16.4	16.9	16.5	17.6	16.7	N/A	N/A	17.3
UT46aa	19.1	N/A	N/A	20.4	18.3	17.5	17.8	16.0	16.4	N/A	N/A	17.3
UT47aa	17.6	N/A	N/A	19.7	16.8	19.1	16.7	16.8	17.3	N/A	N/A	16.8
UT48aa	17.6	N/A	N/A	19.7	16.9	16.7	17.5	18.5	15.9	N/A	N/A	19.1
UT49aa	17.7	N/A	N/A	20.2	17.4	17.5	16.2	16.6	15.7	N/A	N/A	25.5
UT50aa	17.1	N/A	N/A	20.4	16.8	16.8	16.1	16.0	15.4	N/A	N/A	16.9



A-4-6 Low Level Contact Resistance (mΩ)												
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT31aa	18.7	N/A	N/A	16.8	20.7	20.5	25.0	24.9	19.7	N/A	N/A	21.3
UT32aa	18.7	N/A	N/A	16.7	21.2	20.4	21.6	25.8	23.4	N/A	N/A	21.7
UT33aa	17.8	N/A	N/A	15.5	18.1	17.9	17.2	18.1	19.1	N/A	N/A	16.6
UT34aa	18.3	N/A	N/A	16.0	19.0	18.4	18.1	20.5	19.1	N/A	N/A	19.7
UT35aa	19.1	N/A	N/A	16.1	21.9	17.9	17.4	19.3	19.5	N/A	N/A	17.4
UT36aa	19.2	N/A	N/A	16.3	19.4	17.5	18.9	21.1	19.9	N/A	N/A	17.9
UT37aa	18.4	N/A	N/A	15.3	19.9	18.2	18.9	19.7	18.6	N/A	N/A	17.8
UT38aa	18.9	N/A	N/A	17.5	18.5	18.1	19.5	20.1	19.1	N/A	N/A	17.3
UT39aa	19.0	N/A	N/A	16.6	19.2	18.1	31.2	19.3	18.9	N/A	N/A	17.1
UT40aa	17.0	N/A	N/A	16.2	20.6	19.0	18.1	19.5	20.5	N/A	N/A	16.7
UT41aa	16.9	N/A	N/A	17.4	19.0	18.5	18.3	19.6	19.2	N/A	N/A	16.6
UT42aa	20.0	N/A	N/A	20.5	18.2	17.9	17.4	19.4	18.5	N/A	N/A	17.9
UT43aa	17.4	N/A	N/A	15.5	19.9	17.3	18.3	21.6	18.9	N/A	N/A	18.0
UT44aa	19.3	N/A	N/A	16.8	26.3	18.9	22.5	24.1	21.1	N/A	N/A	17.6
UT45aa	18.2	N/A	N/A	16.7	19.6	17.3	18.4	20.4	19.2	N/A	N/A	17.8
UT46aa	18.8	N/A	N/A	16.2	20.3	18.1	18.7	19.8	18.9	N/A	N/A	19.9
UT47aa	18.2	N/A	N/A	15.8	20.8	18.1	20.0	20.0	18.3	N/A	N/A	17.6
UT48aa	18.0	N/A	N/A	15.8	22.6	17.9	21.7	21.1	18.6	N/A	N/A	17.8
UT49aa	18.0	N/A	N/A	15.9	19.5	19.3	17.8	19.4	19.1	N/A	N/A	19.7
UT50aa	18.0	N/A	N/A	15.2	20.6	18.4	19.7	21.2	19.0	N/A	N/A	17.9



A-4-8 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/08/07	Temperature(°C)	21.8	Huang Siwei	Pass
	Humidity (RH)	58.2 %		
Test condition	Mated; Maximum open circuit voltage 20 mV; Test current 100 mA.			
Criteria	≤50 mΩ			

A-4-8 Low Level Contact Resistance (mΩ)												
Sample Coding	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
UT31aa	18.1	N/A	N/A	18.6	16.1	19.8	17.4	19.3	16.5	N/A	N/A	18.1
UT32aa	15.0	N/A	N/A	15.4	19.0	19.6	17.7	17.1	19.4	N/A	N/A	17.7
UT33aa	19.0	N/A	N/A	16.2	15.9	19.0	18.2	17.9	17.1	N/A	N/A	17.3
UT34aa	17.5	N/A	N/A	17.3	17.8	18.9	19.1	18.6	19.7	N/A	N/A	16.4
UT35aa	18.3	N/A	N/A	18.8	18.4	18.9	18.0	18.3	19.0	N/A	N/A	15.4
UT36aa	16.3	N/A	N/A	15.7	15.6	15.3	16.7	16.9	19.8	N/A	N/A	16.9
UT37aa	17.0	N/A	N/A	16.4	19.7	15.4	18.5	18.2	18.8	N/A	N/A	19.1
UT38aa	19.8	N/A	N/A	15.1	17.4	17.7	18.7	15.3	15.7	N/A	N/A	19.4
UT39aa	16.6	N/A	N/A	17.8	19.4	19.0	19.6	19.6	18.6	N/A	N/A	15.3
UT40aa	19.4	N/A	N/A	18.2	16.1	18.6	15.7	17.3	15.1	N/A	N/A	19.4
UT41aa	18.7	N/A	N/A	17.5	19.4	18.6	16.0	15.0	15.4	N/A	N/A	16.2
UT42aa	16.6	N/A	N/A	18.1	16.3	16.0	17.8	16.6	15.5	N/A	N/A	19.8
UT43aa	19.8	N/A	N/A	15.4	18.0	19.1	19.0	16.4	18.6	N/A	N/A	19.5
UT44aa	16.9	N/A	N/A	15.3	19.9	19.2	18.5	19.8	16.3	N/A	N/A	16.7
UT45aa	15.7	N/A	N/A	19.2	18.5	18.7	18.6	16.8	16.5	N/A	N/A	18.6
UT46aa	15.3	N/A	N/A	18.8	19.8	15.3	15.1	15.0	17.6	N/A	N/A	15.8
UT47aa	17.4	N/A	N/A	16.4	19.6	19.9	18.4	15.5	15.5	N/A	N/A	15.4
UT48aa	19.6	N/A	N/A	17.4	16.3	15.6	18.7	15.0	18.9	N/A	N/A	19.6
UT49aa	17.3	N/A	N/A	16.6	15.8	17.9	19.0	17.8	17.0	N/A	N/A	16.1
UT50aa	15.7	N/A	N/A	17.8	15.7	15.2	17.4	15.6	17.6	N/A	N/A	16.4



A-4-8 Low Level Contact Resistance (mΩ)												
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT31aa	19.4	N/A	N/A	17.9	16.9	17.8	15.3	16.2	17.3	N/A	N/A	15.0
UT32aa	18.5	N/A	N/A	18.2	19.6	15.2	19.3	17.0	19.6	N/A	N/A	15.5
UT33aa	18.3	N/A	N/A	18.8	16.7	15.2	17.7	19.5	16.6	N/A	N/A	16.5
UT34aa	16.1	N/A	N/A	16.5	18.5	15.8	17.7	19.1	17.3	N/A	N/A	16.6
UT35aa	18.6	N/A	N/A	17.5	18.5	19.2	17.8	17.1	19.5	N/A	N/A	17.5
UT36aa	17.4	N/A	N/A	17.7	18.4	17.2	16.0	16.9	19.5	N/A	N/A	19.2
UT37aa	16.6	N/A	N/A	17.7	17.8	19.4	16.4	16.0	20.0	N/A	N/A	19.0
UT38aa	17.6	N/A	N/A	15.1	15.7	15.6	19.7	15.4	16.8	N/A	N/A	15.9
UT39aa	18.4	N/A	N/A	18.4	15.3	15.9	17.6	19.5	15.5	N/A	N/A	15.5
UT40aa	18.8	N/A	N/A	19.7	19.3	15.7	19.4	16.5	15.1	N/A	N/A	15.4
UT41aa	15.4	N/A	N/A	18.2	19.2	17.0	19.3	18.3	16.7	N/A	N/A	16.8
UT42aa	19.2	N/A	N/A	18.2	16.8	17.9	15.3	16.8	19.2	N/A	N/A	17.2
UT43aa	15.2	N/A	N/A	19.0	17.4	16.3	18.1	16.7	17.6	N/A	N/A	16.7
UT44aa	18.4	N/A	N/A	19.0	15.4	16.9	17.2	17.1	16.3	N/A	N/A	15.1
UT45aa	17.4	N/A	N/A	17.5	15.5	18.8	18.8	19.5	18.6	N/A	N/A	15.4
UT46aa	19.1	N/A	N/A	17.9	15.6	18.2	16.6	16.8	16.7	N/A	N/A	18.2
UT47aa	17.1	N/A	N/A	16.1	15.8	16.4	17.3	16.4	17.2	N/A	N/A	17.4
UT48aa	18.4	N/A	N/A	19.5	17.7	19.1	19.8	17.3	17.4	N/A	N/A	16.1
UT49aa	15.8	N/A	N/A	17.4	16.2	17.1	18.1	18.9	16.7	N/A	N/A	17.8
UT50aa	15.5	N/A	N/A	17.5	15.9	17.9	19.0	18.1	19.1	N/A	N/A	15.3



A-4-10 Low level contact resistance			
Testing Period	Measure environment		Test Engineer
2025/08/07	Temperature(°C)	21.8	Huang Siwei
	Humidity (RH)	58.2 %	
Test condition	Mated; Maximum open circuit voltage 20 mV; Test current 100 mA.		
Criteria	≤50 mΩ		

A-4-10 Low Level Contact Resistance (mΩ)												
Sample Coding	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
UT31aa	18.3	N/A	N/A	17.1	19.4	15.8	17.1	15.6	16.9	N/A	N/A	16.6
UT32aa	15.0	N/A	N/A	16.0	16.6	16.0	15.7	16.4	16.3	N/A	N/A	18.6
UT33aa	15.3	N/A	N/A	17.5	18.3	19.1	16.4	15.6	16.4	N/A	N/A	16.2
UT34aa	15.8	N/A	N/A	16.8	16.0	19.7	15.4	17.0	15.4	N/A	N/A	17.6
UT35aa	15.7	N/A	N/A	18.9	17.5	16.6	17.9	15.3	16.9	N/A	N/A	15.7
UT36aa	18.9	N/A	N/A	15.2	16.2	19.6	17.7	17.9	18.8	N/A	N/A	18.2
UT37aa	15.7	N/A	N/A	15.5	18.1	15.7	19.2	16.0	17.8	N/A	N/A	19.5
UT38aa	15.6	N/A	N/A	18.1	18.9	16.6	19.2	19.6	16.8	N/A	N/A	18.4
UT39aa	17.1	N/A	N/A	15.8	15.5	19.2	17.8	18.6	19.2	N/A	N/A	15.4
UT40aa	16.6	N/A	N/A	18.2	19.6	16.4	19.7	18.5	17.9	N/A	N/A	18.0
UT41aa	17.3	N/A	N/A	17.6	17.8	17.0	16.9	16.6	18.5	N/A	N/A	17.3
UT42aa	17.7	N/A	N/A	18.9	18.3	17.3	16.7	15.2	18.7	N/A	N/A	19.8
UT43aa	19.4	N/A	N/A	18.6	18.9	19.2	19.9	18.8	15.2	N/A	N/A	16.8
UT44aa	17.5	N/A	N/A	15.2	18.9	18.9	17.9	15.0	16.5	N/A	N/A	16.4
UT45aa	19.8	N/A	N/A	18.8	19.3	19.1	17.0	16.5	15.4	N/A	N/A	15.8
UT46aa	15.9	N/A	N/A	15.1	15.5	16.2	16.4	16.8	19.8	N/A	N/A	17.5
UT47aa	17.5	N/A	N/A	15.2	19.4	17.5	19.6	15.1	16.2	N/A	N/A	17.0
UT48aa	19.6	N/A	N/A	15.7	18.1	15.3	16.0	17.5	16.8	N/A	N/A	17.3
UT49aa	16.3	N/A	N/A	16.8	18.7	16.6	16.1	20.0	15.4	N/A	N/A	18.9
UT50aa	18.0	N/A	N/A	19.4	16.8	15.9	17.1	17.0	15.1	N/A	N/A	17.8



A-4-10 Low Level Contact Resistance (mΩ)												
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT31aa	18.2	N/A	N/A	15.4	19.4	15.3	17.1	16.5	16.9	N/A	N/A	16.2
UT32aa	19.0	N/A	N/A	18.4	15.7	17.8	17.6	16.6	16.8	N/A	N/A	16.2
UT33aa	16.6	N/A	N/A	16.6	16.4	19.6	19.5	17.3	17.7	N/A	N/A	18.7
UT34aa	16.6	N/A	N/A	15.1	18.6	19.5	17.1	19.2	16.5	N/A	N/A	18.2
UT35aa	18.6	N/A	N/A	19.1	16.3	16.9	19.1	19.0	19.5	N/A	N/A	16.7
UT36aa	19.4	N/A	N/A	17.6	17.0	17.8	16.2	16.0	17.4	N/A	N/A	18.6
UT37aa	18.5	N/A	N/A	17.2	18.2	19.4	18.7	17.6	16.4	N/A	N/A	19.4
UT38aa	17.7	N/A	N/A	15.3	18.1	16.2	17.7	18.8	15.9	N/A	N/A	17.1
UT39aa	18.8	N/A	N/A	16.3	16.2	16.0	17.7	17.7	19.0	N/A	N/A	18.9
UT40aa	17.3	N/A	N/A	18.1	18.3	17.3	17.7	17.4	17.7	N/A	N/A	18.3
UT41aa	17.6	N/A	N/A	18.1	16.0	15.9	19.5	19.2	19.6	N/A	N/A	15.7
UT42aa	16.6	N/A	N/A	15.0	15.9	18.4	19.6	17.2	17.9	N/A	N/A	17.7
UT43aa	19.3	N/A	N/A	16.1	17.3	17.6	17.2	15.4	19.3	N/A	N/A	17.8
UT44aa	19.0	N/A	N/A	16.6	16.4	16.9	15.3	16.3	15.9	N/A	N/A	17.0
UT45aa	19.2	N/A	N/A	15.3	18.7	15.1	16.6	18.9	16.6	N/A	N/A	19.7
UT46aa	18.7	N/A	N/A	15.9	18.3	16.4	19.6	17.2	16.9	N/A	N/A	15.5
UT47aa	15.9	N/A	N/A	16.1	16.0	19.5	15.1	16.4	15.4	N/A	N/A	19.8
UT48aa	17.3	N/A	N/A	18.1	16.2	16.5	18.8	15.2	17.0	N/A	N/A	16.7
UT49aa	19.2	N/A	N/A	17.9	15.4	16.1	18.5	17.8	15.5	N/A	N/A	19.6
UT50aa	18.6	N/A	N/A	19.4	16.3	15.4	18.8	19.6	17.1	N/A	N/A	18.1



A-7-2 Low level contact resistance			
Testing Period	Measure environment		Test Engineer
2025/07/29	Temperature(°C)	22.7	Su Kun
	Humidity (RH)	72.0 %	
Test condition	Mated; Maximum open circuit voltage 20 mV; Test current 100 mA.		
Criteria	≤40 mΩ (Initial)		

A-7-2 Low Level Contact Resistance (mΩ)												
Sample Coding	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
UT51aa	16.6	N/A	N/A	18.1	16.0	16.3	16.0	15.2	15.3	N/A	N/A	18.2
UT52aa	18.9	N/A	N/A	20.4	18.0	20.4	18.2	19.3	16.7	N/A	N/A	19.2
UT53aa	18.3	N/A	N/A	19.9	17.7	18.9	16.5	16.5	15.7	N/A	N/A	16.5
UT54aa	18.1	N/A	N/A	18.1	18.7	16.8	17.2	16.7	18.9	N/A	N/A	17.6
UT55aa	16.6	N/A	N/A	18.2	15.6	16.3	15.5	15.8	16.9	N/A	N/A	16.2
UT56aa	16.2	N/A	N/A	33.3	16.5	17.0	20.2	16.7	15.8	N/A	N/A	15.8
UT57aa	17.5	N/A	N/A	19.5	17.0	17.5	16.6	19.5	16.0	N/A	N/A	17.7
UT58aa	17.9	N/A	N/A	19.7	16.6	18.1	17.6	16.4	15.2	N/A	N/A	16.5
UT59aa	16.5	N/A	N/A	18.7	16.2	16.6	16.4	16.2	16.6	N/A	N/A	16.6
UT60aa	16.9	N/A	N/A	19.9	16.3	17.7	17.8	15.7	15.2	N/A	N/A	16.3
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT51aa	18.1	N/A	N/A	15.2	19.1	19.9	19.5	21.2	20.1	N/A	N/A	17.8
UT52aa	18.8	N/A	N/A	15.7	19.7	19.4	19.3	22.8	20.1	N/A	N/A	18.3
UT53aa	17.7	N/A	N/A	15.6	19.3	17.9	17.5	19.0	19.1	N/A	N/A	17.6
UT54aa	18.9	N/A	N/A	15.7	20.4	18.8	19.2	21.2	18.9	N/A	N/A	17.9
UT55aa	17.9	N/A	N/A	15.4	19.7	18.4	19.0	21.0	18.6	N/A	N/A	18.4
UT56aa	17.9	N/A	N/A	17.7	19.1	19.4	20.1	21.3	20.5	N/A	N/A	18.2
UT57aa	19.4	N/A	N/A	16.9	20.4	17.8	19.0	19.9	18.5	N/A	N/A	18.0
UT58aa	20.1	N/A	N/A	15.6	18.8	17.1	18.6	18.5	18.0	N/A	N/A	17.5
UT59aa	18.3	N/A	N/A	15.1	20.1	18.4	19.8	21.9	19.2	N/A	N/A	18.2
UT60aa	18.4	N/A	N/A	16.0	18.9	17.6	18.4	19.3	18.9	N/A	N/A	17.3



A-7-10 Low level contact resistance			
Testing Period	Measure environment		Test Engineer
2025/08/01	Temperature(°C)	22.9	Su Kun
	Humidity (RH)	70.0 %	
Test condition	Mated; Maximum open circuit voltage 20 mV; Test current 100 mA.		
Criteria	≤50 mΩ		

A-7-10 Low Level Contact Resistance (mΩ)												
Sample Coding	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
UT51aa	16.9	N/A	N/A	19.8	16.9	16.7	17.6	17.1	19.7	N/A	N/A	20.6
UT52aa	17.8	N/A	N/A	20.7	17.7	19.7	18.1	22.1	17.0	N/A	N/A	16.4
UT53aa	17.9	N/A	N/A	20.6	41.2	44.2	33.7	22.3	16.2	N/A	N/A	18.6
UT54aa	17.8	N/A	N/A	20.2	17.8	18.4	17.6	21.2	18.3	N/A	N/A	18.5
UT55aa	17.3	N/A	N/A	19.7	16.9	17.4	32.4	18.4	23.1	N/A	N/A	25.8
UT56aa	17.0	N/A	N/A	20.0	31.5	24.3	23.1	20.9	15.0	N/A	N/A	22.4
UT57aa	26.6	N/A	N/A	32.3	32.2	32.1	32.2	21.6	17.1	N/A	N/A	16.2
UT58aa	17.1	N/A	N/A	45.4	31.2	37.8	22.3	42.8	16.0	N/A	N/A	17.1
UT59aa	22.2	N/A	N/A	23.6	24.6	24.9	17.8	22.0	19.6	N/A	N/A	25.0
UT60aa	21.9	N/A	N/A	19.7	23.5	26.5	20.6	25.0	15.8	N/A	N/A	17.4
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT51aa	18.4	N/A	N/A	16.3	20.9	21.3	19.9	25.8	21.6	N/A	N/A	23.0
UT52aa	17.8	N/A	N/A	16.5	20.0	21.1	20.9	20.9	19.1	N/A	N/A	17.7
UT53aa	24.9	N/A	N/A	17.0	20.1	18.1	19.0	20.6	19.2	N/A	N/A	18.1
UT54aa	19.9	N/A	N/A	17.2	21.6	23.6	23.3	21.6	20.1	N/A	N/A	18.8
UT55aa	21.0	N/A	N/A	15.0	23.3	35.6	28.3	26.3	23.9	N/A	N/A	24.5
UT56aa	19.3	N/A	N/A	16.5	21.4	20.4	21.6	19.5	20.6	N/A	N/A	18.2
UT57aa	19.2	N/A	N/A	17.6	27.4	22.3	36.8	28.9	36.2	N/A	N/A	24.5
UT58aa	21.4	N/A	N/A	15.8	25.4	29.9	25.9	36.7	22.9	N/A	N/A	20.0
UT59aa	20.7	N/A	N/A	15.9	38.2	45.1	47.8	43.2	21.0	N/A	N/A	19.2
UT60aa	18.2	N/A	N/A	16.4	23.3	22.8	22.1	22.1	18.2	N/A	N/A	17.3



8.4. Clause 3.7.8.2 Dielectric withstanding voltage

A-7-1 Dielectric withstanding voltage				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/29	Temperature(°C)	25.6	Su Kun	Pass
	Humidity (RH)	65.0 %		
Test condition	Mated; 100 VAC (RMS), 1 min. The test voltage shall be applied between adjacent contacts.			
Criteria	A failure is the occurrence of a disruptive discharge as evidenced by flashover (surface discharge), sparkover (air discharge), breakdown (puncture discharge) or leakage in excess of 5 mA			

A-7-11 Dielectric withstanding voltage				
Testing Period	Measure environment		Test Engineer	Test Result
2025/08/01	Temperature(°C)	23.6	Su Kun	Pass
	Humidity (RH)	71.8 %		
Test condition	Mated; 100 VAC (RMS), 1 min. The test voltage shall be applied between adjacent contacts.			
Criteria	A failure is the occurrence of a disruptive discharge as evidenced by flashover (surface discharge), sparkover (air discharge), breakdown (puncture discharge) or leakage in excess of 5 mA			

B-7-3 Dielectric withstanding voltage				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/29	Temperature(°C)	23.8	Huang Siwei	Pass
	Humidity (RH)	70.0 %		
Test condition	Mated; 100 VAC (RMS), 1 min. The test voltage shall be applied between adjacent contacts.			
Criteria	A failure is the occurrence of a disruptive discharge as evidenced by flashover (surface discharge), sparkover (air discharge), breakdown (puncture discharge) or leakage in excess of 5 mA			



8.5. Clause 3.7.8.3 Insulation Resistance

A-7-12 Insulation Resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/08/01	Temperature(°C)	23.6	Su Kun	Pass
	Humidity (RH)	71.2 %		
Test condition	Mated and Unmated, 100 Vdc, 2min. The test voltage shall be applied between adjacent contacts.			
Criteria	≥100MΩ			

A-7-12 Insulation Resistance Mated					
Sample Coding	UT51aa	UT52aa	UT53aa	UT54aa	UT55aa
Test contacts					
A4 to A5	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ
A5 to A6	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ
A6 to A7	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ
B4 to B5	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ
B5 to B6	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ
Sample Coding	UT56aa	UT57aa	UT58aa	UT59aa	UT60aa
Test contacts					
A4 to A5	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ
A5 to A6	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ
A6 to A7	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ
B4 to B5	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ
B5 to B6	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ	> 100MΩ
Note: Followed by the specific resistance value.					

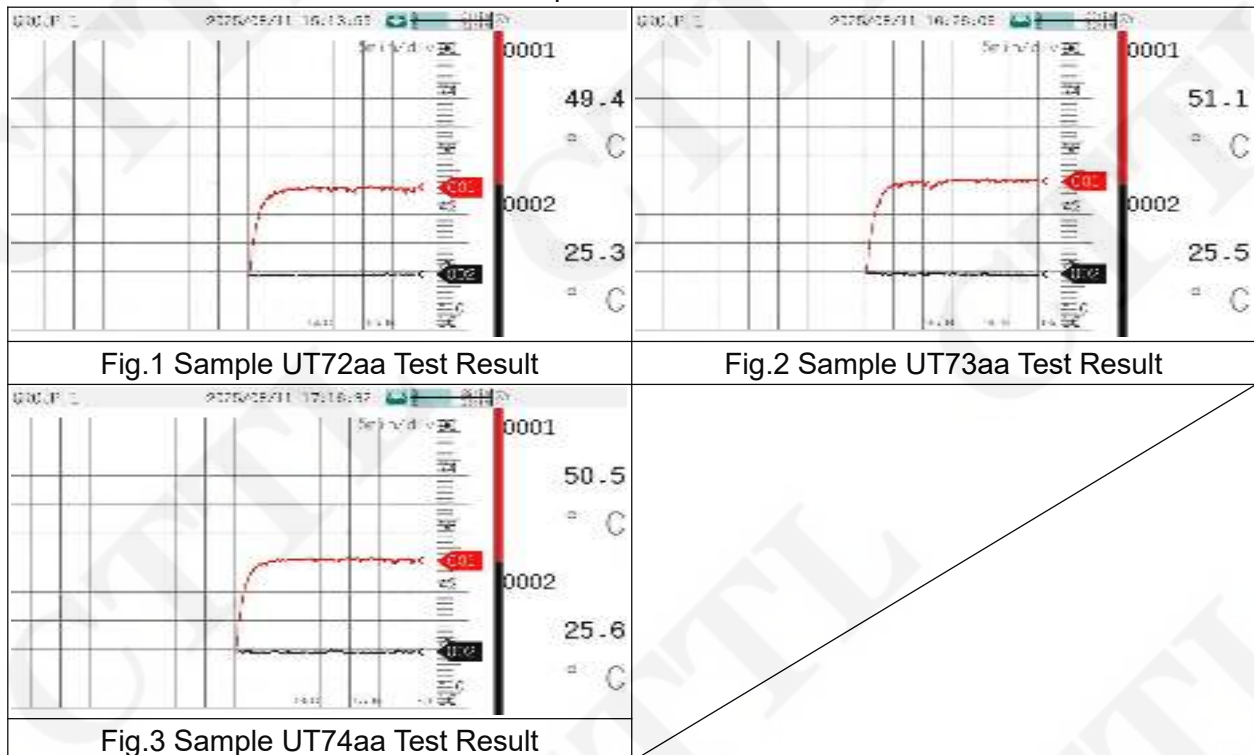
8.6. Clause 3.7.8.4 Contact Current Rating

B-6-1 Contact Current Rating			
Testing Period	Measure environment		Test Engineer
2025/08/11	Temperature(°C)	25.3	Su Kun
	Humidity (RH)	67.0 %	
Test condition	1、 5A applied collectively to VBUS pins (i.e.,pins A4,A9,B4,and B9) . 2、 0.5A applied to the VCONN pin (i.e.,B5) ,terminated. 3、 0.25 A applied individually to all the other contacts.		
Criteria	The temperature rise shall not exceed 30°C at the outside surface of the shell.		

B-6-1 Contact Current Rating			
Sample Coding	Ambient temperature (°C)	Thermocouple temperature (°C)	Temperature rise (°C)
UT72aa	25.3	49.4	24.1
UT73aa	25.5	51.1	25.6
UT74aa	25.6	50.5	24.9

Note: Temperature rise of sample = Thermocouple temperature - Ambient temperature.

B-6 Temperature Rise Curve





8.7. Clause 3.8.1.1 Insertion force

A-7-4 Insertion Force				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/29	Temperature(°C)	22.9	Su Kun	Pass
	Humidity (RH)	72.0 %		
Test condition	Speed: 12.5mm/min; Insertion depth: 5.4mm.			
Criteria	Insertion force:5N~20N			

A-7-4 Insertion Force					
Sample Coding	UT51aa	UT52aa	UT53aa	UT54aa	UT55aa
Insertion force (N)	7.3	6.1	6.6	5.6	6.6
Sample Coding	UT56aa	UT57aa	UT58aa	UT59aa	UT60aa
Insertion force (N)	5.4	6.8	7.0	7.0	7.5

8.8. Clause 3.8.1.2 Extraction force

A-7-5 Extraction Force				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/29	Temperature(°C)	22.5	Su Kun	Pass
	Humidity (RH)	72.0 %		
Test condition	Speed: 12.5mm/min; Extraction depth: 5.4mm.			
Criteria	Extraction force: 8N~20N(Initial reading)			

A-7-7 Extraction Force				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/29	Temperature(°C)	22.2	Su Kun	Pass
	Humidity (RH)	72.0 %		
Test condition	Speed: 12.5mm/min; Extraction depth: 5.4mm.			
Criteria	Extraction force: 8N~20N; 33% of the initial reading.			



A-7-9 Extraction Force				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/31	Temperature(°C)	23.8	Su Kun	Pass
	Humidity (RH)	70.0 %		
Test condition	Speed: 12.5mm/min; Extraction depth: 5.4mm.			
Criteria	Extraction force: 6N~20N.			

A-7-5 Extraction Force					
Sample Coding	UT51aa	UT52aa	UT53aa	UT54aa	UT55aa
Extraction force (N)	8.2	8.4	8.3	8.4	8.5
Sample Coding	UT56aa	UT57aa	UT58aa	UT59aa	UT60aa
Extraction force (N)	9.0	8.1	9.4	8.1	8.0
A-7-7 Extraction Force					
Sample Coding	UT51aa	UT52aa	UT53aa	UT54aa	UT55aa
Extraction force (N)	8.4	8.2	9.0	8.9	8.4
$\frac{ (A-7-7)-(A-7-5) }{(A-7-5)} * 100\%$	2.44%	2.38%	8.43%	5.95%	1.18%
Sample Coding	UT56aa	UT57aa	UT58aa	UT59aa	UT60aa
Extraction force (N)	9.6	8.3	9.5	8.3	8.1
$\frac{ (A-7-7)-(A-7-5) }{(A-7-5)} * 100\%$	6.67%	2.47%	1.06%	2.47%	1.25%
A-7-9 Extraction Force					
Sample Coding	UT51aa	UT52aa	UT53aa	UT54aa	UT55aa
Extraction force (N)	7.2	6.5	8.4	7.9	7.4
Sample Coding	UT56aa	UT57aa	UT58aa	UT59aa	UT60aa
Extraction force (N)	7.1	6.9	9.8	7.6	7.3

A-7 Mechanical Curve

Sample UT51aa

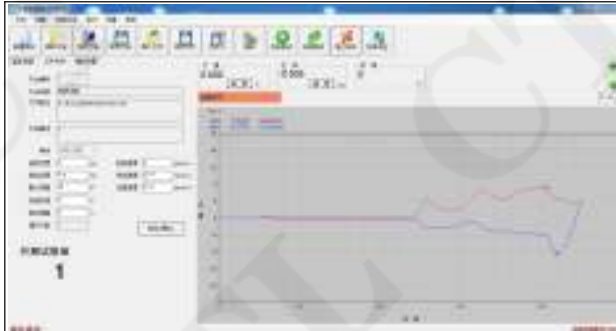


Fig.4 Insertion Force

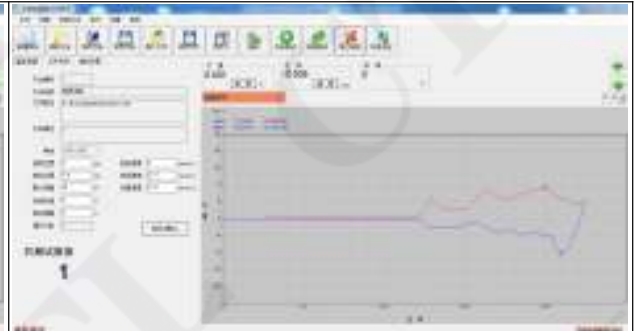


Fig.5 Initial Extraction Force

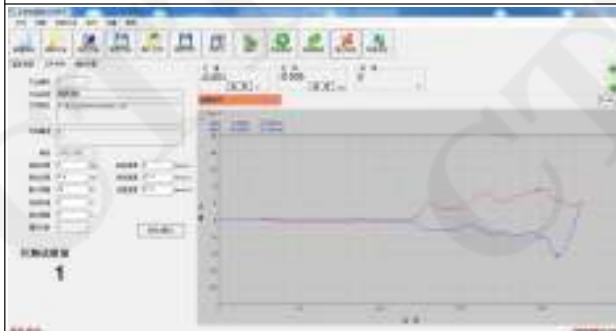


Fig.6 32nd Extraction Force

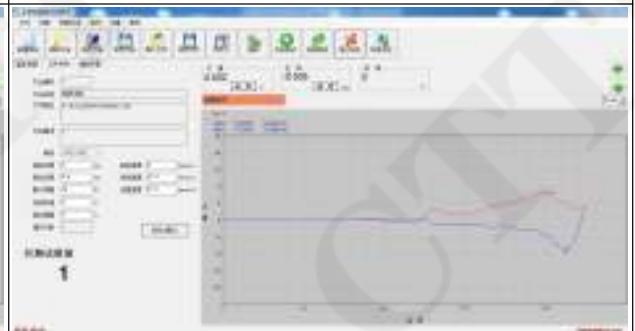


Fig.7 Final Extraction Force

Sample UT52aa

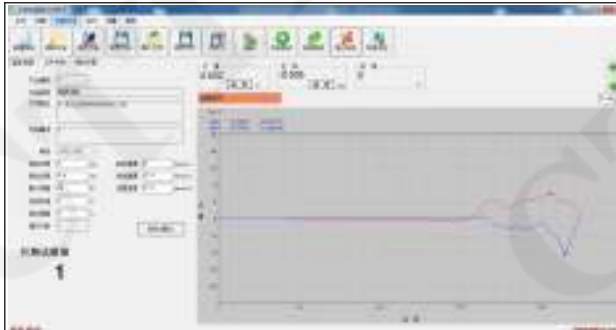


Fig.8 Insertion Force

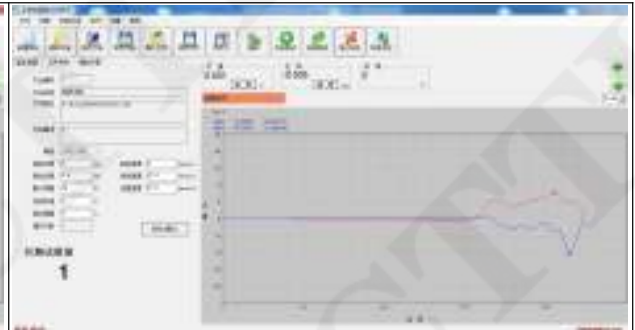


Fig.9 Initial Extraction Force

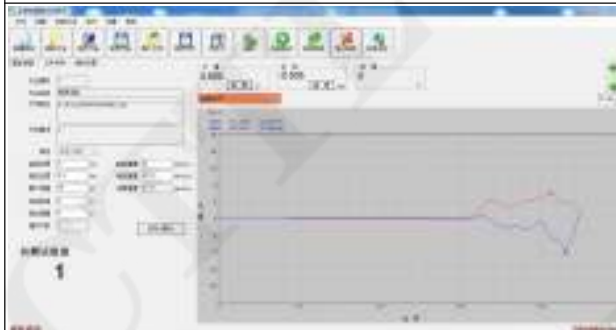


Fig.10 32nd Extraction Force

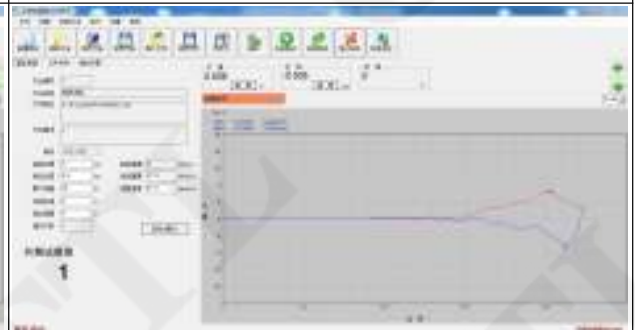


Fig.11 Final Extraction Force



Sample UT53aa

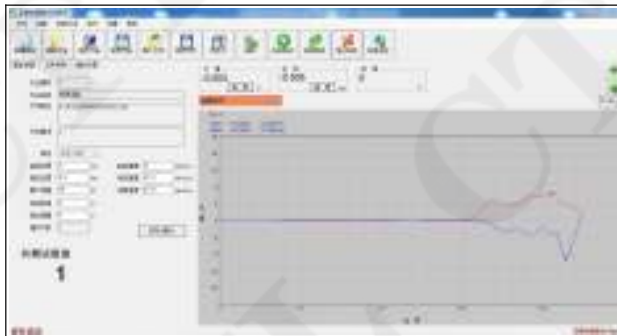


Fig.12 Insertion Force

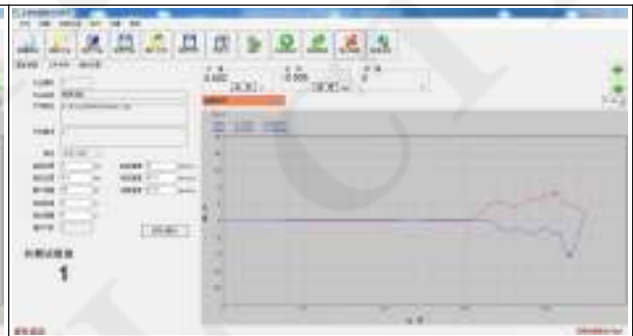


Fig.13 Initial Extraction Force

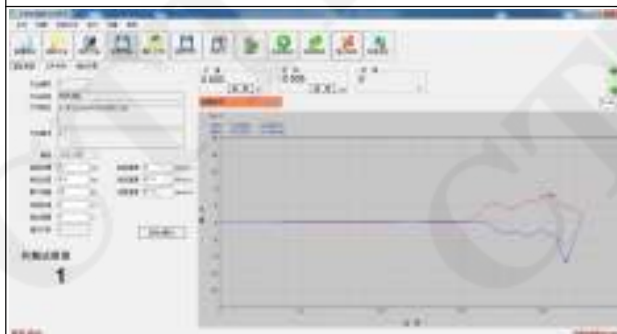


Fig.14 32nd Extraction Force



Fig.15 Final Extraction Force

Sample UT54aa

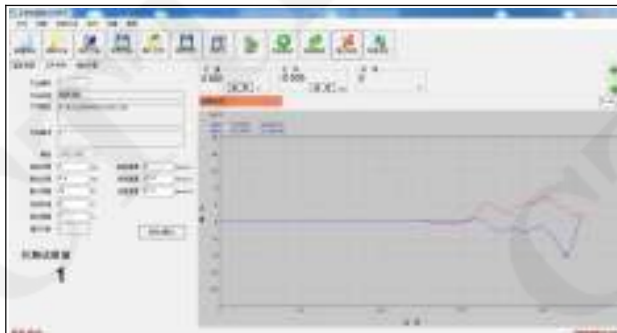


Fig.16 Insertion Force

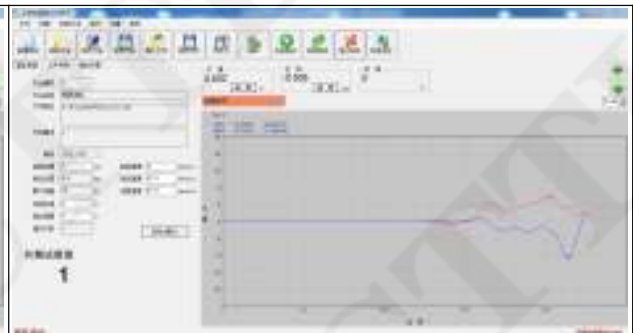


Fig.17 Initial Extraction Force

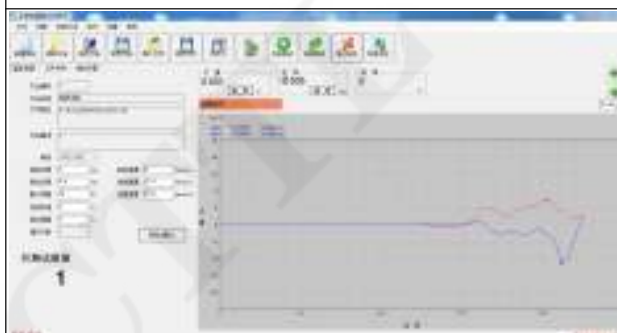


Fig.18 32nd Extraction Force

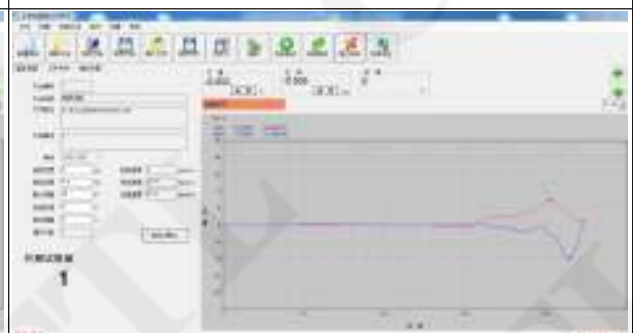


Fig.19 Final Extraction Force



Sample UT55aa

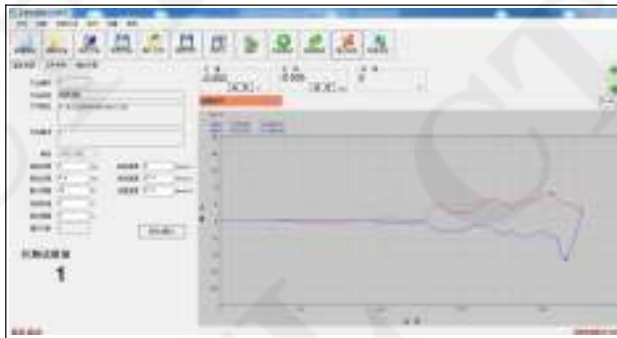


Fig.20 Insertion Force

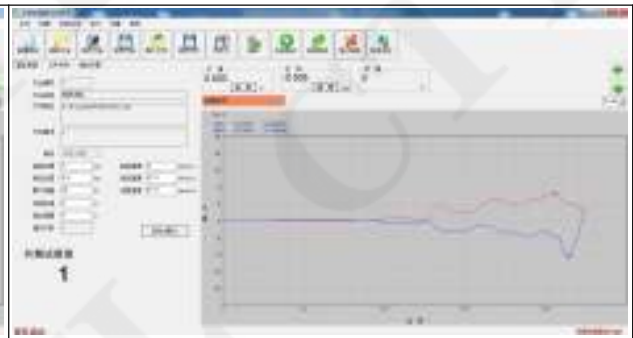


Fig.21 Initial Extraction Force

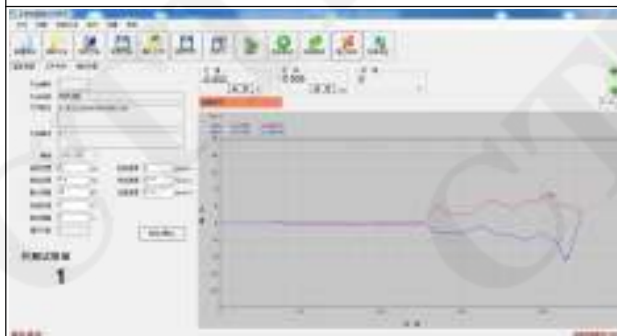


Fig.22 32nd Extraction Force

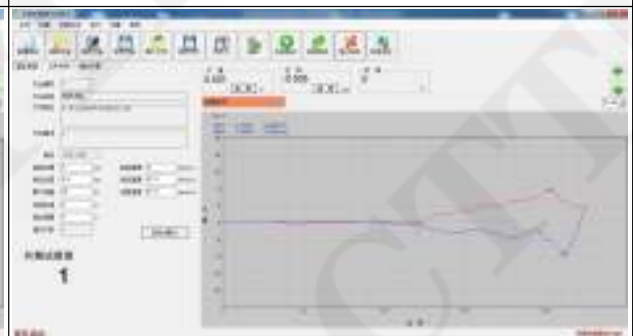


Fig.23 Final Extraction Force

Sample UT56aa

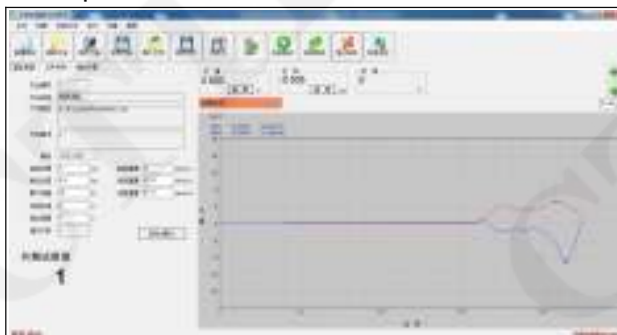


Fig.24 Insertion Force

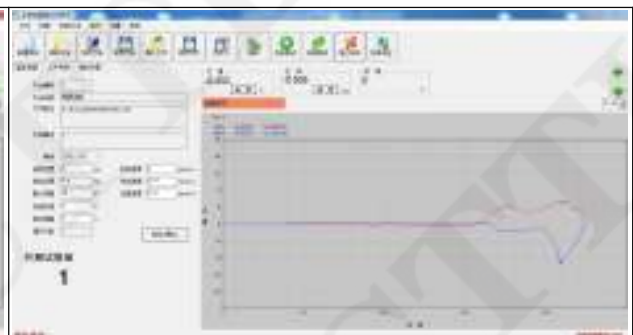


Fig.25 Initial Extraction Force

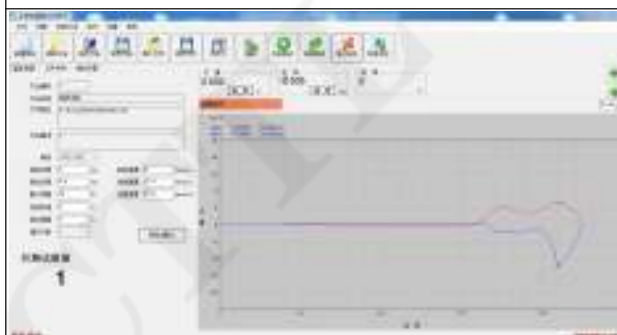


Fig.26 32nd Extraction Force



Fig.27 Final Extraction Force



Sample UT57aa

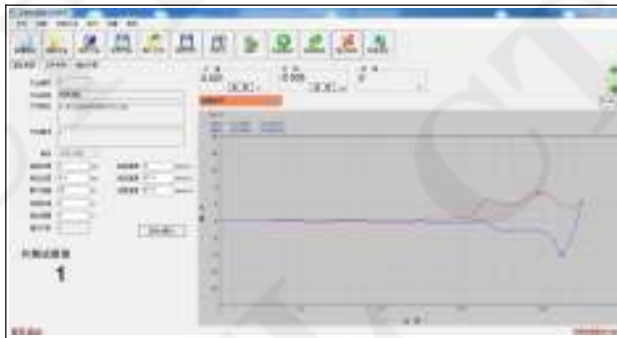


Fig.28 Insertion Force

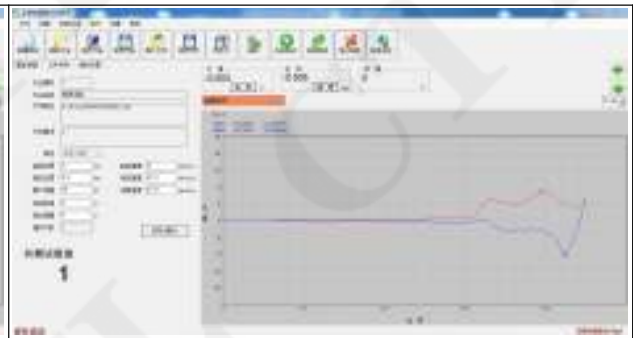


Fig.29 Initial Extraction Force

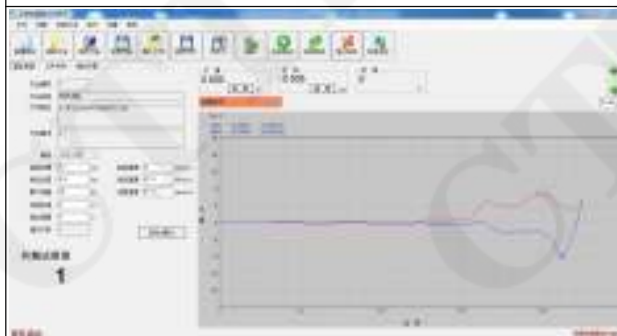


Fig.30 32nd Extraction Force



Fig.31 Final Extraction Force

Sample UT58aa

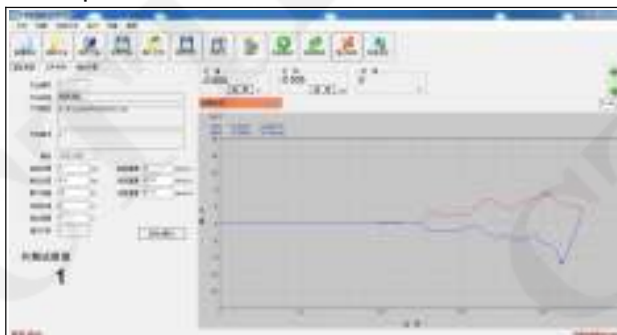


Fig.32 Insertion Force

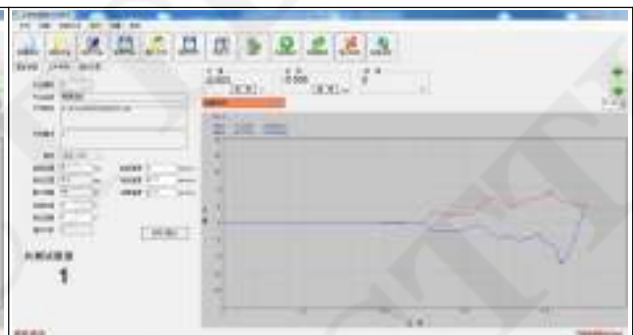


Fig.33 Initial Extraction Force

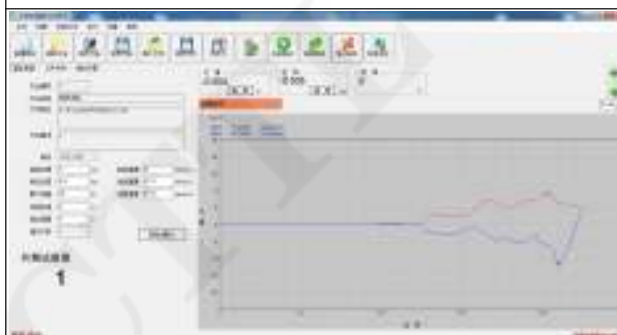


Fig.34 32nd Extraction Force

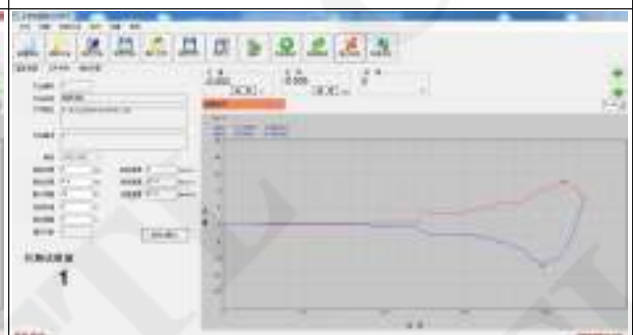


Fig.35 Final Extraction Force



Sample UT59aa

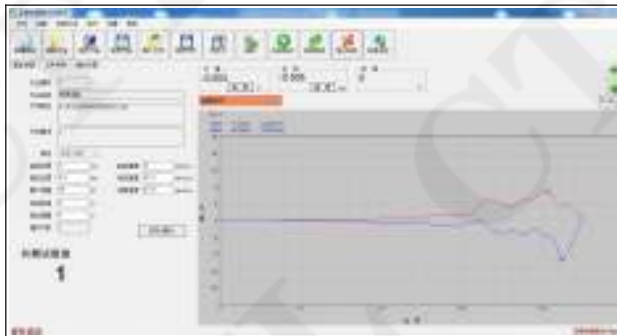


Fig.36 Insertion Force

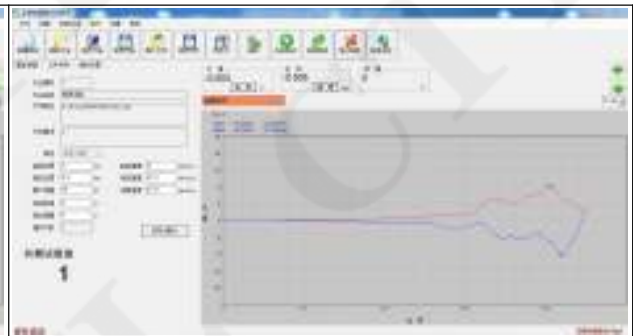


Fig.37 Initial Extraction Force

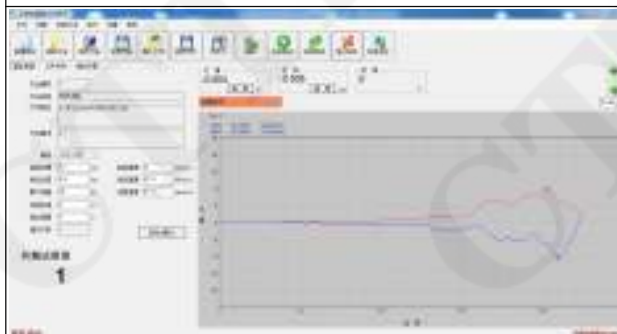


Fig.38 32nd Extraction Force

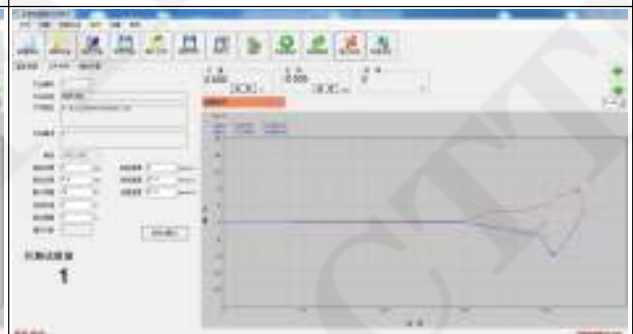


Fig.39 Final Extraction Force

Sample UT60aa

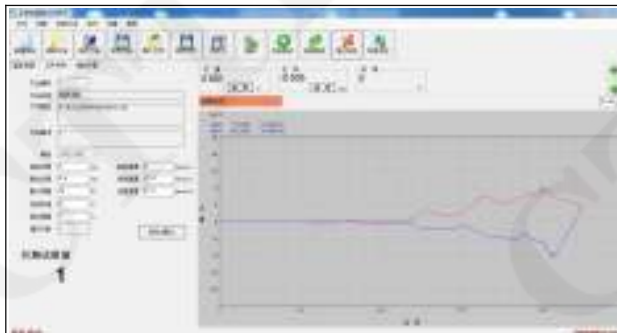


Fig.40 Insertion Force

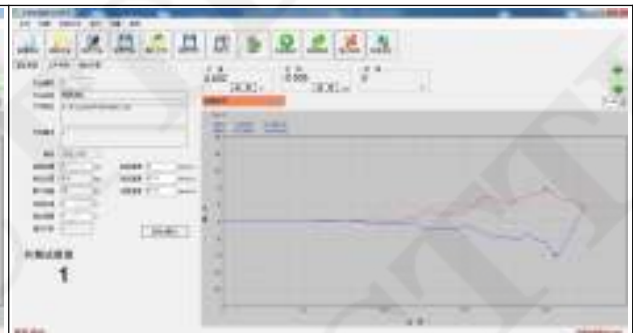


Fig.41 Initial Extraction Force

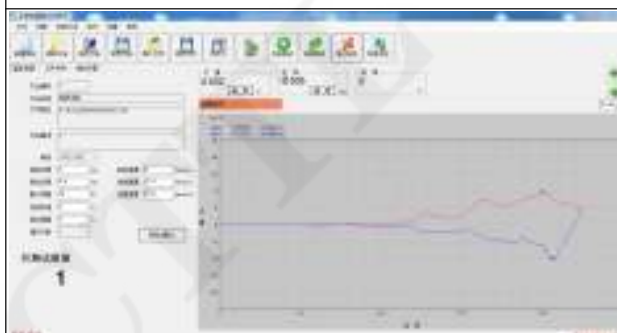


Fig.42 32nd Extraction Force

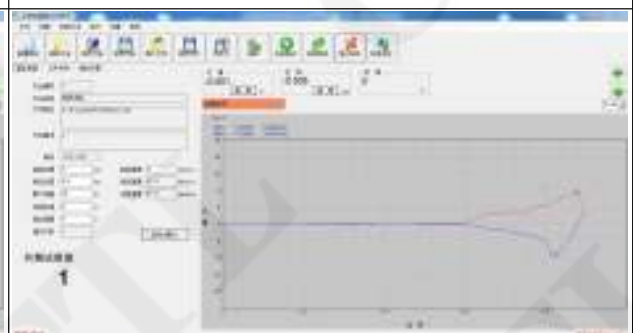


Fig.43 Final Extraction Force



8.9. Clause 3.8.1.3 Durability

A-1-2 Durability				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/23	Temperature(°C)	24.1	Huang Siwei	Pass
	Humidity (RH)	60.9 %		
Test condition	Auto cycle; cycle rate: 500±50/h; Number of cycles: 50.			
Criteria	No evidence of physical damages.			

A-2-2 Durability				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/25	Temperature(°C)	22.3	Huang Siwei	Pass
	Humidity (RH)	78.9 %		
Test condition	Auto cycle; cycle rate: 500±50/h; Number of cycles: 50.			
Criteria	No evidence of physical damages.			

A-3-2 Durability				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/24	Temperature(°C)	23.4	Su Kun	Pass
	Humidity (RH)	66.0 %		
Test condition	Auto cycle; cycle rate: 500±50/h; Number of cycles: 50.			
Criteria	No evidence of physical damages.			

A-4-2 Durability				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/23	Temperature(°C)	24.6	Huang Siwei	Pass
	Humidity (RH)	71.3 %		
Test condition	Auto cycle; cycle rate: 500±50/h; Number of cycles: 50.			
Criteria	No evidence of physical damages.			

A-7-3 Durability				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/29	Temperature(°C)	22.2	Su Kun	Pass
	Humidity (RH)	72.0 %		
Test condition	Manual mating/unmating 4 cycles.			
Criteria	No evidence of physical damages.			



A-7-6 Durability				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/29	Temperature(°C)	22.4	Su Kun	Pass
	Humidity (RH)	72.0 %		
Test condition	Manual mating/unmating 25 cycles.			
Criteria	No evidence of physical damages.			

A-7-8 Durability				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/30-2025/07/31	Temperature(°C)	22.3 - 25.7	Su Kun	Pass
	Humidity (RH)	66.0 - 74.0 %		
Test condition	Auto cycle; cycle rate: 500±50/h; Number of cycles: 10000. 2468 cycles (normal) + 2500 cycles (Rotate the receptacle 180°) + 2500 cycles (normal) + 2500 cycles (Rotate the receptacle 180°)			
Criteria	No evidence of physical damages.			

**8.10. Clause 3.8.1.3 Reseating**

A-1-5 Re-seating				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/31	Temperature(°C)	24.8	Huang Siwei	Pass
	Humidity (RH)	68.9 %		
Test condition	Manual mating/unmating 3 cycles.			
Criteria	No evidence of physical damages.			

A-2-7 Re-seating				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/31	Temperature(°C)	23.6	Huang Siwei	Pass
	Humidity (RH)	70.2 %		
Test condition	Manual mating/unmating 3 cycles.			
Criteria	No evidence of physical damages.			

A-4-9 Re-seating				
Testing Period	Measure environment		Test Engineer	Test Result
2025/08/07	Temperature(°C)	21.8	Huang Siwei	Pass
	Humidity (RH)	58.2 %		
Test condition	Manual mating/unmating 3 cycles.			
Criteria	No evidence of physical damages.			



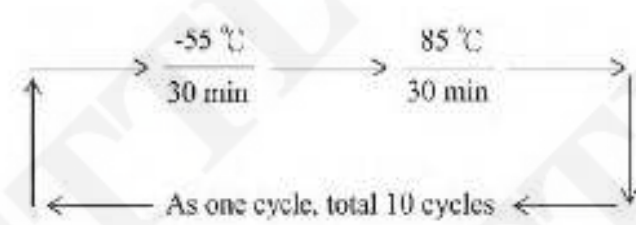
8.11. Clause 3.8.2 Temperature life

A-1-3 Temperature Life				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/23-2025/07/28	Temperature(°C)	21.7 - 25.9	Huang Siwei	Pass
	Humidity (RH)	61.2 - 69.6 %		
Test condition	Mated; Temperature: 105±2°C; Duration: 120h.			
Criteria	No evidence of physical damages.			

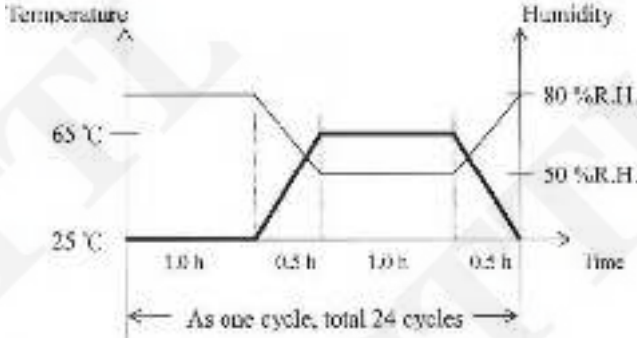
A-3-3 Temperature Life				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/28-2025/07/31	Temperature(°C)	22.9 - 25.6	Su Kun	Pass
	Humidity (RH)	62.0 - 73.0 %		
Test condition	Mated; Temperature: 105±2°C; Duration: 72h.			
Criteria	No evidence of physical damages.			

A-4-3 Temperature Life				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/24-2025/07/27	Temperature(°C)	21.7 - 25.4	Huang Siwei	Pass
	Humidity (RH)	65.4 - 72.6 %		
Test condition	Mated; Temperature: 105±2°C; Duration: 72h.			
Criteria	No evidence of physical damages.			

8.12. Clause 3.8.2 Thermal shock

A-2-3 Thermal Shock				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/25-2025/07/26	Temperature(°C)	20.1 - 23.7	Huang Siwei	Pass
	Humidity (RH)	66.4 - 68.8 %		
Test condition	Mated; -55_{-5}^0 °C to 85_0^{+3} °C, 10 cycles. High/low temperature transfer time within 5 min. 			
Criteria	No evidence of physical damages.			

8.13. Clause 3.8.2 Cyclic temperature and humidity

A-2-5 Cyclic temperature and humidity				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/27-2025/07/30	Temperature(°C)	20.6 - 22.5	Huang Siwei	Pass
	Humidity (RH)	61.4 - 64.7 %		
Test condition	Mated; Temperature of 25°C±3°C relative humidity of 80% ±3% to Temperature of 65°C±3°C relative humidity of 50% ±3% , Thermal ramp time 0.5 hour , maintain 1 hour, 24 cycles.			
Criteria	No evidence of physical damages.			

8.14. Clause 3.8.2 Vibration

A-3-5 Vibration				
Testing Period	Measure environment		Test Engineer	Test Result
2025/08/12	Temperature(°C)	26.6	Su Kun	Pass
	Humidity (RH)	58.0 %		
Test condition	Mated; random vibration; Frequency:20-500Hz; 15min./axis for 3 axis (X,Y,Z); Power spectral density:0.02g ² /Hz, Acceleration:3.1grms.			
Criteria	No evidence of physical damages. No discontinuities of 1us or greater duration happened			

A-3-5 Vibration Curve

Sample UT21aa to UT25aa

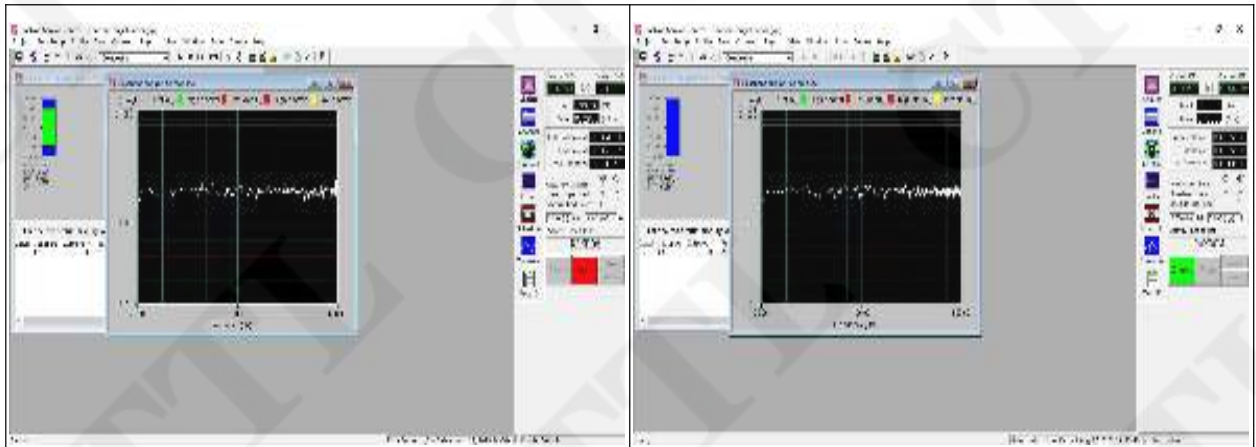


Fig.44 X-axis Under Testing

Fig.45 X-axis After Testing

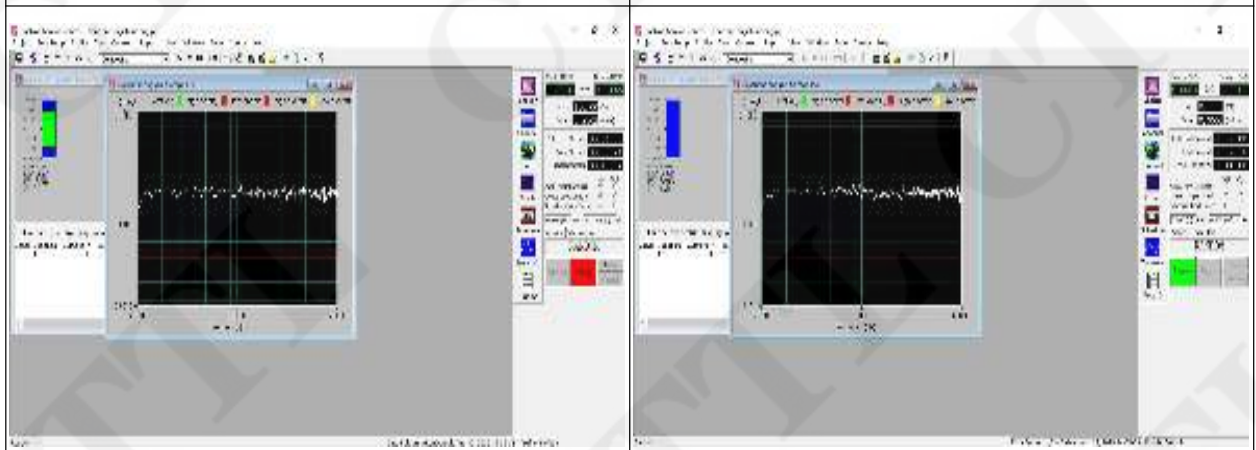


Fig.46 Y-axis Under Testing

Fig.47 Y-axis After Testing

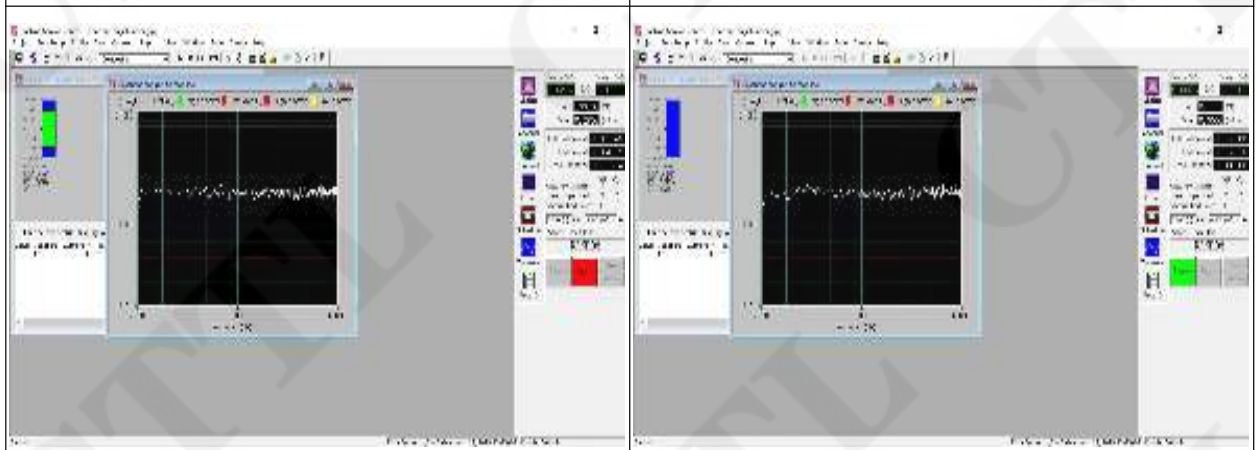


Fig.48 Z-axis Under Testing

Fig.49 Z-axis After Testing

Sample UT26aa to UT30aa

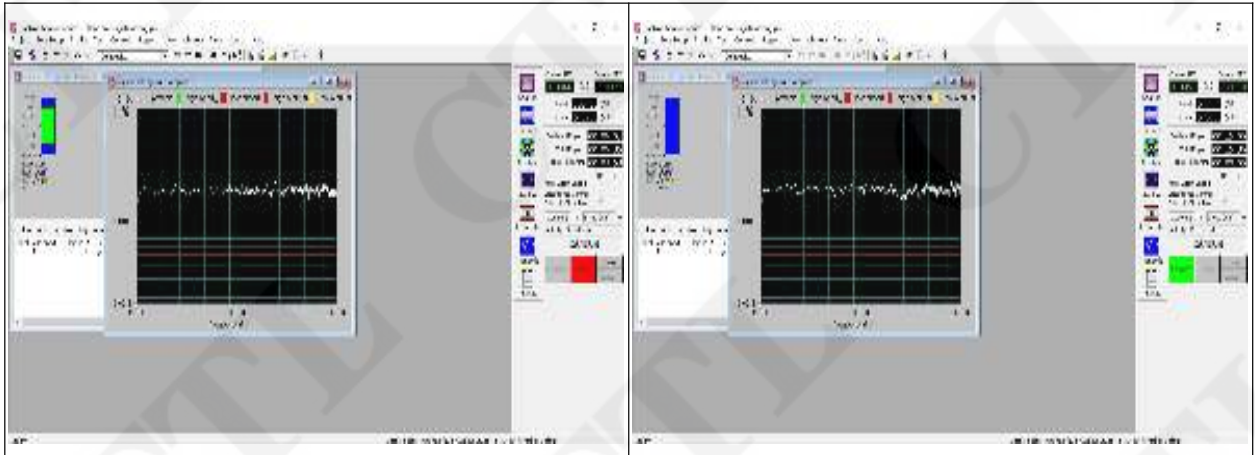


Fig.50 X-axis Under Testing

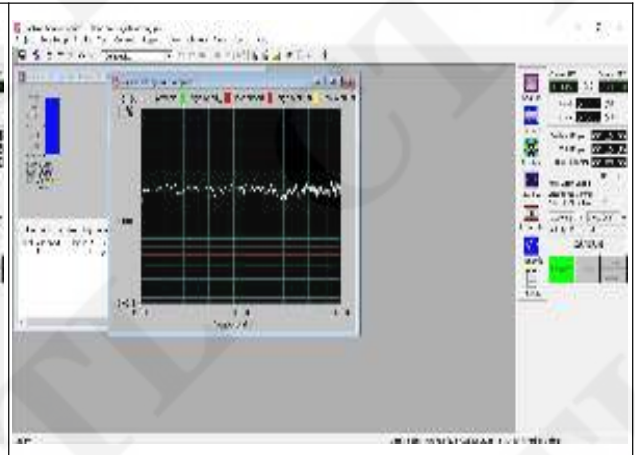


Fig.51 X-axis After Testing

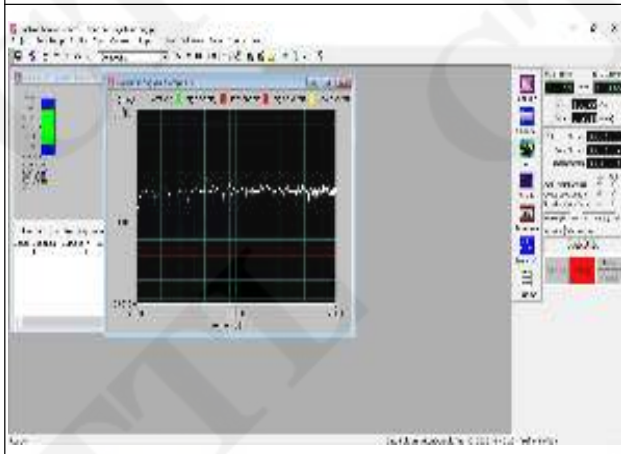


Fig.52 Y-axis Under Testing

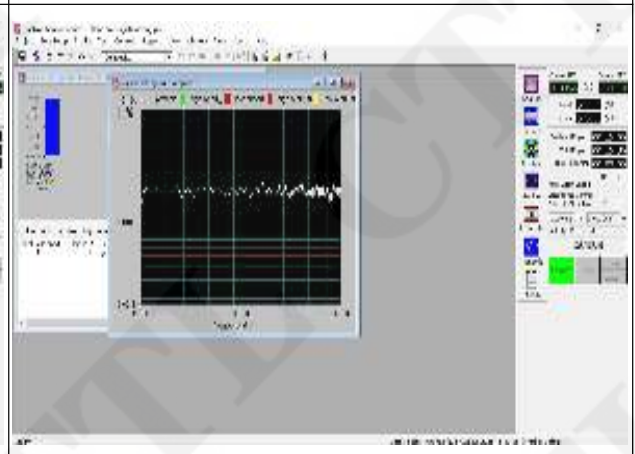


Fig.53 Y-axis After Testing

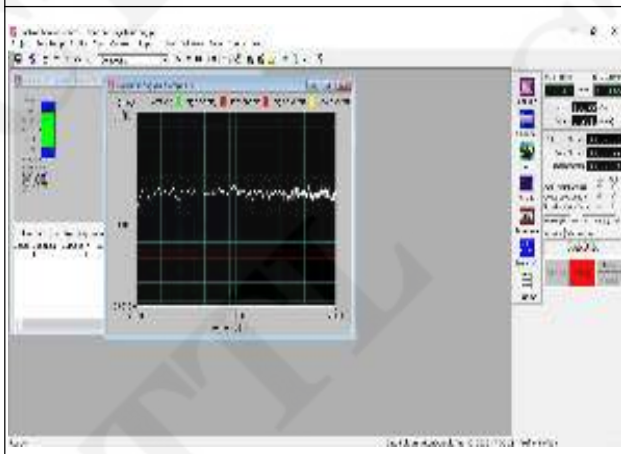


Fig.54 Z-axis Under Testing

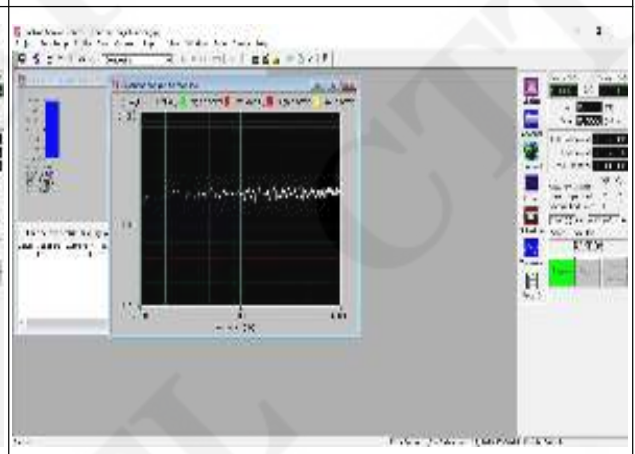


Fig.55 Z-axis After Testing

**8.15. Clause 3.8.2 Mixed flowing gas**

A-4-5 Mixed flowing gas				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/28-2025/08/04	Temperature(°C)	20.9 - 22.4	Huang Siwei	Pass
	Humidity (RH)	68.7 - 69.3 %		
Test condition	CL2:(10±3) ppb; No2:(200±50) ppb; H2S:(10±5) ppb SO2:(100±20) ppb; Temperature:(30±1)°C; Humidity:(70±2)%RH 1/3 days and then unmated for 2/3 days. The others are exposed mated for full 7 days test period.			
Criteria	No evidence of physical damages.			

8.16. Clause 3.8.2 Thermal disturbance

A-4-7 Thermal disturbance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/08/05-2025/08/06	Temperature(°C)	23.0 - 24.5	Huang Siwei	Pass
	Humidity (RH)	58.9 - 61.7 %		
Test condition	Mated Cycle the connector or socket between 15 °C ± 3 °C and 85 °C ± 3 °C, as measured on the part. Ramps should be a minimum of 2 °C per minute, and dwell times should insure that the contacts reach the temperature extremes (a minimum of 5 minutes). Humidity is not controlled. Perform 10 such cycles.			
Criteria	No evidence of physical damages.			

8.17. Clause 3.8.1.7 Wrenching Strength-a

B-7-1 Wrenching Strength -a				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/29	Temperature(°C)	23.8	Huang Siwei	Pass
	Humidity (RH)	70.0 %		
Test condition	1、 Perpendicular forces are applied to the plug in four direction (i.e., left, right, up and down) . 2、 50N at 15 mm from the edge of the receptacle. 3、 10s at each axis. 4、 5mm ball tipped probe.			
Criteria	No damaged and Stay at 0.75Nm for 10 sec.			

B-7-1 Wrenching Strength-a

Sample UT75aa

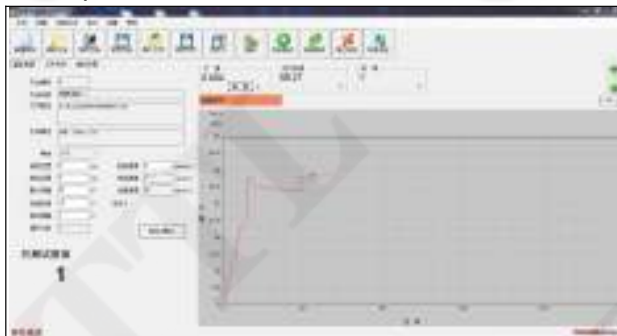


Fig.56 0 degree



Fig.57 180 degree



Fig.58 90 degree



Fig.59 270 degree

Sample UT76aa

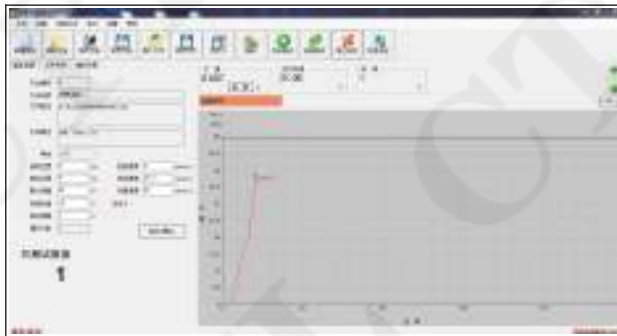


Fig.60 0 degree

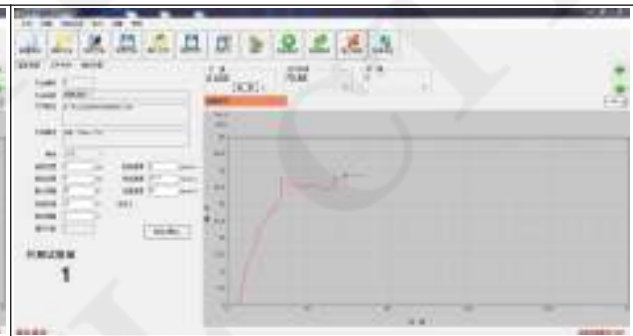


Fig.61 180 degree



Fig.62 90 degree



Fig.63 270 degree

Sample UT77aa

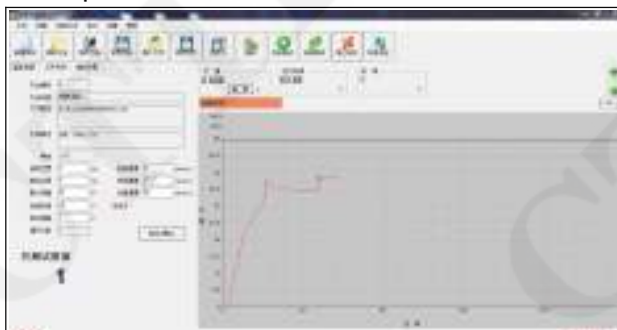


Fig.64 0 degree



Fig.65 180 degree



Fig.66 90 degree

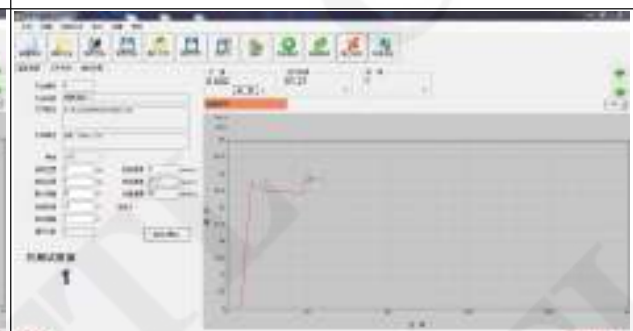


Fig.67 270 degree

**8.18. Clause 3.8.1.7 Continuity**

B-7-2 Continuity				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/29	Temperature(°C)	23.8	Huang Siwei	Pass
	Humidity (RH)	70.0 %		
Criteria	No discontinuities or shorts allowed.			



8.19. Clause 3.8.1.7 Wrenching Strength-b

B-7-4 Wrenching Strength -b				
Testing Period	Measure environment		Test Engineer	Test Result
2025/07/29	Temperature(°C)	23.8	Huang Siwei	Pass
	Humidity (RH)	70.0 %		
Test condition	1、Perpendicular forces are applied to the plug in four direction (i.e., left, right, up and down) . 2、 Force at 15 mm from the edge of the receptacle. 3、 The plug shall disengage from the test fixture or mechanically fail. 4、 5mm ball tipped probe.			
Criteria	A moment of 2.0 Nm is applied in the up and down directions. A moment of 3.5 Nm is applied in the left and right directions.			

Test data:				
B-7-4 Wrenching Strength -b				
Sample Coding	Direction	Force(N)	Moment(Nm)	Limit(Nm)
UT78aa	UP	118.2	1.8	2.0
UT79aa	DOWN	95.2	1.4	2.0
UT80aa	LEFT	125.5	1.9	3.5
UT81aa	RIGHT	127.4	1.9	3.5
UT82aa	UP	88.5	1.3	2.0
UT83aa	DOWN	93.2	1.4	2.0
UT84aa	LEFT	123.0	1.8	3.5
UT85aa	RIGHT	134.9	2.0	3.5
UT86aa	UP	81.6	1.2	2.0
UT87aa	DOWN	85.2	1.3	2.0
UT88aa	LEFT	131.9	2.0	3.5
UT89aa	RIGHT	147.2	2.2	3.5

Note: The arm of force = 15mm.

B-7-4 Wrenching Strength-b



Fig.68 UT78aa-0 degree

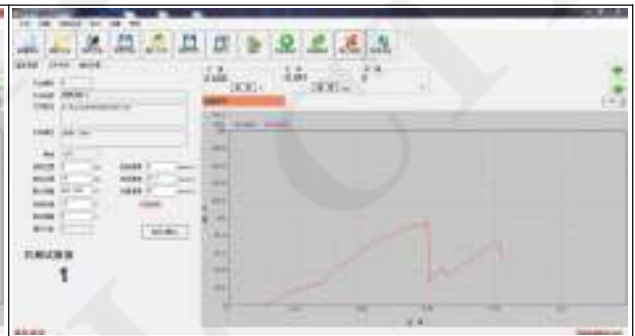


Fig.69 UT79aa-180 degree

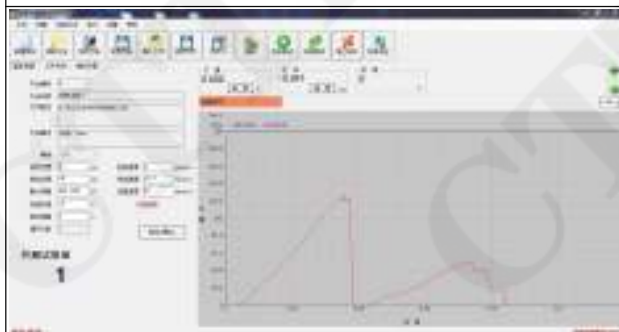


Fig.70 UT80aa-90 degree



Fig.71 UT81aa-270 degree

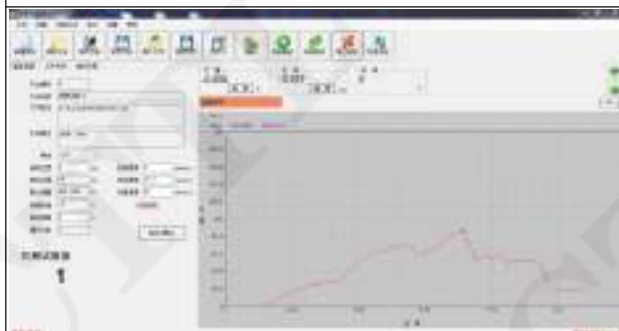


Fig.72 UT82aa-0 degree



Fig.73 UT83aa-180 degree

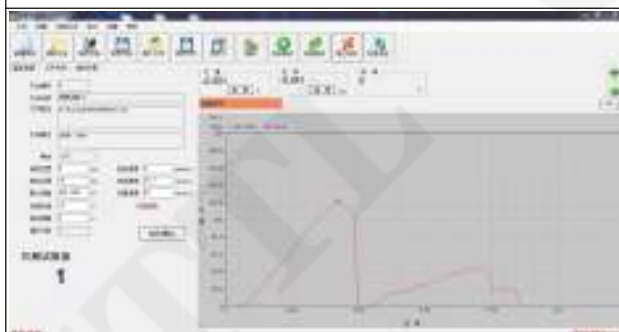


Fig.74 UT84aa-90 degree



Fig.75 UT85aa-270 degree

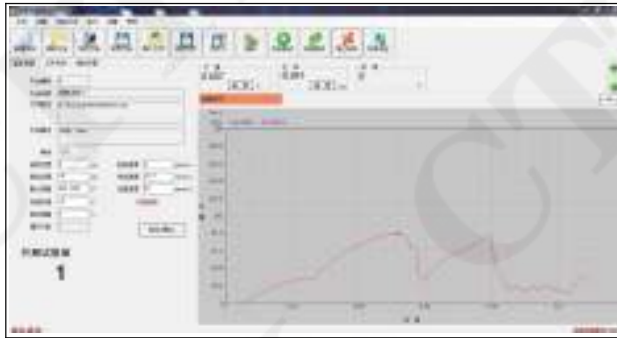


Fig.76 UT86aa-0 degree



Fig.77 UT87aa-180 degree

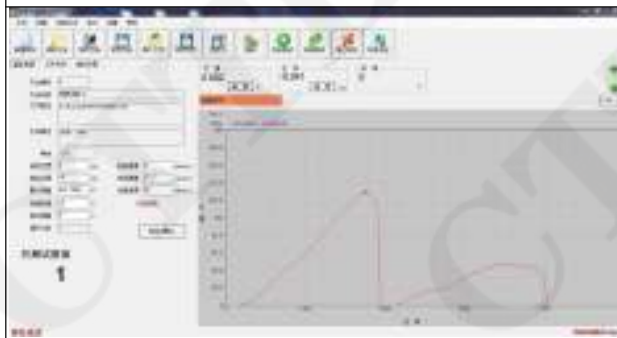


Fig.78 UT88aa-90 degree

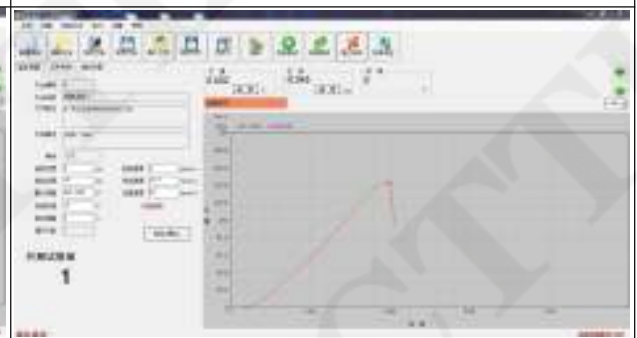


Fig.79 UT89aa-270 degree

**Test Equipments Utilized**

Name	Model	Serial number	Calibration Date	Expire Date
Oven Machine (ESPEC)	LC-213	1010170239	2024.11.22	2025.11.21
Oven Machine (ESPEC)	LC-213	1010170285	2024.11.22	2025.11.21
Thermal Shock Chamber(ESPEC)	TSE-12-A	161003228	2024.11.22	2025.11.21
Temperature & Humidity Chamber	GPL-2	0010-003613	2024.11.22	2025.11.21
Mixed Flow Gas Chamber(Yamasaki)	GH-180/VL	705	2024.11.22	2025.11.21
Vibration machine	V455-PAL1000 L	1020385-1	2024.11.22	2025.11.21
Durability Tester	YH-8816USDT	17068816076	2024.11.22	2025.11.21
Durability Tester	YH-8816USDT	17068816077	2024.11.22	2025.11.21
Durability Tester	YH-8816USDT	17068816078	2024.11.22	2025.11.21
Durability Tester	YH-8816USDT	17068816079	2024.11.22	2025.11.21
4-axis Tester	YH-8812WEXT	17068812429	2024.11.22	2025.11.21
4-axis Tester	YH-8812WEXT	17068812430	2024.11.22	2025.11.21
Microscope	MM-400/L	3413948	2024.11.22	2025.11.21
Micro-ohmmeter	RM3545	170938239	2024.11.22	2025.11.21
Electronic load meter	63610-80-20	636001001093	2024.11.22	2025.11.21
Electronic load meter	63610-80-20	636001001094	2024.11.22	2025.11.21
DC power supply	9202B	652E22230	2024.11.22	2025.11.21



Temperature rise test system	GP10	S5T909482	2024.11.22	2025.11.21
Moment disconnection tester	NM11B	20010112	2024.11.25	2025.11.24
Electrical Safety Analyzer	TOS9201	XK002479	2024.11.22	2025.11.21
AVO meter	87VC	37980325WS	2024.11.22	2025.11.21

ANNEX A: UUT photograph

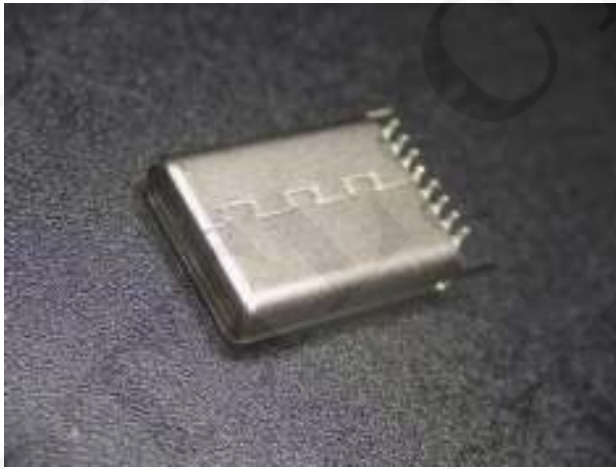


Fig 80 Plug



Fig 81 Plug



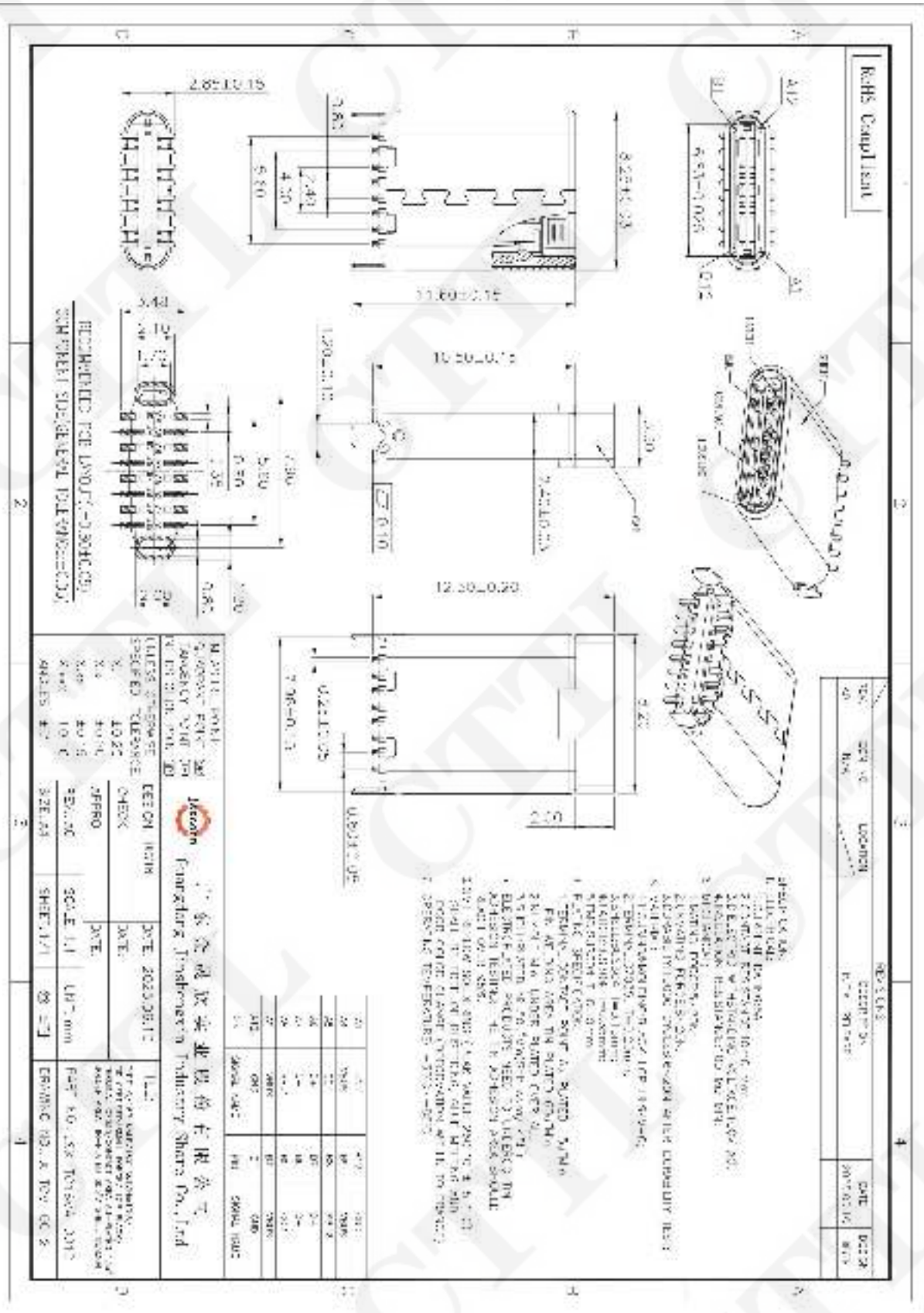
Fig 82 Plug



Fig 83 Plug



ANNEX B: Drawing



ANNEX C: Insertion Force & Extraction Force Test Layout



ANNEX D: Durability Test Layout



ANNEX E: Dielectric withstanding voltage Test Layout



ANNEX F: Vibration Test Layout



ANNEX G: Contact Current Rating Test Layout



END OF REPORT