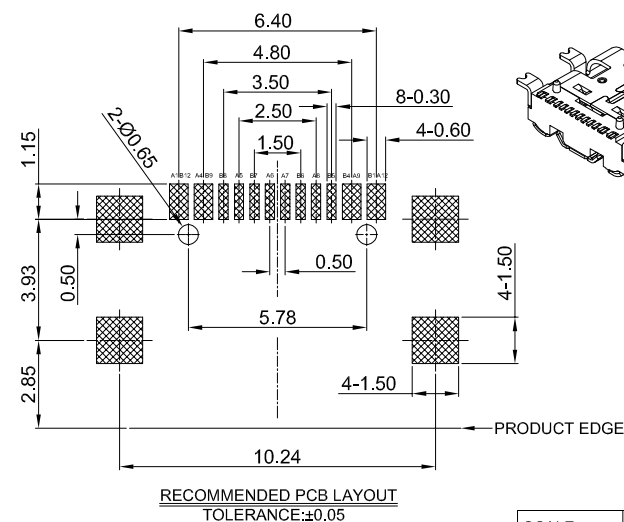
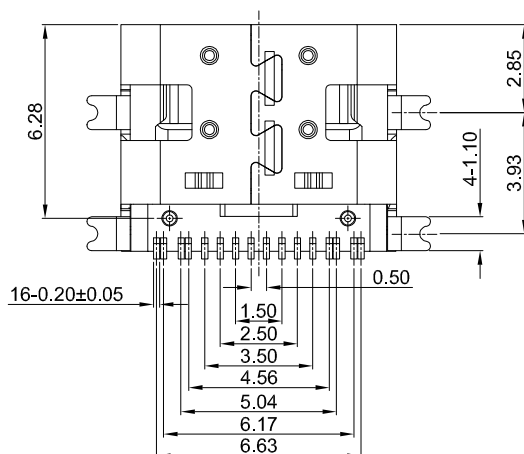
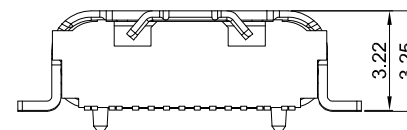
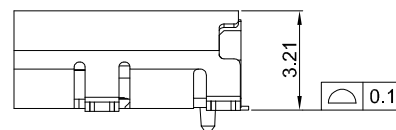
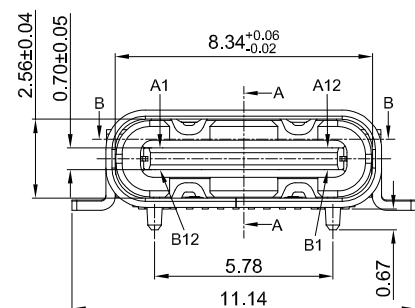
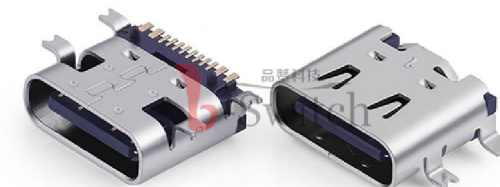
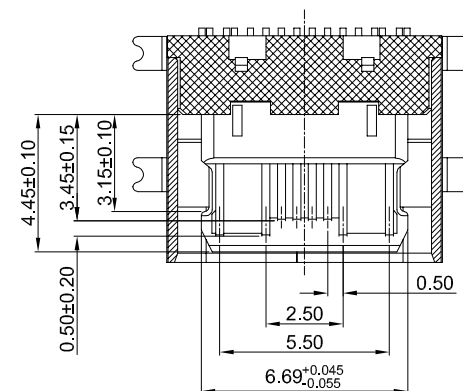
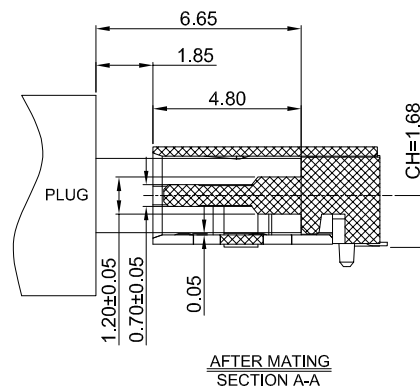
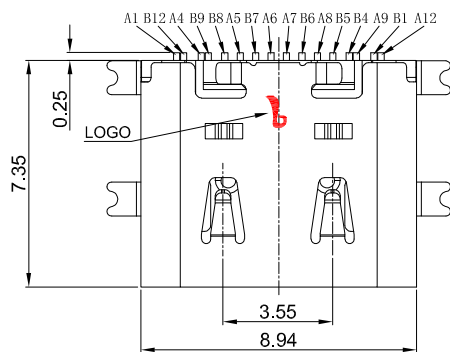


G-Switch USB-C Specification:

- 1.Current rated: 5A on vbus/1.25A on vconn/0.25A on other
- 2.Withstanding voltage: 100V AC/minute
- 3.Contact resistance: 40mΩ Max
- 4.Insulation resistance: 100MQ Min
- 5.Operating temperature: -40°C ~ +85°C
- 6.Mating force: 5N~20N
- 7.Unmating force: 8N~20N
- 8.Durability cycle:10,000 cycles
- 9.Compliant with: IEC62680-1-3

A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
GND			VBUS	CC1	D+	D-	SBU1	VBUS			GND
First			First	Second	Second	Second	Second	First			First
B12	B11	B10	B9	B8	B7	B6	B5	B4	B3	B2	B1
GND			VBUS	SBU2	D-	D+	CC2	VBUS			GND
First			First	Second	Second	Second	Second	First			First

USB IF
TID-7342

1	SHELL	STAINLESS STEEL	NI 30u" Min PLATED
2	MID PLATE	STAINLESS STEEL	CLEAN
3	HOUSING	HIGH TEMPERATURE PLASTIC	BLACK UL 94 V-0
4	TERMINALS	COPPER ALLOY	Au1u" Min PLATING ON CONTACT AREA
NO.	PARTS	MATERIAL	REMARKS



SCALE: 1:1	UNIT: mm
SIZE: A4	

Unless otherwise	
General Tolerance:	
X.x	±0.30
X.xx	±0.20
X.xxx	±0.10
X.x°	±3°
X.xx°	±2°

Title:	Horizontal Type-c 16P Female SMT CH=1.68 L=7.35mm
--------	--

Molde Code: GT-USB-9047A

DRAWN	CHECKED	APPROVED	DATE
Xia	Chen	Chen	2020.02.01

 品贊科技
b-Switch
www.dq-switch.com

REV: A0	SHEET: 1/1
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中国认可
国际互认
检测
TESTING
CNAS L13628

EN/SASO IEC 62680-1-3 Test Report

25T04N000386-001-COM

For

Type-C Receptacle Connector

Company Name: G-Switch Technology (Dongguan) Co., Ltd.

Product Name: Horizontal Type-c 16P Female SMT CH=1.68

L=7.35mm

Model Name: GT-USB-9047A

Hardware Version: A0

Issued Date: 2025-04-09

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:

SAICT, Shenzhen Academy of Information and Communications Technology

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

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Email: yewu@saict.ac.cn, www.saict.ac.cn



NO.25T04N000386-001-COM

REPORT HISTORY

Report Number	Revision	Description	Issue Date
25T04N000386-001-COM	V1	First release	2025-04-09

Note: the latest revision of the test report supersedes all previous versions.



CONTENTS

1. Test Laboratory	1
1.1. Testing Location	1
1.2. Testing Environment	1
1.3. Project Data	1
1.4. Signature	1
2. Client Information	1
2.1. Applicant Information	1
2.2. Manufacturer Information	1
3. Unit Under Test (UUT) Information	2
3.1. About UUT	2
3.2. Sample Coding	2
4. Reference Documents	3
5. USB Type-C Compliance Requirements	3
5.1. DC Electrical	3
5.2. Mechanical	4
5.3. Environmental	5
6. Test Procedure	6
7. Test Result Summary	9
8. Test Detail	10
8.1. Clause 3.2.1 (6) Construction	10
8.2. Clause 3.2.1 (8) Critical Dimensions	12
8.3. Clause 3.7.8.1 Low level contact resistance	13
8.4. Clause 3.7.8.2 Dielectric withstanding voltage	35
8.5. Clause 3.7.8.3 Insulation Resistance	36
8.6. Clause 3.7.8.4 Contact Current Rating	37
8.7. Clause 3.8.1.1 Insertion force	38
8.8. Clause 3.8.1.2 Extraction force	38
8.9. Clause 3.8.1.3 Durability	45
8.10. Clause 3.8.1.3 Reseating	47
8.11. Clause 3.8.1.6 4-Axis Continuity	47



8.12. Clause 3.8.2 Temperature life	52
8.13. Clause 3.8.2 Thermal shock	52
8.14. Clause 3.8.2 Cyclic temperature and humidity	53
8.15. Clause 3.8.2 Vibration	53
8.16. Clause 3.8.2 Mixed flowing gas	56
8.17. Clause 3.8.2 Thermal disturbance	56
9. Test Equipments Utilized	57
ANNEX A: UUT photograph	59
ANNEX B: Drawing	60
ANNEX C: Insertion Force & Extraction Force Test Layout	61
ANNEX D: Durability Test Layout	62
ANNEX E: Dielectric withstanding voltage Test Layout	63
ANNEX F: Vibration Test Layout	64
ANNEX G: Contact Current Rating Test Layout	65



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℃

Relative Humidity: 25-85%RH

Atmospheric pressure 86-106kPa

1.3. Project Data

Testing Start Date: 2025-03-04

Testing End Date: 2025-04-03

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: G-Switch Technology (Dongguan) Co., Ltd.
Address: Room 701, Workshop 2, Optical Technology Innovation Center, Xinhong, Marina Bay New District, Dongguan City
City: Dongguan
Country: China
Telephone: 0769-82388879
Email: feng@g-switch.cn

2.2. Manufacturer Information

Company Name: G-Switch Technology (Dongguan) Co., Ltd.
Address: Room 701, Workshop 2, Optical Technology Innovation Center, Xinhong, Marina Bay New District, Dongguan City
City: Dongguan
Country: China
Telephone: 0769-82388879
Email: feng@g-switch.cn



3. Unit Under Test (UUT) Information

3.1. About UUT

Description:	USB 2.0 Type-C Receptacle Connector
Brand Name:	G-Switch Technology (Dongguan) Co., Ltd.
Marketing Name:	Horizontal Type-c 16P Female SMT CH=1.68 L=7.35mm
Model Name:	GT-USB-9047A
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-1	UT61aa to UT68aa	8 pcs
Group B-5	UT69aa to UT71aa	3 pcs
Group B-6	UT72aa to UT74aa	3 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

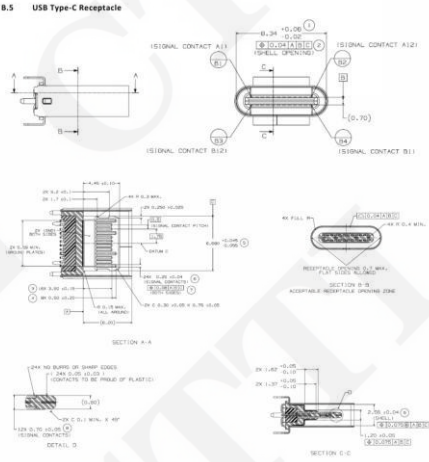
Note:The requirements of the standards SASO IEC 62680-1-3 is the same as EN IEC 62680-1-3.

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	8.5 USB Type-C Receptacle  Figure B-5 USB Type-C Receptacle Using SECTION A-A	Table B-5 Receptacle Critical Dimensions for Receptacles Using SECTION A-A in Figure B-5 <table border="1"> <thead> <tr> <th>Description</th><th>Dimension</th><th>+ Tol.</th><th>- Tol.</th></tr> </thead> <tbody> <tr> <td>1. Receptacle inside opening</td><td>8.34</td><td>0.04</td><td>0.02</td></tr> <tr> <td>2. Receptacle inside opening position tolerance</td><td>0.04 with datum A/B/C</td><td>n/a</td><td>n/a</td></tr> <tr> <td>3. Receptacle signal pin length</td><td>3.50</td><td>0.15</td><td>0.15</td></tr> <tr> <td>4. Pin length datum</td><td>0.30</td><td>0.20</td><td>0.20</td></tr> <tr> <td>5. Tongue width</td><td>0.500</td><td>0.005</td><td>0.005</td></tr> <tr> <td>6. Contact width</td><td>0.25</td><td>0.04</td><td>0.04</td></tr> <tr> <td>7. Contact width position tolerance</td><td>0.08 with datum A/B/C</td><td>n/a</td><td>n/a</td></tr> <tr> <td>8. Tongue thickness</td><td>0.70</td><td>0.05</td><td>0.05</td></tr> <tr> <td>9. Receptacle inside thickness</td><td>2.56</td><td>0.05</td><td>0.04</td></tr> </tbody> </table> Notes: 1. All values are in millimeters.	Description	Dimension	+ Tol.	- Tol.	1. Receptacle inside opening	8.34	0.04	0.02	2. Receptacle inside opening position tolerance	0.04 with datum A/B/C	n/a	n/a	3. Receptacle signal pin length	3.50	0.15	0.15	4. Pin length datum	0.30	0.20	0.20	5. Tongue width	0.500	0.005	0.005	6. Contact width	0.25	0.04	0.04	7. Contact width position tolerance	0.08 with datum A/B/C	n/a	n/a	8. Tongue thickness	0.70	0.05	0.05	9. Receptacle inside thickness	2.56	0.05	0.04
Description	Dimension	+ Tol.	- Tol.																																								
1. Receptacle inside opening	8.34	0.04	0.02																																								
2. Receptacle inside opening position tolerance	0.04 with datum A/B/C	n/a	n/a																																								
3. Receptacle signal pin length	3.50	0.15	0.15																																								
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7. Contact width position tolerance	0.08 with datum A/B/C	n/a	n/a																																								
8. Tongue thickness	0.70	0.05	0.05																																								
9. Receptacle inside thickness	2.56	0.05	0.04																																								
3.8.1.1	Insertion force	EIA 364-13 The insertion force test shall be done at a maximum speed of 12.5 mm (0.492") per minute.	Within the range from 5 N to 20 N. This requirement does not apply to the plugs that are used for direct docking without a cable.																																								
3.8.1.2	Extraction force	EIA 364-13 The extraction force test shall be done at a maximum speed of 12.5 mm (0.492") per minute.	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: a) 33 % of the initial reading, and b) within the range of 8 N to 20 N. 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.																																								
3.8.1.3	Durability	EIA 364-09	10,000 cycles minimum. Low level contact resistance and dielectric withstanding voltage shall be checked to be within spec after the 10,000 durability cycles according to Table 4-8, Test Group A-7.																																								
3.8.1.6	4-Axis Continuity	See Appendix D for detailed test fixtures and procedures. Plug and Receptacle: Subject the mating interface to the moments defined in appendix D for at least 10 seconds.	No discontinuities greater than 1 microsecond duration in any of the four orientations tested.																																								

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-1	
No.	Test Item
B-1-4	4-Axis Continuity
Group B-5	
No.	Test Item
B-5-1	Critical Dimensions
Group B-6	
No.	Test Item
B-6-1	Contact Current Rating

7. Test Result Summary

Test Item	Clause	Result
Construction	3.2.1 (6)	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
4-Axis Continuity	3.8.1.6	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

8. Test Detail

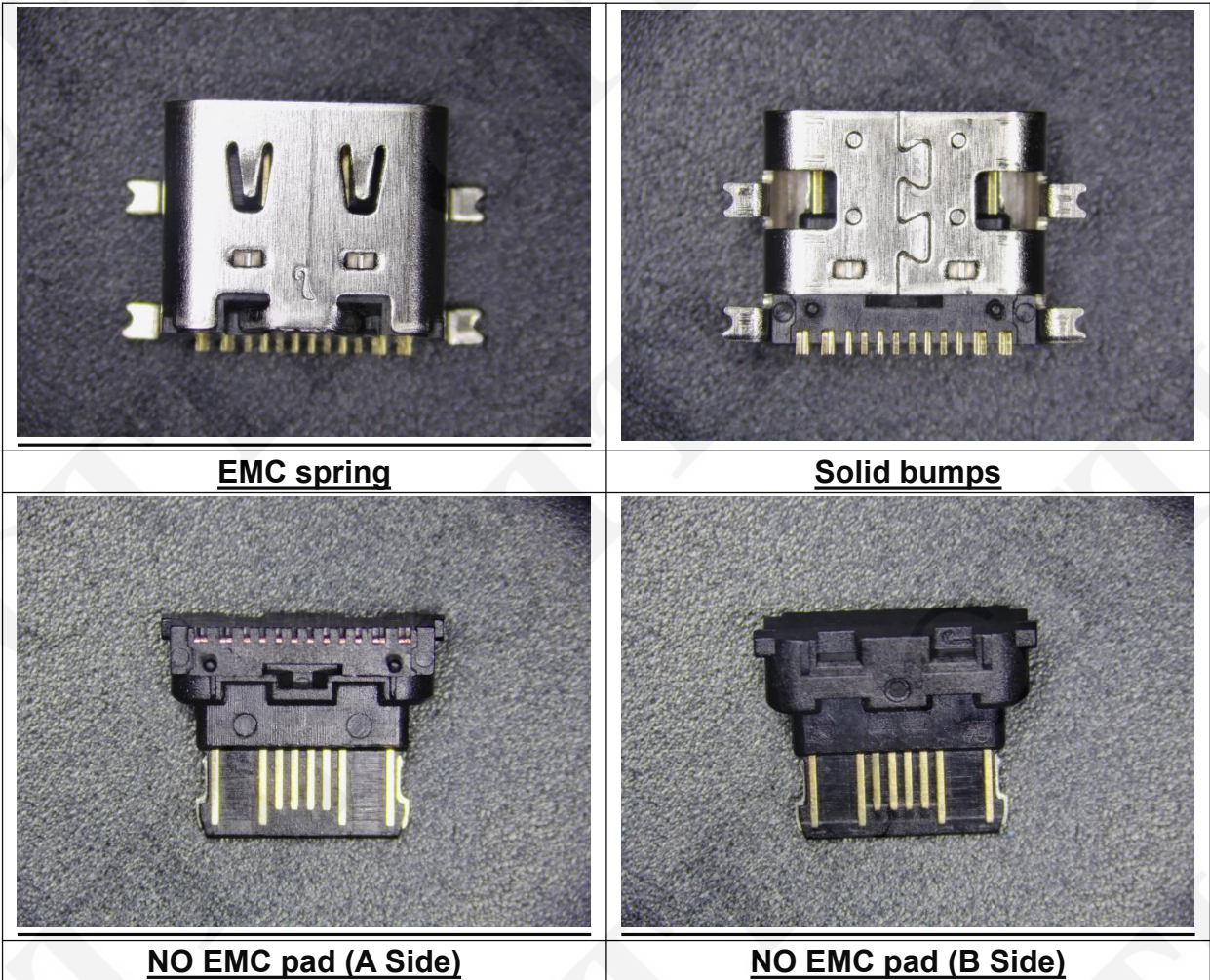
8.1. Clause 3.2.1 (6) Construction

Construction				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/04	Temperature(°C)	23.5	Huang Siwei	Pass
	Humidity (RH)	60.3 %		

EMC ground return path			
Description	Sample Coding		
	UT69aa	UT70aa	UT71aa
1.EMC spring	Y	Y	Y
2.EMC pad	N	N	N
3.Solid bumps	Y	Y	Y
4.Distance between the bumps $\geq 2.43\text{mm}$	N/A	N/A	N/A
Result	Pass	Pass	Pass
Note: Receptacle configurations with a conductive shell. The requirements apply to the receptacle contact dimensions shown in ALTERNATE SECTION A-A Figure B-5. Receptacle configuration with respect to mounting surface: Right angle.			

Number of pins: 16

<u>A1</u>	<u>A2</u>	<u>A3</u>	<u>A4</u>	<u>A5</u>	<u>A6</u>	<u>A7</u>	<u>A8</u>	<u>A9</u>	<u>A10</u>	<u>A11</u>	<u>A12</u>
✓	N/A	N/A	✓	✓	✓	✓	✓	✓	N/A	N/A	✓
<u>B12</u>	<u>B11</u>	<u>B10</u>	<u>B9</u>	<u>B8</u>	<u>B7</u>	<u>B6</u>	<u>B5</u>	<u>B4</u>	<u>B3</u>	<u>B2</u>	<u>B1</u>
✓	N/A	N/A	✓	✓	✓	✓	✓	✓	N/A	N/A	✓

EMC Springs/bumps/EMC Pad photograph

8.2. Clause 3.2.1 (8) Critical Dimensions

B-5-1 Critical Dimensions				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/04	Temperature(°C)	23.5	Huang Siwei	Pass
	Humidity (RH)	60.3 %		

Test data: (Unit:mm)			
B-5-1 Critical Dimensions – Receptacle			
Description	Sample Coding		
	UT69aa	UT70aa	UT71aa
1.Receptacle inside opening (8.32~8.40)	8.3447	8.3514	8.3454
2.Receptacle insider opening position tolerance (0.04 with datum A/B/C)	0.0061	0.0025	0.0056
3.Receptacle signal pin length (3.35~3.65)	3.4698	3.4795	3.4420
4.Pin length delta (0.30~0.70)	0.5556	0.5391	0.5055
5.Tongue width (6.635~6.735)	6.7227	6.7219	6.7295
6.Contact width (0.21~0.29)	0.2758	0.2807	0.2784
7.Contact width position tolerance (0.08 with datum A/B/C)	0.0483	0.0177	0.0146
8.Tongue thickness (0.65~0.75)	0.7107	0.7132	0.7065
9.Receptacle inside thickness (2.52~2.60)	2.5882	2.5784	2.5781
Decision result	Pass	Pass	Pass

8.3. Clause 3.7.8.1 Low level contact resistance

A-1-1 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/17	Temperature(℃)	22.2	Huang Siwei	Pass
	Humidity (RH)	57.4 %		
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	22.6	N/A	N/A	23.9	20.6	20.8	20.8	20.8	17.4	N/A	N/A	17.6
UT02aa	22.2	N/A	N/A	24.2	20.8	20.6	21.2	21.0	17.2	N/A	N/A	17.6
UT03aa	23.3	N/A	N/A	24.9	21.4	21.7	20.9	21.7	19.3	N/A	N/A	18.7
UT04aa	22.8	N/A	N/A	26.6	22.3	21.7	21.4	23.0	17.0	N/A	N/A	17.5
UT05aa	22.4	N/A	N/A	24.5	22.4	21.6	21.3	20.9	17.1	N/A	N/A	17.5
UT06aa	24.0	N/A	N/A	23.5	20.8	20.7	20.9	21.1	17.8	N/A	N/A	18.5
UT07aa	22.6	N/A	N/A	24.6	23.8	20.7	21.2	21.4	23.9	N/A	N/A	17.6
UT08aa	22.6	N/A	N/A	24.4	20.6	20.6	20.5	21.7	17.6	N/A	N/A	17.7
UT09aa	23.0	N/A	N/A	24.1	20.7	20.5	20.3	21.1	18.6	N/A	N/A	18.9
UT10aa	23.0	N/A	N/A	24.7	21.1	21.1	21.1	21.2	17.4	N/A	N/A	18.0
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT01aa	22.4	N/A	N/A	20.2	19.6	19.0	19.1	19.7	20.1	N/A	N/A	19.0
UT02aa	22.0	N/A	N/A	20.3	19.6	19.3	19.1	19.6	20.0	N/A	N/A	19.3
UT03aa	22.9	N/A	N/A	21.4	20.4	20.2	19.8	20.7	21.3	N/A	N/A	21.8
UT04aa	22.4	N/A	N/A	21.0	19.2	19.2	19.1	19.7	20.3	N/A	N/A	19.7
UT05aa	22.1	N/A	N/A	20.9	19.2	19.8	19.0	19.6	20.1	N/A	N/A	19.6
UT06aa	22.5	N/A	N/A	21.2	19.9	19.2	19.2	19.6	20.1	N/A	N/A	21.1
UT07aa	25.8	N/A	N/A	21.7	19.6	19.3	19.1	20.1	20.6	N/A	N/A	19.3
UT08aa	22.4	N/A	N/A	24.1	19.7	19.2	19.0	19.6	20.1	N/A	N/A	18.9
UT09aa	22.3	N/A	N/A	21.1	21.1	20.8	20.4	21.0	24.0	N/A	N/A	20.1
UT10aa	22.5	N/A	N/A	20.8	19.8	19.3	19.3	19.7	20.5	N/A	N/A	19.4

A-1-4 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/24	Temperature(℃)	22.7	Huang Siwei	Pass
	Humidity (RH)	57.8 %		
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	22.9	N/A	N/A	24.4	21.2	21.5	21.4	21.6	17.4	N/A	N/A	18.2
UT02aa	22.2	N/A	N/A	25.1	22.0	21.9	22.4	22.5	17.6	N/A	N/A	18.7
UT03aa	23.2	N/A	N/A	25.0	21.9	22.0	21.4	22.2	18.9	N/A	N/A	19.0
UT04aa	23.6	N/A	N/A	25.6	22.0	21.6	21.6	23.3	17.2	N/A	N/A	17.9
UT05aa	22.6	N/A	N/A	26.0	22.5	23.0	22.6	22.2	17.2	N/A	N/A	18.3
UT06aa	24.3	N/A	N/A	23.3	21.3	21.3	21.2	21.9	17.9	N/A	N/A	20.9
UT07aa	23.1	N/A	N/A	25.3	22.5	21.4	20.9	22.3	19.0	N/A	N/A	18.0
UT08aa	23.0	N/A	N/A	24.8	21.4	21.5	21.5	21.4	18.0	N/A	N/A	18.5
UT09aa	23.3	N/A	N/A	24.5	21.0	20.6	20.4	21.0	18.6	N/A	N/A	19.0
UT10aa	22.9	N/A	N/A	25.1	22.0	21.7	21.8	21.6	17.7	N/A	N/A	18.4
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT01aa	22.9	N/A	N/A	21.5	20.6	19.5	19.7	20.2	20.6	N/A	N/A	19.3
UT02aa	23.0	N/A	N/A	21.2	20.8	20.4	20.2	20.8	20.8	N/A	N/A	19.3
UT03aa	23.7	N/A	N/A	21.3	21.0	20.7	20.1	20.9	21.4	N/A	N/A	22.5
UT04aa	22.7	N/A	N/A	21.7	19.7	19.9	19.5	20.1	20.4	N/A	N/A	19.4
UT05aa	23.0	N/A	N/A	21.4	20.2	20.0	19.8	20.5	20.5	N/A	N/A	19.9
UT06aa	22.9	N/A	N/A	21.3	20.9	19.9	20.3	20.6	20.8	N/A	N/A	20.6
UT07aa	31.0	N/A	N/A	27.3	20.1	19.8	19.6	20.5	21.1	N/A	N/A	19.5
UT08aa	22.8	N/A	N/A	24.8	20.6	20.3	19.8	20.3	20.6	N/A	N/A	19.4
UT09aa	22.5	N/A	N/A	20.9	21.9	21.6	21.3	21.7	22.6	N/A	N/A	20.3
UT10aa	22.9	N/A	N/A	21.1	20.4	19.7	20.0	20.2	20.9	N/A	N/A	19.7

A-1-6 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/24	Temperature(℃)	22.7	Huang Siwei	Pass
	Humidity (RH)	57.8 %		
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	22.1	N/A	N/A	24.8	22.8	22.5	20.1	22.9	17.9	N/A	N/A	18.9
UT02aa	23.9	N/A	N/A	24.3	22.1	22.4	20.4	21.6	17.5	N/A	N/A	18.9
UT03aa	22.4	N/A	N/A	24.3	22.1	22.0	22.0	22.0	17.4	N/A	N/A	18.4
UT04aa	22.7	N/A	N/A	25.9	21.2	21.3	21.9	22.0	17.1	N/A	N/A	19.2
UT05aa	22.5	N/A	N/A	24.6	21.9	22.1	21.9	22.8	18.5	N/A	N/A	19.2
UT06aa	22.1	N/A	N/A	24.5	21.6	22.6	20.8	22.3	17.5	N/A	N/A	19.3
UT07aa	23.3	N/A	N/A	25.8	21.9	22.4	20.9	21.2	17.6	N/A	N/A	18.4
UT08aa	22.3	N/A	N/A	25.7	22.8	21.6	21.4	22.3	17.2	N/A	N/A	19.0
UT09aa	23.3	N/A	N/A	25.8	22.9	21.4	20.1	22.8	17.2	N/A	N/A	19.7
UT10aa	22.8	N/A	N/A	25.7	21.6	21.7	20.4	22.9	18.2	N/A	N/A	19.5
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT01aa	23.0	N/A	N/A	21.9	21.1	20.5	19.2	20.6	21.0	N/A	N/A	19.8
UT02aa	22.6	N/A	N/A	21.1	21.9	19.7	19.9	20.0	20.4	N/A	N/A	20.4
UT03aa	22.5	N/A	N/A	21.4	21.8	20.5	20.3	20.9	21.7	N/A	N/A	19.5
UT04aa	22.6	N/A	N/A	21.4	20.0	19.8	20.3	20.9	21.4	N/A	N/A	20.2
UT05aa	23.2	N/A	N/A	21.2	21.1	20.2	20.0	20.8	21.6	N/A	N/A	19.5
UT06aa	23.1	N/A	N/A	21.6	20.7	20.8	20.8	20.4	21.1	N/A	N/A	19.6
UT07aa	22.1	N/A	N/A	21.6	21.4	20.4	20.1	20.4	21.6	N/A	N/A	20.1
UT08aa	22.0	N/A	N/A	21.6	20.9	19.4	19.1	20.2	20.4	N/A	N/A	19.7
UT09aa	23.3	N/A	N/A	21.2	20.8	20.1	19.2	20.2	21.7	N/A	N/A	20.5
UT10aa	23.9	N/A	N/A	21.7	20.4	19.9	19.2	20.9	21.7	N/A	N/A	19.3

A-2-1 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/17	Temperature(℃)	22.7	Huang Siwei	Pass
	Humidity (RH)	58.8 %		
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	22.2	N/A	N/A	24.5	21.1	20.9	20.6	21.9	18.5	N/A	N/A	18.7
UT12aa	23.0	N/A	N/A	24.7	20.7	20.7	20.3	20.8	18.6	N/A	N/A	20.4
UT13aa	22.2	N/A	N/A	24.6	21.1	20.6	21.9	21.1	18.5	N/A	N/A	17.4
UT14aa	22.6	N/A	N/A	24.1	20.9	20.7	20.3	21.1	17.9	N/A	N/A	18.1
UT15aa	23.1	N/A	N/A	24.6	20.2	20.4	20.5	20.4	17.8	N/A	N/A	17.5
UT16aa	22.9	N/A	N/A	24.5	21.3	20.9	20.6	21.4	17.2	N/A	N/A	17.5
UT17aa	22.0	N/A	N/A	25.0	20.9	20.4	20.3	21.4	17.7	N/A	N/A	17.2
UT18aa	21.8	N/A	N/A	25.3	20.3	20.4	20.5	20.9	17.8	N/A	N/A	18.0
UT19aa	21.4	N/A	N/A	27.0	21.0	20.7	21.0	21.3	18.0	N/A	N/A	18.5
UT20aa	22.9	N/A	N/A	24.9	20.8	20.9	20.8	21.1	17.9	N/A	N/A	18.2
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT11aa	22.4	N/A	N/A	21.4	20.6	20.4	19.8	20.8	21.6	N/A	N/A	20.2
UT12aa	22.4	N/A	N/A	21.0	20.9	20.2	20.3	21.0	21.3	N/A	N/A	20.5
UT13aa	22.4	N/A	N/A	22.0	19.6	19.8	20.2	20.0	20.5	N/A	N/A	20.1
UT14aa	22.4	N/A	N/A	21.1	20.1	19.9	19.4	20.3	20.4	N/A	N/A	19.4
UT15aa	22.5	N/A	N/A	20.9	20.1	19.6	19.4	19.9	20.2	N/A	N/A	19.3
UT16aa	22.4	N/A	N/A	20.9	19.3	19.2	19.1	20.0	21.0	N/A	N/A	19.6
UT17aa	22.1	N/A	N/A	20.9	19.4	32.8	19.1	19.8	20.1	N/A	N/A	18.9
UT18aa	22.2	N/A	N/A	21.6	19.9	19.2	19.5	19.9	20.4	N/A	N/A	19.4
UT19aa	22.5	N/A	N/A	22.9	20.3	20.1	19.9	20.8	21.3	N/A	N/A	20.0
UT20aa	22.5	N/A	N/A	20.6	20.8	19.9	20.1	20.6	21.6	N/A	N/A	20.0

A-2-4 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/18	Temperature(℃)	21.6	Huang Siwei	Pass
	Humidity (RH)	60.9 %		
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	22.2	N/A	N/A	25.3	21.8	21.1	20.7	28.4	18.7	N/A	N/A	19.2
UT12aa	22.8	N/A	N/A	24.6	21.3	21.3	20.5	21.7	19.3	N/A	N/A	29.2
UT13aa	21.9	N/A	N/A	24.8	21.5	21.1	23.2	21.7	18.0	N/A	N/A	17.6
UT14aa	22.2	N/A	N/A	25.1	21.9	21.7	21.1	21.8	18.0	N/A	N/A	18.6
UT15aa	22.8	N/A	N/A	25.2	20.6	20.9	21.1	21.1	17.4	N/A	N/A	17.7
UT16aa	23.4	N/A	N/A	24.7	22.5	21.6	21.2	21.7	17.7	N/A	N/A	18.1
UT17aa	22.1	N/A	N/A	26.9	21.3	21.1	21.0	22.8	18.0	N/A	N/A	18.1
UT18aa	22.4	N/A	N/A	28.4	20.5	21.2	21.0	21.4	17.4	N/A	N/A	18.1
UT19aa	23.1	N/A	N/A	27.5	22.6	21.3	21.6	21.5	18.2	N/A	N/A	19.0
UT20aa	22.8	N/A	N/A	25.2	21.2	21.1	21.4	21.6	18.1	N/A	N/A	18.4
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT11aa	23.0	N/A	N/A	21.1	21.1	20.9	20.2	21.1	22.3	N/A	N/A	19.9
UT12aa	23.1	N/A	N/A	21.0	22.3	21.6	22.1	22.5	22.2	N/A	N/A	20.6
UT13aa	22.8	N/A	N/A	21.6	20.4	20.1	20.8	20.4	21.1	N/A	N/A	19.6
UT14aa	23.0	N/A	N/A	21.3	20.4	20.3	19.9	20.9	21.2	N/A	N/A	19.4
UT15aa	22.5	N/A	N/A	20.5	20.5	19.6	19.5	19.9	20.2	N/A	N/A	19.1
UT16aa	23.0	N/A	N/A	21.6	20.0	19.9	20.2	20.7	21.6	N/A	N/A	20.1
UT17aa	22.9	N/A	N/A	20.9	20.2	19.3	19.9	20.4	20.8	N/A	N/A	19.1
UT18aa	22.7	N/A	N/A	21.2	20.5	19.4	19.9	20.7	21.4	N/A	N/A	19.3
UT19aa	22.5	N/A	N/A	24.6	21.3	21.2	21.0	21.3	21.8	N/A	N/A	20.3
UT20aa	23.2	N/A	N/A	20.8	21.2	20.2	20.6	21.0	21.4	N/A	N/A	20.1

A-2-6 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/21	Temperature(℃)	21.2	Huang Siwei	Pass
	Humidity (RH)	57.7 %		
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	22.3	N/A	N/A	24.8	21.7	21.3	20.7	25.9	18.6	N/A	N/A	19.1
UT12aa	23.2	N/A	N/A	24.8	20.8	21.3	20.9	21.6	18.8	N/A	N/A	21.8
UT13aa	22.1	N/A	N/A	25.1	21.5	21.4	23.6	21.4	17.9	N/A	N/A	17.6
UT14aa	22.6	N/A	N/A	24.7	21.2	21.3	20.9	21.6	17.8	N/A	N/A	18.4
UT15aa	22.9	N/A	N/A	25.1	20.8	21.3	20.9	20.6	17.4	N/A	N/A	17.6
UT16aa	23.0	N/A	N/A	24.5	22.1	21.4	21.2	21.9	17.6	N/A	N/A	18.1
UT17aa	22.2	N/A	N/A	26.6	21.3	21.1	20.9	21.9	18.0	N/A	N/A	18.0
UT18aa	22.6	N/A	N/A	27.9	20.8	21.1	20.6	21.3	17.5	N/A	N/A	18.4
UT19aa	23.2	N/A	N/A	25.8	21.4	21.1	21.0	21.2	17.9	N/A	N/A	18.5
UT20aa	23.1	N/A	N/A	25.6	21.4	21.2	21.8	21.4	18.0	N/A	N/A	18.4
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT11aa	22.4	N/A	N/A	21.1	20.9	20.8	20.4	21.3	22.0	N/A	N/A	20.3
UT12aa	23.1	N/A	N/A	21.1	22.0	20.6	21.6	21.5	21.9	N/A	N/A	20.4
UT13aa	22.7	N/A	N/A	21.4	20.3	20.2	20.3	20.2	20.9	N/A	N/A	19.4
UT14aa	22.6	N/A	N/A	21.1	20.4	20.4	20.2	20.7	21.3	N/A	N/A	19.6
UT15aa	22.3	N/A	N/A	20.4	20.3	19.5	19.4	19.9	20.3	N/A	N/A	19.1
UT16aa	22.7	N/A	N/A	21.3	19.8	19.8	19.9	20.8	21.1	N/A	N/A	20.6
UT17aa	22.3	N/A	N/A	20.7	20.1	19.2	19.9	20.5	20.9	N/A	N/A	19.1
UT18aa	22.3	N/A	N/A	21.5	20.4	19.7	20.3	20.7	21.8	N/A	N/A	19.4
UT19aa	22.4	N/A	N/A	24.0	20.8	20.8	20.6	21.1	21.8	N/A	N/A	20.2
UT20aa	23.1	N/A	N/A	21.1	21.2	20.2	20.6	21.0	21.3	N/A	N/A	19.9

A-2-8 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/21	Temperature(℃)	21.2	Huang Siwei	Pass
	Humidity (RH)	57.7 %		
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	23.0	N/A	N/A	24.4	20.2	21.8	20.3	21.4	18.4	N/A	N/A	17.4
UT12aa	22.9	N/A	N/A	24.3	21.8	21.3	21.3	22.6	18.6	N/A	N/A	18.6
UT13aa	23.0	N/A	N/A	25.4	21.9	22.0	21.0	21.2	17.5	N/A	N/A	18.3
UT14aa	23.6	N/A	N/A	25.2	21.1	21.3	21.2	22.1	17.6	N/A	N/A	18.6
UT15aa	22.2	N/A	N/A	24.3	20.6	21.3	20.7	22.5	17.1	N/A	N/A	18.4
UT16aa	23.4	N/A	N/A	25.4	21.2	21.1	21.8	22.5	18.5	N/A	N/A	18.6
UT17aa	22.8	N/A	N/A	24.7	21.2	21.8	20.8	21.0	18.8	N/A	N/A	18.4
UT18aa	22.2	N/A	N/A	25.1	20.8	21.4	21.3	21.7	18.4	N/A	N/A	18.8
UT19aa	22.1	N/A	N/A	24.6	21.4	21.3	20.9	21.7	18.3	N/A	N/A	17.3
UT20aa	22.2	N/A	N/A	24.7	21.6	21.7	21.0	21.8	17.6	N/A	N/A	18.2
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT11aa	22.7	N/A	N/A	21.8	20.7	20.9	20.0	20.4	21.1	N/A	N/A	20.7
UT12aa	23.4	N/A	N/A	21.0	20.7	20.4	19.7	20.8	21.2	N/A	N/A	20.9
UT13aa	22.5	N/A	N/A	21.7	21.2	19.1	19.4	20.1	21.0	N/A	N/A	20.4
UT14aa	22.1	N/A	N/A	21.2	21.8	20.6	19.4	20.2	21.4	N/A	N/A	20.4
UT15aa	23.3	N/A	N/A	21.4	20.3	19.3	20.1	20.2	21.9	N/A	N/A	19.7
UT16aa	23.8	N/A	N/A	21.5	20.1	19.2	20.8	20.4	21.9	N/A	N/A	20.4
UT17aa	23.6	N/A	N/A	21.9	20.6	20.4	20.5	20.7	21.8	N/A	N/A	20.5
UT18aa	23.4	N/A	N/A	21.2	21.9	19.6	20.9	20.9	21.3	N/A	N/A	19.1
UT19aa	22.5	N/A	N/A	21.4	20.8	20.8	19.7	20.9	20.5	N/A	N/A	20.4
UT20aa	23.5	N/A	N/A	21.3	20.6	19.9	19.8	20.1	21.9	N/A	N/A	20.8

A-3-1 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/12	Temperature(℃)	23.1	Su Kun	Pass
	Humidity (RH)	71.5 %		
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	22.8	N/A	N/A	24.2	20.2	20.4	20.1	20.7	17.3	N/A	N/A	17.5
UT22aa	25.5	N/A	N/A	31.8	28.5	30.2	26.1	28.7	20.1	N/A	N/A	23.2
UT23aa	23.1	N/A	N/A	23.9	20.7	20.5	20.5	20.7	18.0	N/A	N/A	18.8
UT24aa	23.0	N/A	N/A	24.4	20.9	20.8	20.2	21.0	17.6	N/A	N/A	18.1
UT25aa	23.1	N/A	N/A	24.9	20.4	21.0	21.0	20.9	18.8	N/A	N/A	19.4
UT26aa	22.4	N/A	N/A	24.5	21.1	22.1	20.8	21.2	18.1	N/A	N/A	18.3
UT27aa	22.9	N/A	N/A	24.5	20.3	20.4	20.9	21.3	18.2	N/A	N/A	18.4
UT28aa	22.5	N/A	N/A	23.7	21.1	20.4	20.2	20.9	17.0	N/A	N/A	17.5
UT29aa	22.9	N/A	N/A	24.3	20.7	34.3	20.4	20.9	18.0	N/A	N/A	18.5
UT30aa	29.5	N/A	N/A	24.3	20.7	20.5	20.5	21.3	17.7	N/A	N/A	17.1
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT21aa	21.7	N/A	N/A	20.4	20.2	19.5	19.4	20.2	20.5	N/A	N/A	19.5
UT22aa	28.7	N/A	N/A	23.4	27.8	28.2	21.3	27.8	26.7	N/A	N/A	21.6
UT23aa	22.1	N/A	N/A	30.0	20.8	20.2	20.1	20.7	21.4	N/A	N/A	19.9
UT24aa	22.4	N/A	N/A	21.1	20.0	19.4	19.4	19.8	20.3	N/A	N/A	19.0
UT25aa	22.0	N/A	N/A	21.5	21.6	20.2	21.3	21.1	21.4	N/A	N/A	20.0
UT26aa	22.4	N/A	N/A	20.6	20.0	20.0	19.9	20.7	20.9	N/A	N/A	19.9
UT27aa	22.1	N/A	N/A	20.8	25.1	20.1	20.1	21.0	21.7	N/A	N/A	19.9
UT28aa	22.0	N/A	N/A	21.3	19.4	19.4	18.9	19.6	20.2	N/A	N/A	19.0
UT29aa	22.3	N/A	N/A	20.6	20.8	19.9	20.2	20.6	20.9	N/A	N/A	20.0
UT30aa	22.2	N/A	N/A	21.0	19.7	19.7	19.4	19.9	20.3	N/A	N/A	19.2

A-3-4 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/19	Temperature(℃)	22.9	Su Kun	Pass
	Humidity (RH)	39.1 %		
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	23.6	N/A	N/A	25.0	21.5	22.2	21.6	22.1	18.1	N/A	N/A	18.2
UT22aa	26.2	N/A	N/A	33.2	30.1	31.5	27.4	30.7	20.2	N/A	N/A	23.6
UT23aa	23.2	N/A	N/A	24.5	22.1	21.4	22.5	22.3	18.6	N/A	N/A	19.6
UT24aa	23.3	N/A	N/A	25.2	21.4	21.7	21.6	21.9	18.1	N/A	N/A	18.4
UT25aa	22.8	N/A	N/A	25.3	20.9	21.3	21.6	21.6	18.2	N/A	N/A	19.8
UT26aa	23.0	N/A	N/A	25.7	22.1	25.6	22.1	22.7	19.5	N/A	N/A	19.2
UT27aa	23.7	N/A	N/A	26.0	21.5	21.8	21.8	22.2	18.8	N/A	N/A	18.8
UT28aa	23.5	N/A	N/A	24.9	21.8	21.9	21.8	21.6	17.4	N/A	N/A	18.0
UT29aa	23.4	N/A	N/A	25.0	21.4	34.6	21.1	21.2	18.3	N/A	N/A	18.8
UT30aa	19.7	N/A	N/A	25.9	22.4	24.0	22.0	22.7	19.0	N/A	N/A	18.0
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT21aa	23.6	N/A	N/A	21.4	20.7	19.7	20.2	20.9	20.7	N/A	N/A	20.1
UT22aa	30.6	N/A	N/A	24.4	28.3	28.9	22.2	28.6	27.7	N/A	N/A	22.3
UT23aa	23.5	N/A	N/A	27.3	22.0	21.2	20.9	21.3	21.8	N/A	N/A	20.7
UT24aa	22.7	N/A	N/A	21.2	21.0	20.1	20.4	20.9	22.4	N/A	N/A	19.5
UT25aa	22.7	N/A	N/A	21.1	22.2	21.3	21.8	23.1	22.3	N/A	N/A	20.7
UT26aa	23.4	N/A	N/A	21.1	20.8	21.2	21.0	21.6	22.5	N/A	N/A	20.4
UT27aa	22.8	N/A	N/A	20.7	23.7	20.4	20.8	21.4	22.3	N/A	N/A	20.4
UT28aa	22.6	N/A	N/A	21.3	20.2	19.9	19.2	20.3	20.6	N/A	N/A	19.3
UT29aa	22.8	N/A	N/A	20.5	21.2	20.4	20.6	21.0	21.4	N/A	N/A	20.4
UT30aa	24.0	N/A	N/A	21.4	20.4	20.2	20.6	20.9	21.7	N/A	N/A	19.4

A-3-6 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/20	Temperature(℃)	23.1	Su Kun	Pass
	Humidity (RH)	41.8 %		
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	23.1	N/A	N/A	24.4	21.5	21.7	21.2	21.7	17.8	N/A	N/A	17.8
UT22aa	26.7	N/A	N/A	31.7	28.7	30.9	26.6	28.9	20.6	N/A	N/A	23.8
UT23aa	22.9	N/A	N/A	24.1	21.3	21.1	21.3	21.6	18.3	N/A	N/A	19.1
UT24aa	24.7	N/A	N/A	24.3	21.2	21.3	21.2	21.5	18.2	N/A	N/A	18.4
UT25aa	24.5	N/A	N/A	24.3	20.5	20.4	20.9	21.0	19.1	N/A	N/A	18.5
UT26aa	22.7	N/A	N/A	25.8	22.1	26.0	21.8	22.2	19.3	N/A	N/A	19.3
UT27aa	23.4	N/A	N/A	25.7	21.4	21.3	21.4	21.4	18.6	N/A	N/A	19.0
UT28aa	22.0	N/A	N/A	23.8	21.1	20.9	21.0	21.0	17.1	N/A	N/A	17.6
UT29aa	23.7	N/A	N/A	25.0	21.6	34.8	21.4	21.3	18.5	N/A	N/A	18.8
UT30aa	23.4	N/A	N/A	24.5	21.4	21.4	21.0	21.7	17.6	N/A	N/A	17.5
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT21aa	23.0	N/A	N/A	21.2	20.2	19.2	19.8	20.4	20.4	N/A	N/A	19.9
UT22aa	28.8	N/A	N/A	24.6	28.4	28.0	22.0	27.8	27.0	N/A	N/A	22.9
UT23aa	22.9	N/A	N/A	25.2	21.4	20.4	20.2	20.8	21.3	N/A	N/A	20.6
UT24aa	22.6	N/A	N/A	21.7	20.1	19.8	19.6	19.8	20.6	N/A	N/A	19.0
UT25aa	21.7	N/A	N/A	20.8	21.1	20.1	20.9	21.0	22.7	N/A	N/A	20.3
UT26aa	23.1	N/A	N/A	20.9	20.9	21.0	20.7	21.3	22.3	N/A	N/A	20.1
UT27aa	22.8	N/A	N/A	20.7	22.2	20.2	20.7	21.1	22.0	N/A	N/A	20.3
UT28aa	22.2	N/A	N/A	21.6	19.8	20.0	19.2	20.4	20.2	N/A	N/A	19.7
UT29aa	23.4	N/A	N/A	20.7	21.5	20.4	20.7	20.9	21.5	N/A	N/A	20.3
UT30aa	22.3	N/A	N/A	20.7	20.3	20.1	19.9	20.5	22.3	N/A	N/A	20.2

A-4-1 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/14	Temperature(℃)	22.2	Huang Siwei	Pass
	Humidity (RH)	54.3 %		
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	22.4	N/A	N/A	25.0	21.4	23.1	21.5	21.3	17.6	N/A	N/A	18.2
UT32aa	22.0	N/A	N/A	24.6	21.6	21.6	20.6	21.3	17.1	N/A	N/A	17.6
UT33aa	23.1	N/A	N/A	24.1	21.8	21.2	35.6	21.1	17.5	N/A	N/A	17.6
UT34aa	22.8	N/A	N/A	25.4	21.4	21.2	21.2	21.7	26.0	N/A	N/A	18.5
UT35aa	23.6	N/A	N/A	24.6	20.7	20.7	20.3	21.2	18.4	N/A	N/A	18.8
UT36aa	23.0	N/A	N/A	25.2	22.2	22.7	21.5	21.3	18.0	N/A	N/A	17.9
UT37aa	23.0	N/A	N/A	24.7	20.8	20.4	20.8	21.2	18.2	N/A	N/A	18.6
UT38aa	22.2	N/A	N/A	24.9	22.6	22.0	20.9	21.4	17.2	N/A	N/A	17.1
UT39aa	23.2	N/A	N/A	24.9	21.0	21.0	20.8	21.2	18.3	N/A	N/A	18.2
UT40aa	22.3	N/A	N/A	24.6	21.2	21.1	20.9	21.2	18.6	N/A	N/A	19.1
UT41aa	22.7	N/A	N/A	24.2	21.4	21.6	20.7	21.3	17.4	N/A	N/A	17.7
UT42aa	23.4	N/A	N/A	25.2	22.0	21.0	21.4	21.7	18.1	N/A	N/A	18.4
UT43aa	23.1	N/A	N/A	24.7	32.8	22.3	20.9	21.7	17.3	N/A	N/A	17.7
UT44aa	22.7	N/A	N/A	24.7	21.5	21.0	20.8	21.2	18.4	N/A	N/A	19.3
UT45aa	22.7	N/A	N/A	24.7	21.5	21.0	20.7	21.1	18.4	N/A	N/A	19.3
UT46aa	23.0	N/A	N/A	24.0	21.2	21.1	21.1	21.4	17.5	N/A	N/A	18.2
UT47aa	23.1	N/A	N/A	24.0	22.2	21.1	20.9	26.9	18.6	N/A	N/A	18.3
UT48aa	22.2	N/A	N/A	26.8	21.1	20.9	26.2	21.4	17.2	N/A	N/A	17.7
UT49aa	23.2	N/A	N/A	24.8	21.3	21.2	21.2	21.4	18.4	N/A	N/A	18.8
UT50aa	22.9	N/A	N/A	24.4	21.5	28.0	21.3	21.2	17.0	N/A	N/A	17.5

A-4-1 Low Level Contact Resistance (mΩ)												
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT31aa	22.5	N/A	N/A	21.1	19.9	20.2	19.9	20.5	21.1	N/A	N/A	20.1
UT32aa	23.1	N/A	N/A	20.7	19.4	19.5	19.1	20.0	20.3	N/A	N/A	19.3
UT33aa	21.9	N/A	N/A	20.5	19.7	19.5	19.2	20.1	20.5	N/A	N/A	18.9
UT34aa	22.5	N/A	N/A	21.6	20.9	21.1	20.1	21.0	21.5	N/A	N/A	20.4
UT35aa	22.0	N/A	N/A	20.6	20.6	20.1	20.1	20.7	21.1	N/A	N/A	20.0
UT36aa	22.3	N/A	N/A	20.8	19.8	19.9	19.5	21.4	20.4	N/A	N/A	19.4
UT37aa	22.0	N/A	N/A	20.8	21.1	20.2	20.2	20.9	21.3	N/A	N/A	20.0
UT38aa	22.4	N/A	N/A	21.4	19.5	19.2	19.1	19.9	20.4	N/A	N/A	19.4
UT39aa	23.1	N/A	N/A	20.3	20.5	19.9	19.8	20.1	20.8	N/A	N/A	19.5
UT40aa	22.1	N/A	N/A	21.4	20.3	21.0	19.9	20.7	21.2	N/A	N/A	20.4
UT41aa	22.7	N/A	N/A	21.2	19.7	19.6	19.2	19.7	20.4	N/A	N/A	19.4
UT42aa	22.9	N/A	N/A	23.4	20.4	20.3	20.2	21.0	21.6	N/A	N/A	20.1
UT43aa	22.3	N/A	N/A	22.5	19.9	19.4	19.3	20.0	20.3	N/A	N/A	19.5
UT44aa	22.4	N/A	N/A	20.9	20.4	19.7	19.8	20.4	20.9	N/A	N/A	19.8
UT45aa	22.4	N/A	N/A	20.9	20.4	19.7	19.8	20.4	20.9	N/A	N/A	19.8
UT46aa	22.7	N/A	N/A	20.8	20.1	21.2	19.6	20.0	20.4	N/A	N/A	19.2
UT47aa	27.4	N/A	N/A	23.2	20.2	19.5	19.4	20.0	20.2	N/A	N/A	20.4
UT48aa	22.2	N/A	N/A	21.3	20.4	19.4	19.2	20.0	20.1	N/A	N/A	18.9
UT49aa	23.0	N/A	N/A	21.0	21.4	19.9	20.1	20.6	21.3	N/A	N/A	20.3
UT50aa	22.4	N/A	N/A	21.0	19.6	19.3	19.1	19.6	20.1	N/A	N/A	19.2

A-4-4 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/17	Temperature(℃)	22.1	Huang Siwei	Pass
	Humidity (RH)	59.4 %		
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	22.3	N/A	N/A	24.6	21.5	23.1	21.0	21.2	17.4	N/A	N/A	18.1
UT32aa	22.1	N/A	N/A	24.7	22.6	22.5	20.3	21.1	17.1	N/A	N/A	17.7
UT33aa	22.8	N/A	N/A	25.1	21.0	20.8	21.0	21.4	22.2	N/A	N/A	18.3
UT34aa	23.6	N/A	N/A	24.0	22.0	20.9	22.7	21.0	17.7	N/A	N/A	17.7
UT35aa	23.3	N/A	N/A	24.6	20.7	20.7	20.1	21.2	18.1	N/A	N/A	18.7
UT36aa	22.7	N/A	N/A	24.9	22.4	23.7	21.2	21.4	17.5	N/A	N/A	17.9
UT37aa	23.1	N/A	N/A	24.6	20.6	20.4	20.8	21.3	18.0	N/A	N/A	18.4
UT38aa	22.1	N/A	N/A	24.7	21.7	21.6	20.9	21.2	17.0	N/A	N/A	17.1
UT39aa	22.9	N/A	N/A	25.2	20.8	20.8	20.7	21.2	18.1	N/A	N/A	18.4
UT40aa	23.0	N/A	N/A	25.2	21.8	23.2	21.9	21.6	18.9	N/A	N/A	20.1
UT41aa	22.3	N/A	N/A	26.2	22.1	22.4	20.7	21.7	17.4	N/A	N/A	16.4
UT42aa	23.1	N/A	N/A	24.9	21.6	21.0	21.2	21.4	17.8	N/A	N/A	18.3
UT43aa	22.4	N/A	N/A	24.8	37.1	21.4	20.8	22.1	17.1	N/A	N/A	17.9
UT44aa	22.5	N/A	N/A	23.8	21.7	20.7	22.1	21.6	17.1	N/A	N/A	17.5
UT45aa	22.9	N/A	N/A	24.4	22.0	20.6	20.6	20.9	18.1	N/A	N/A	18.8
UT46aa	22.9	N/A	N/A	23.9	21.4	20.8	20.8	21.5	17.5	N/A	N/A	18.1
UT47aa	23.0	N/A	N/A	23.7	22.1	20.9	20.7	26.4	18.0	N/A	N/A	18.1
UT48aa	22.0	N/A	N/A	26.3	21.4	20.8	21.1	21.1	17.4	N/A	N/A	17.7
UT49aa	23.3	N/A	N/A	25.1	21.2	21.2	21.1	21.4	18.2	N/A	N/A	19.0
UT50aa	23.1	N/A	N/A	24.1	21.5	29.5	21.5	21.1	17.0	N/A	N/A	17.7

A-4-4 Low Level Contact Resistance (mΩ)												
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT31aa	22.4	N/A	N/A	21.1	20.0	20.2	19.8	20.3	21.0	N/A	N/A	20.1
UT32aa	22.4	N/A	N/A	20.6	19.6	19.2	18.9	19.7	20.2	N/A	N/A	18.9
UT33aa	22.3	N/A	N/A	21.2	20.6	20.5	20.0	20.7	21.4	N/A	N/A	20.0
UT34aa	22.1	N/A	N/A	20.9	20.1	20.1	19.9	20.1	20.9	N/A	N/A	19.6
UT35aa	21.8	N/A	N/A	20.6	20.6	20.1	20.0	20.6	21.1	N/A	N/A	19.9
UT36aa	22.1	N/A	N/A	20.7	20.0	19.7	19.7	20.9	20.6	N/A	N/A	19.7
UT37aa	21.9	N/A	N/A	20.6	20.8	19.9	19.9	20.5	21.1	N/A	N/A	19.6
UT38aa	22.9	N/A	N/A	21.0	19.6	19.6	19.2	19.9	20.4	N/A	N/A	19.2
UT39aa	22.7	N/A	N/A	20.4	20.3	19.9	19.8	20.2	21.0	N/A	N/A	19.6
UT40aa	23.4	N/A	N/A	21.9	21.0	21.8	21.0	21.9	22.1	N/A	N/A	21.0
UT41aa	22.6	N/A	N/A	21.1	20.1	19.8	19.7	20.1	20.6	N/A	N/A	19.3
UT42aa	22.8	N/A	N/A	23.6	20.2	20.2	20.0	20.7	21.2	N/A	N/A	19.9
UT43aa	22.2	N/A	N/A	22.4	20.0	20.0	20.0	20.1	20.6	N/A	N/A	19.5
UT44aa	23.8	N/A	N/A	21.2	19.5	19.5	18.8	19.5	19.9	N/A	N/A	19.2
UT45aa	22.1	N/A	N/A	20.9	20.5	19.7	20.1	20.4	20.9	N/A	N/A	19.8
UT46aa	22.7	N/A	N/A	20.8	19.9	21.0	19.4	20.1	20.4	N/A	N/A	19.3
UT47aa	25.6	N/A	N/A	23.0	19.9	19.4	19.4	20.1	20.2	N/A	N/A	18.9
UT48aa	22.7	N/A	N/A	21.0	20.8	19.8	19.3	20.3	20.2	N/A	N/A	18.8
UT49aa	22.8	N/A	N/A	21.0	21.2	20.5	20.3	20.6	21.8	N/A	N/A	20.2
UT50aa	22.6	N/A	N/A	20.7	19.6	19.4	19.4	20.1	20.6	N/A	N/A	19.4

A-4-6 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/24	Temperature(℃)	22.7	Huang Siwei	Pass
	Humidity (RH)	59.8 %		
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	22.2	N/A	N/A	25.7	21.8	21.6	21.2	21.3	18.9	N/A	N/A	18.3
UT32aa	22.7	N/A	N/A	24.2	21.2	22.2	21.5	21.6	18.5	N/A	N/A	18.2
UT33aa	23.0	N/A	N/A	24.3	22.9	21.4	21.2	21.8	18.1	N/A	N/A	19.7
UT34aa	22.3	N/A	N/A	24.0	21.3	21.5	21.6	22.3	18.8	N/A	N/A	18.6
UT35aa	22.2	N/A	N/A	25.8	22.4	22.2	21.9	21.9	17.6	N/A	N/A	20.0
UT36aa	22.7	N/A	N/A	25.0	22.4	21.4	21.2	22.1	18.0	N/A	N/A	18.4
UT37aa	22.2	N/A	N/A	25.6	22.7	22.1	21.9	22.3	17.7	N/A	N/A	18.1
UT38aa	23.6	N/A	N/A	24.0	22.0	22.1	21.1	21.3	18.8	N/A	N/A	19.1
UT39aa	22.6	N/A	N/A	25.0	21.8	21.9	20.2	21.6	18.4	N/A	N/A	18.9
UT40aa	23.2	N/A	N/A	25.7	21.4	21.4	20.6	21.0	18.9	N/A	N/A	19.1
UT41aa	22.9	N/A	N/A	25.4	21.8	22.7	20.4	22.0	18.9	N/A	N/A	19.1
UT42aa	23.5	N/A	N/A	25.3	21.3	22.7	20.1	21.2	17.9	N/A	N/A	18.7
UT43aa	23.0	N/A	N/A	24.9	22.4	22.9	20.0	22.5	18.5	N/A	N/A	19.3
UT44aa	22.4	N/A	N/A	25.9	21.3	21.0	21.8	22.2	17.8	N/A	N/A	19.0
UT45aa	23.5	N/A	N/A	25.4	21.2	21.6	21.6	22.1	18.4	N/A	N/A	19.1
UT46aa	23.1	N/A	N/A	24.9	21.8	22.6	20.6	21.1	18.1	N/A	N/A	19.8
UT47aa	22.3	N/A	N/A	25.5	22.4	22.8	20.7	21.8	18.3	N/A	N/A	18.7
UT48aa	23.0	N/A	N/A	25.0	21.3	22.1	20.6	22.9	18.6	N/A	N/A	18.1
UT49aa	23.8	N/A	N/A	24.1	22.4	21.7	20.7	21.8	17.1	N/A	N/A	19.5
UT50aa	23.4	N/A	N/A	25.9	22.2	22.2	20.2	21.2	18.6	N/A	N/A	19.8

A-4-6 Low Level Contact Resistance (mΩ)												
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT31aa	23.9	N/A	N/A	21.7	20.7	19.5	19.7	20.9	22.0	N/A	N/A	19.5
UT32aa	23.1	N/A	N/A	21.9	21.0	20.1	20.4	20.1	22.0	N/A	N/A	20.5
UT33aa	22.1	N/A	N/A	21.0	21.9	20.1	19.8	20.6	21.0	N/A	N/A	20.6
UT34aa	23.8	N/A	N/A	22.0	21.0	20.9	20.4	20.4	21.8	N/A	N/A	19.1
UT35aa	24.0	N/A	N/A	21.0	20.8	20.1	20.5	20.7	20.2	N/A	N/A	20.5
UT36aa	23.6	N/A	N/A	21.2	21.1	19.3	20.5	20.9	21.2	N/A	N/A	20.1
UT37aa	23.4	N/A	N/A	21.7	20.1	19.7	19.9	20.8	21.7	N/A	N/A	19.0
UT38aa	23.6	N/A	N/A	21.5	21.5	20.7	19.1	20.9	20.6	N/A	N/A	19.5
UT39aa	23.9	N/A	N/A	21.8	20.6	19.1	19.0	20.2	21.4	N/A	N/A	19.4
UT40aa	23.2	N/A	N/A	21.2	22.0	20.4	20.1	20.1	21.0	N/A	N/A	20.7
UT41aa	23.3	N/A	N/A	21.8	21.2	20.9	20.6	21.0	20.7	N/A	N/A	20.4
UT42aa	22.8	N/A	N/A	21.4	20.8	20.7	20.1	20.1	20.5	N/A	N/A	19.9
UT43aa	22.6	N/A	N/A	21.0	20.9	20.8	19.5	20.3	20.7	N/A	N/A	19.4
UT44aa	22.5	N/A	N/A	21.4	21.8	19.5	20.9	20.7	21.7	N/A	N/A	19.1
UT45aa	23.2	N/A	N/A	21.1	21.6	20.7	20.8	20.6	21.5	N/A	N/A	19.9
UT46aa	23.1	N/A	N/A	21.9	20.6	19.8	19.5	21.0	21.6	N/A	N/A	20.1
UT47aa	23.1	N/A	N/A	21.8	22.0	19.8	20.8	20.6	21.9	N/A	N/A	19.1
UT48aa	23.8	N/A	N/A	21.4	20.9	19.2	19.4	20.5	22.0	N/A	N/A	20.3
UT49aa	23.3	N/A	N/A	21.9	20.2	20.9	19.5	20.5	21.8	N/A	N/A	19.7
UT50aa	23.4	N/A	N/A	21.6	20.6	19.3	19.7	20.6	20.2	N/A	N/A	19.1

A-4-8 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/25	Temperature(℃)	22.4	Huang Siwei	Pass
	Humidity (RH)	59.2 %		
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	23.9	N/A	N/A	25.9	21.4	22.5	20.9	21.6	17.7	N/A	N/A	19.6
UT32aa	22.2	N/A	N/A	25.4	22.9	22.4	20.5	22.3	18.6	N/A	N/A	19.9
UT33aa	23.3	N/A	N/A	25.3	22.9	22.1	22.0	22.0	17.4	N/A	N/A	18.2
UT34aa	23.7	N/A	N/A	25.3	21.1	22.1	21.3	21.2	18.1	N/A	N/A	19.3
UT35aa	22.1	N/A	N/A	24.1	22.3	22.1	20.5	21.5	18.7	N/A	N/A	18.2
UT36aa	23.8	N/A	N/A	25.2	21.4	21.8	20.6	22.8	17.5	N/A	N/A	19.6
UT37aa	22.6	N/A	N/A	25.6	21.9	22.5	20.4	21.5	18.9	N/A	N/A	19.4
UT38aa	23.7	N/A	N/A	25.9	22.0	22.7	21.8	22.5	17.6	N/A	N/A	18.8
UT39aa	22.5	N/A	N/A	24.3	21.8	21.1	21.7	21.8	17.0	N/A	N/A	19.9
UT40aa	22.7	N/A	N/A	25.7	21.8	22.5	21.5	21.8	17.8	N/A	N/A	18.7
UT41aa	23.6	N/A	N/A	24.7	21.3	22.8	21.1	22.7	18.8	N/A	N/A	18.1
UT42aa	22.1	N/A	N/A	24.4	21.9	21.8	21.4	22.0	17.6	N/A	N/A	19.1
UT43aa	22.5	N/A	N/A	24.5	21.3	21.3	20.7	21.4	17.5	N/A	N/A	19.6
UT44aa	22.3	N/A	N/A	25.1	21.6	21.4	20.8	22.6	18.8	N/A	N/A	19.5
UT45aa	22.2	N/A	N/A	24.2	22.2	22.3	20.8	21.3	18.8	N/A	N/A	18.9
UT46aa	23.6	N/A	N/A	25.0	22.7	22.1	20.3	22.9	17.6	N/A	N/A	18.0
UT47aa	23.0	N/A	N/A	25.6	22.2	22.1	21.6	21.3	17.6	N/A	N/A	19.8
UT48aa	22.9	N/A	N/A	25.8	21.9	22.9	20.8	22.2	17.9	N/A	N/A	18.0
UT49aa	22.0	N/A	N/A	25.1	22.2	22.0	21.9	21.2	18.9	N/A	N/A	18.4
UT50aa	22.6	N/A	N/A	24.2	22.8	22.6	21.2	22.3	17.5	N/A	N/A	18.9

A-4-8 Low Level Contact Resistance (mΩ)												
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT31aa	23.9	N/A	N/A	21.8	21.9	21.0	20.9	20.1	20.4	N/A	N/A	20.4
UT32aa	24.0	N/A	N/A	21.9	20.8	19.7	19.3	20.3	21.1	N/A	N/A	20.1
UT33aa	23.3	N/A	N/A	21.7	20.6	19.6	20.6	20.3	22.0	N/A	N/A	19.4
UT34aa	23.6	N/A	N/A	21.8	20.6	20.1	20.3	20.8	20.5	N/A	N/A	19.3
UT35aa	23.3	N/A	N/A	21.6	21.4	20.2	19.8	20.6	21.4	N/A	N/A	19.5
UT36aa	22.4	N/A	N/A	21.7	20.4	20.1	20.1	20.6	21.8	N/A	N/A	20.0
UT37aa	22.9	N/A	N/A	21.9	20.9	20.6	19.9	20.5	22.0	N/A	N/A	19.2
UT38aa	22.5	N/A	N/A	21.8	20.3	19.7	19.0	21.0	21.3	N/A	N/A	19.2
UT39aa	23.8	N/A	N/A	21.3	21.1	19.6	19.4	20.7	21.1	N/A	N/A	20.1
UT40aa	23.2	N/A	N/A	21.2	20.7	19.8	19.0	20.8	21.7	N/A	N/A	19.3
UT41aa	22.1	N/A	N/A	21.4	20.6	19.1	20.4	20.3	20.3	N/A	N/A	19.3
UT42aa	23.4	N/A	N/A	21.5	20.2	20.2	19.8	20.7	20.9	N/A	N/A	19.5
UT43aa	23.0	N/A	N/A	21.3	21.4	19.3	19.7	20.7	21.8	N/A	N/A	19.2
UT44aa	22.4	N/A	N/A	21.1	21.6	19.5	20.2	20.6	21.5	N/A	N/A	19.3
UT45aa	22.3	N/A	N/A	21.3	20.7	20.3	19.7	20.7	21.4	N/A	N/A	20.8
UT46aa	23.5	N/A	N/A	21.8	21.3	20.5	21.0	20.3	20.4	N/A	N/A	20.8
UT47aa	22.6	N/A	N/A	21.1	20.0	19.8	19.9	20.3	21.7	N/A	N/A	19.5
UT48aa	22.4	N/A	N/A	21.1	20.9	20.3	19.4	20.1	21.3	N/A	N/A	19.6
UT49aa	22.8	N/A	N/A	21.9	21.2	20.3	20.8	20.5	20.7	N/A	N/A	20.4
UT50aa	22.9	N/A	N/A	21.6	21.8	19.9	20.9	20.8	21.4	N/A	N/A	20.8

A-4-10 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/25	Temperature(℃)	22.4	Huang Siwei	Pass
	Humidity (RH)	59.2 %		
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	23.2	N/A	N/A	26.0	22.9	22.5	21.9	22.9	18.5	N/A	N/A	18.4
UT32aa	23.6	N/A	N/A	26.0	22.6	21.2	21.8	21.3	17.2	N/A	N/A	19.1
UT33aa	23.6	N/A	N/A	25.9	21.6	22.1	20.3	22.4	17.7	N/A	N/A	18.1
UT34aa	22.2	N/A	N/A	25.0	21.4	21.1	21.5	22.1	19.0	N/A	N/A	19.4
UT35aa	22.2	N/A	N/A	26.0	21.9	21.7	20.9	22.9	17.8	N/A	N/A	19.9
UT36aa	23.0	N/A	N/A	24.5	21.5	21.7	20.6	21.1	17.0	N/A	N/A	18.3
UT37aa	23.6	N/A	N/A	26.0	22.4	21.1	20.3	22.3	17.1	N/A	N/A	18.2
UT38aa	23.3	N/A	N/A	25.8	22.8	21.6	20.8	22.3	17.8	N/A	N/A	18.4
UT39aa	23.1	N/A	N/A	25.5	22.8	21.6	21.8	21.7	17.9	N/A	N/A	18.4
UT40aa	23.7	N/A	N/A	25.8	23.0	21.8	20.3	21.7	18.7	N/A	N/A	18.9
UT41aa	22.1	N/A	N/A	25.4	21.1	22.0	21.7	22.9	17.8	N/A	N/A	18.8
UT42aa	22.3	N/A	N/A	25.6	22.6	22.1	21.4	22.7	18.7	N/A	N/A	19.6
UT43aa	22.3	N/A	N/A	24.3	21.0	22.3	20.9	21.7	17.6	N/A	N/A	18.6
UT44aa	22.1	N/A	N/A	26.0	22.0	21.5	21.4	21.9	17.6	N/A	N/A	18.3
UT45aa	22.7	N/A	N/A	25.3	22.1	22.9	20.4	22.7	17.4	N/A	N/A	18.3
UT46aa	22.5	N/A	N/A	26.0	21.4	22.9	21.1	21.5	18.8	N/A	N/A	19.1
UT47aa	23.6	N/A	N/A	24.8	21.6	21.7	21.8	21.7	17.0	N/A	N/A	18.3
UT48aa	23.3	N/A	N/A	25.4	21.3	22.6	21.4	21.7	18.0	N/A	N/A	18.5
UT49aa	23.8	N/A	N/A	25.9	22.1	21.4	20.7	21.5	17.8	N/A	N/A	18.6
UT50aa	23.6	N/A	N/A	24.7	21.4	22.9	21.3	21.5	18.2	N/A	N/A	18.9

A-4-10 Low Level Contact Resistance (mΩ)												
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT31aa	22.6	N/A	N/A	21.1	21.8	19.2	19.7	20.4	20.0	N/A	N/A	19.3
UT32aa	23.8	N/A	N/A	21.3	20.9	20.4	20.0	20.5	20.0	N/A	N/A	19.6
UT33aa	22.4	N/A	N/A	21.2	20.2	19.4	19.1	20.6	21.1	N/A	N/A	20.2
UT34aa	23.7	N/A	N/A	21.7	21.6	20.0	20.4	20.5	21.4	N/A	N/A	19.5
UT35aa	22.8	N/A	N/A	21.6	20.6	20.4	19.3	20.3	21.9	N/A	N/A	20.5
UT36aa	22.8	N/A	N/A	21.5	20.5	19.0	20.4	20.4	21.9	N/A	N/A	19.6
UT37aa	23.8	N/A	N/A	21.6	20.5	20.3	20.4	20.1	21.2	N/A	N/A	20.1
UT38aa	23.9	N/A	N/A	21.0	21.8	19.1	20.0	20.8	21.3	N/A	N/A	19.8
UT39aa	22.0	N/A	N/A	21.8	20.4	19.8	19.4	20.4	20.6	N/A	N/A	19.4
UT40aa	22.3	N/A	N/A	21.9	20.6	20.8	20.8	20.1	21.6	N/A	N/A	19.7
UT41aa	23.2	N/A	N/A	21.2	21.3	19.3	20.4	20.3	21.2	N/A	N/A	20.6
UT42aa	22.5	N/A	N/A	21.8	20.6	19.7	20.6	20.9	21.9	N/A	N/A	20.5
UT43aa	23.6	N/A	N/A	22.0	21.3	21.0	19.7	20.1	21.7	N/A	N/A	20.1
UT44aa	22.6	N/A	N/A	21.9	21.6	20.5	20.2	20.4	21.8	N/A	N/A	20.2
UT45aa	22.6	N/A	N/A	21.6	21.2	20.9	19.4	20.3	21.0	N/A	N/A	20.2
UT46aa	22.8	N/A	N/A	21.2	20.8	20.8	20.4	20.1	20.3	N/A	N/A	20.9
UT47aa	22.9	N/A	N/A	21.3	20.8	20.8	20.6	20.6	21.4	N/A	N/A	19.6
UT48aa	22.5	N/A	N/A	21.9	20.6	20.2	19.7	20.3	20.5	N/A	N/A	21.0
UT49aa	22.8	N/A	N/A	21.3	21.8	19.1	19.9	20.8	20.6	N/A	N/A	19.6
UT50aa	23.6	N/A	N/A	21.9	21.6	19.4	19.5	20.4	20.3	N/A	N/A	20.7

A-7-2 Low level contact resistance

Testing Period	Measure environment		Test Engineer	Test Result
2025/03/27	Temperature(℃)	23.9	Su Kun	Pass
	Humidity (RH)	60.9 %		
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	24.1	N/A	N/A	24.9	22.1	21.5	21.2	21.7	18.3	N/A	N/A	18.8
UT52aa	22.8	N/A	N/A	24.5	21.4	21.1	20.9	21.1	17.8	N/A	N/A	18.1
UT53aa	22.6	N/A	N/A	25.1	20.7	20.6	20.4	20.7	18.7	N/A	N/A	18.7
UT54aa	23.1	N/A	N/A	24.6	21.0	20.8	20.9	21.2	18.3	N/A	N/A	18.8
UT55aa	25.3	N/A	N/A	23.9	27.9	20.9	20.9	21.2	18.7	N/A	N/A	18.1
UT56aa	23.4	N/A	N/A	25.1	21.2	21.4	21.2	21.6	17.3	N/A	N/A	18.1
UT57aa	22.7	N/A	N/A	24.7	21.1	21.3	21.0	21.2	17.5	N/A	N/A	17.8
UT58aa	22.9	N/A	N/A	24.8	21.7	21.4	21.4	22.5	17.7	N/A	N/A	18.2
UT59aa	22.3	N/A	N/A	25.1	21.3	20.9	20.9	21.5	18.8	N/A	N/A	18.1
UT60aa	24.4	N/A	N/A	25.2	21.7	21.7	22.3	22.2	18.0	N/A	N/A	17.3
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT51aa	21.2	N/A	N/A	27.3	20.2	20.5	19.7	20.4	21.8	N/A	N/A	21.9
UT52aa	22.7	N/A	N/A	20.9	21.8	19.3	19.6	19.8	20.4	N/A	N/A	19.6
UT53aa	22.0	N/A	N/A	21.9	21.0	20.1	20.2	20.9	21.3	N/A	N/A	20.1
UT54aa	22.1	N/A	N/A	20.9	20.6	20.2	20.3	20.8	21.4	N/A	N/A	19.8
UT55aa	34.8	N/A	N/A	22.0	19.9	19.2	19.7	20.0	20.6	N/A	N/A	19.0
UT56aa	22.6	N/A	N/A	22.0	19.9	19.2	20.8	20.1	20.4	N/A	N/A	19.3
UT57aa	22.5	N/A	N/A	22.1	20.0	19.1	19.3	19.9	20.3	N/A	N/A	19.1
UT58aa	25.4	N/A	N/A	21.4	20.2	19.6	19.9	20.1	20.5	N/A	N/A	19.3
UT59aa	22.4	N/A	N/A	21.2	20.2	19.9	19.9	20.9	21.1	N/A	N/A	19.6
UT60aa	23.4	N/A	N/A	26.0	19.7	19.7	19.4	20.2	21.0	N/A	N/A	19.5

A-7-10 Low level contact resistance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/04/01	Temperature(℃)	22.5	Su Kun	Pass
	Humidity (RH)	47.0 %		
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	23.1	N/A	N/A	29.5	33.3	32.1	29.4	35.1	40.9	N/A	N/A	24.2
UT52aa	23.5	N/A	N/A	43.2	28.4	22.4	24.3	39.5	17.8	N/A	N/A	18.6
UT53aa	25.2	N/A	N/A	25.9	25.1	28.6	27.5	25.1	27.5	N/A	N/A	29.2
UT54aa	26.5	N/A	N/A	26.9	26.6	24.7	25.8	22.8	19.3	N/A	N/A	20.6
UT55aa	22.2	N/A	N/A	27.1	25.4	23.1	28.1	28.6	24.2	N/A	N/A	25.2
UT56aa	25.0	N/A	N/A	30.1	41.9	30.0	38.2	25.1	18.0	N/A	N/A	19.2
UT57aa	25.3	N/A	N/A	29.8	25.5	27.4	28.9	25.0	17.7	N/A	N/A	19.4
UT58aa	23.0	N/A	N/A	24.9	27.2	24.9	22.4	21.8	19.7	N/A	N/A	20.8
UT59aa	23.1	N/A	N/A	34.5	28.1	27.6	33.4	24.3	37.8	N/A	N/A	21.1
UT60aa	26.0	N/A	N/A	38.7	32.3	24.8	22.3	27.8	22.4	N/A	N/A	23.9
Sample Coding	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
UT51aa	44.2	N/A	N/A	22.5	29.4	23.0	21.9	48.3	35.5	N/A	N/A	22.9
UT52aa	22.2	N/A	N/A	22.2	25.2	20.2	23.2	22.5	23.8	N/A	N/A	20.7
UT53aa	26.6	N/A	N/A	22.2	32.5	28.1	23.6	28.0	29.9	N/A	N/A	23.1
UT54aa	22.1	N/A	N/A	21.4	22.4	23.1	22.4	24.5	22.9	N/A	N/A	20.4
UT55aa	22.3	N/A	N/A	28.4	25.2	24.7	25.1	39.7	26.5	N/A	N/A	20.9
UT56aa	22.5	N/A	N/A	20.9	39.1	26.2	28.4	26.0	25.0	N/A	N/A	20.2
UT57aa	22.6	N/A	N/A	22.0	23.6	25.6	22.1	22.6	30.2	N/A	N/A	21.1
UT58aa	23.0	N/A	N/A	38.5	21.0	27.1	24.7	23.7	21.0	N/A	N/A	22.0
UT59aa	26.0	N/A	N/A	21.7	24.0	22.8	23.6	23.9	24.4	N/A	N/A	20.8
UT60aa	26.1	N/A	N/A	23.5	20.9	27.4	21.3	21.8	28.3	N/A	N/A	39.5

8.4. Clause 3.7.8.2 Dielectric withstanding voltage

A-7-1 Dielectric withstanding voltage				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/27	Temperature(℃)	23.6	Su Kun	Pass
	Humidity (RH)	60.6 %		
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
2025/04/03	Temperature(℃)	22.5	Su Kun	Pass
	Humidity (RH)	60.0 %		
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
2025/04/03	Temperature(℃)	22.5	Su Kun	Pass
	Humidity (RH)	60.0 %		
Test condition	Mated and Unmated, 500 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.					

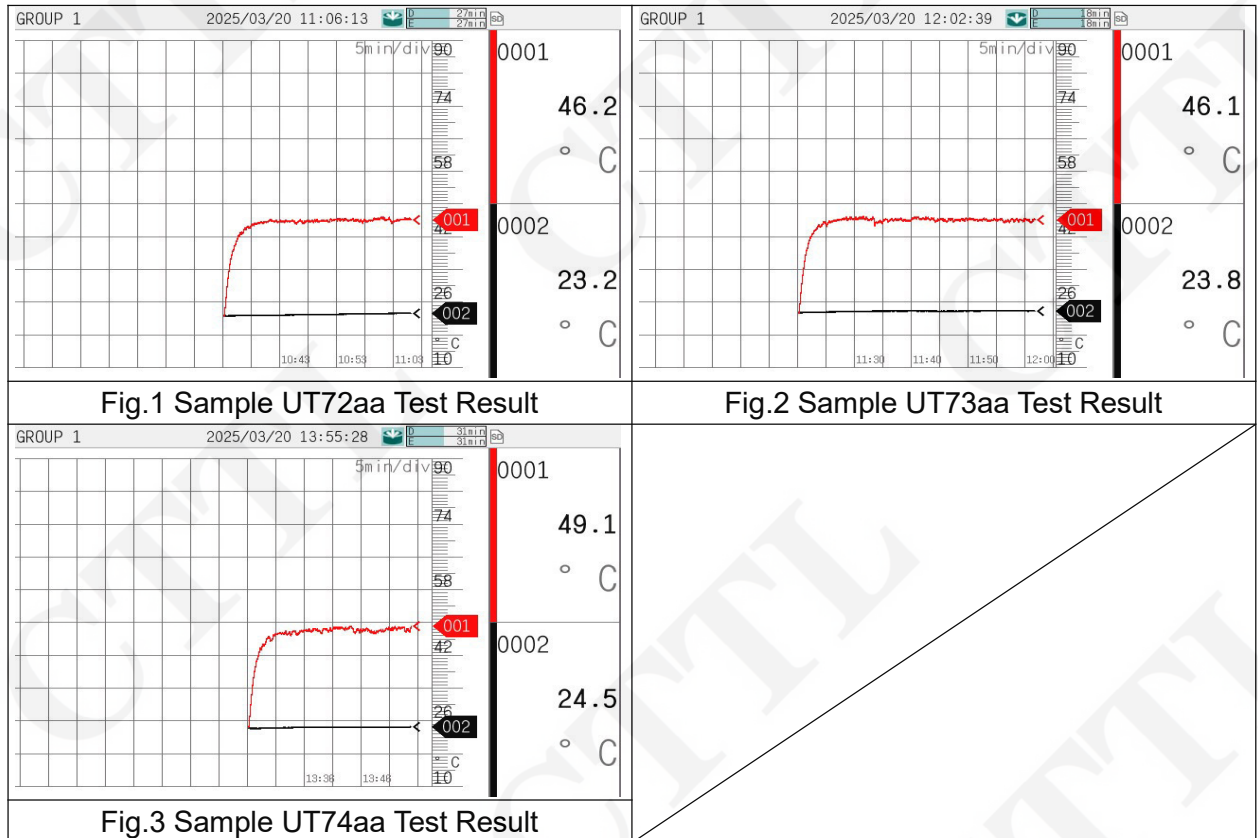
8.6. Clause 3.7.8.4 Contact Current Rating

B-6-1 Contact Current Rating				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/20	Temperature(℃)	23.2	Su Kun	Pass
	Humidity (RH)	46.6 %		
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℃ 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	23.2	46.2	23.0
UT73aa	23.8	46.1	22.3
UT74aa	24.5	49.1	24.6

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
2025/03/27	Temperature(℃)	25.9	Su Kun	Pass
	Humidity (RH)	63.9 %		
Test condition	Speed: 12.5mm/min; Insertion depth: 4.8mm.			
Criteria	Insertion force:5N～20N			

A-7-4 Insertion Force					
Sample Coding	UT51aa	UT52aa	UT53aa	UT54aa	UT55aa
Insertion force (N)	13.3	13.3	13.5	14.0	14.5
Sample Coding	UT56aa	UT57aa	UT58aa	UT59aa	UT60aa
Insertion force (N)	12.3	12.4	13.2	13.7	14.6

8.8. Clause 3.8.1.2 Extraction force

A-7-5 Extraction Force				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/27	Temperature(℃)	25.9	Su Kun	Pass
	Humidity (RH)	63.9 %		
Test condition	Speed: 12.5mm/min; Extraction depth: 4.8mm.			
Criteria	Extraction force: 8N~20N(Initial reading)			

A-7-7 Extraction Force				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/27	Temperature(℃)	25.9	Su Kun	Pass
	Humidity (RH)	63.9 %		
Test condition	Speed: 12.5mm/min; Extraction depth: 4.8mm.			
Criteria	Extraction force: 8N~20N; 33% of the initial reading.			

A-7-9 Extraction Force				
Testing Period	Measure environment		Test Engineer	Test Result
2025/04/01	Temperature(℃)	21.5	Su Kun	Pass
	Humidity (RH)	47.0 %		
Test condition	Speed: 12.5mm/min; Extraction depth: 4.8mm.			
Criteria	Extraction force: 6N~20N.			

A-7-5 Extraction Force					
Sample Coding	UT51aa	UT52aa	UT53aa	UT54aa	UT55aa
Extraction force (N)	18.3	18.9	11.1	19.2	12.8
Sample Coding	UT56aa	UT57aa	UT58aa	UT59aa	UT60aa
Extraction force (N)	17.1	17.1	17.1	17.8	17.7
A-7-7 Extraction Force					
Sample Coding	UT51aa	UT52aa	UT53aa	UT54aa	UT55aa
Extraction force (N)	16.1	16.7	11.8	16.3	13.2
$\frac{ (A-7-7)-(A-7-5) }{(A-7-5)} * 100\%$	12.02%	11.64%	6.31%	15.10%	3.12%
Sample Coding	UT56aa	UT57aa	UT58aa	UT59aa	UT60aa
Extraction force (N)	17.0	14.4	17.5	17.5	17.8
$\frac{ (A-7-7)-(A-7-5) }{(A-7-5)} * 100\%$	0.58%	15.79%	2.34%	1.69%	0.56%
A-7-9 Extraction Force					
Sample Coding	UT51aa	UT52aa	UT53aa	UT54aa	UT55aa
Extraction force (N)	13.3	11.9	8.7	19.5	13.8
Sample Coding	UT56aa	UT57aa	UT58aa	UT59aa	UT60aa
Extraction force (N)	14.3	15.0	15.7	16.5	14.3

A-7 Mechanical Curve

Sample UT51aa

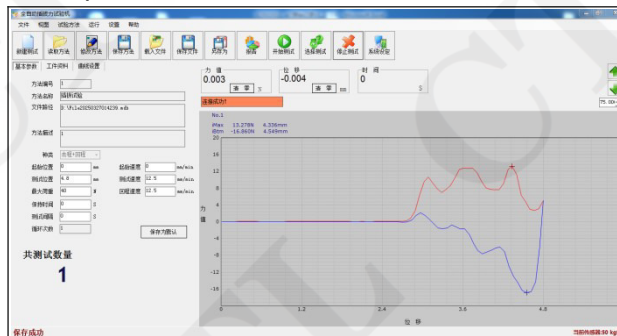


Fig.4 Insertion Force

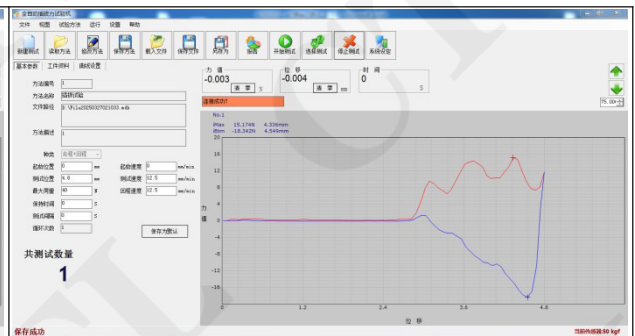


Fig.5 Initial Extraction Force

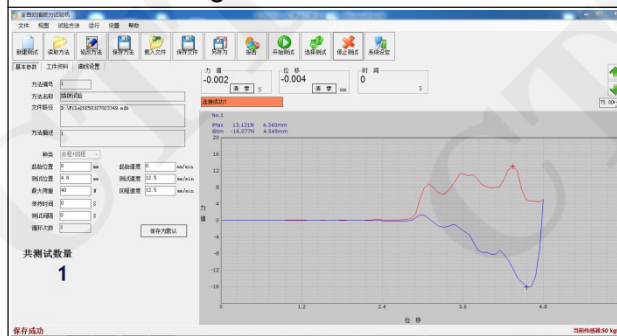


Fig.6 32nd Extraction Force

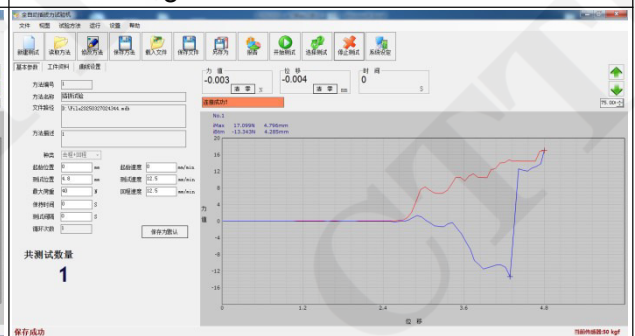


Fig.7 Final Extraction Force

Sample UT52aa

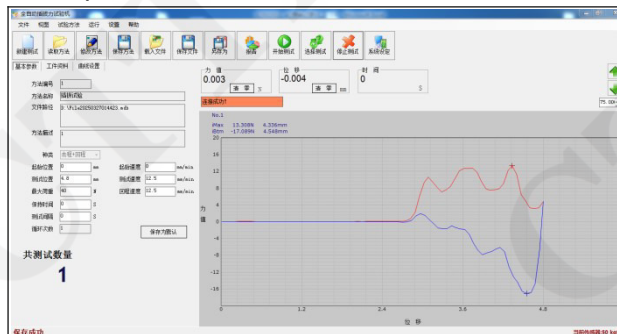


Fig.8 Insertion Force

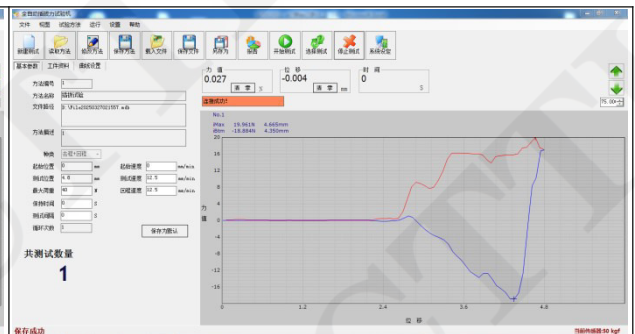


Fig.9 Initial Extraction Force

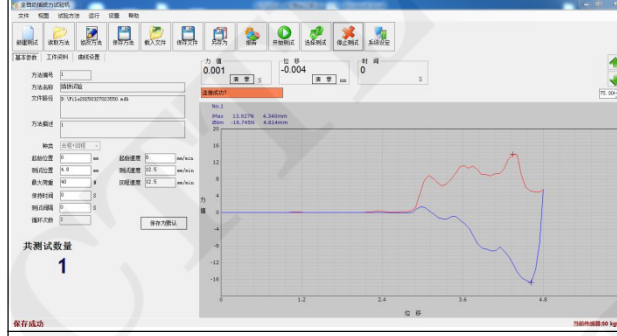


Fig.10 32nd Extraction Force

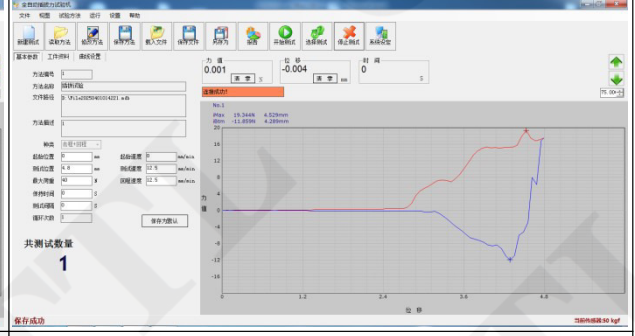
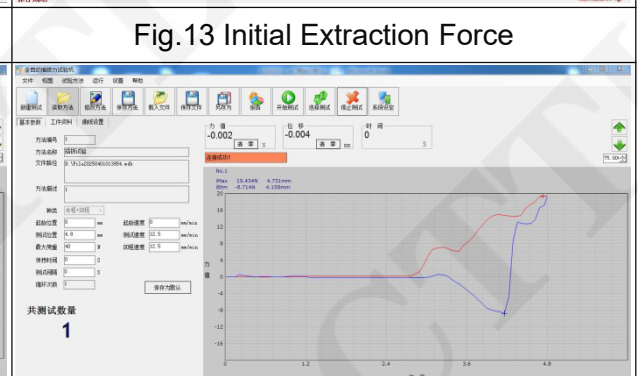
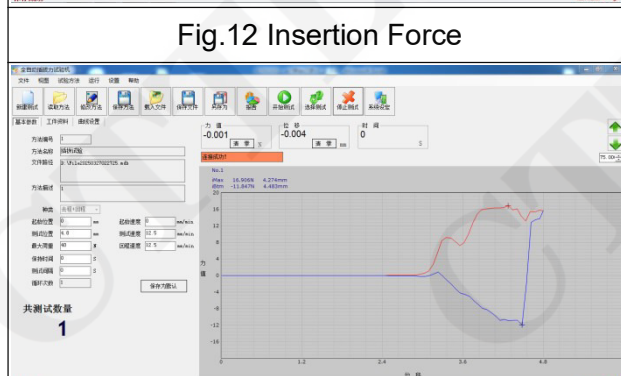
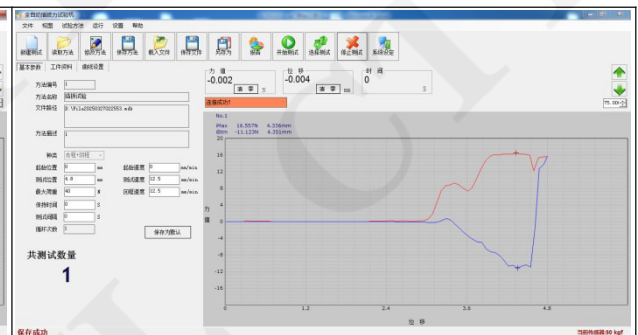
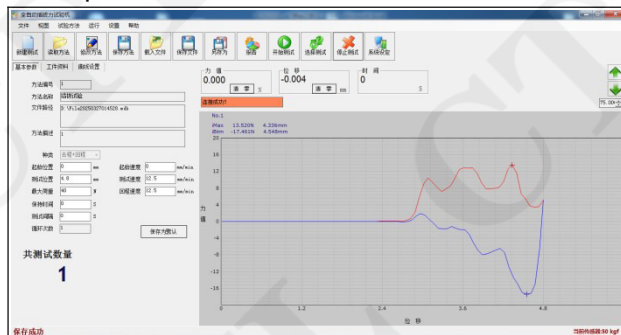
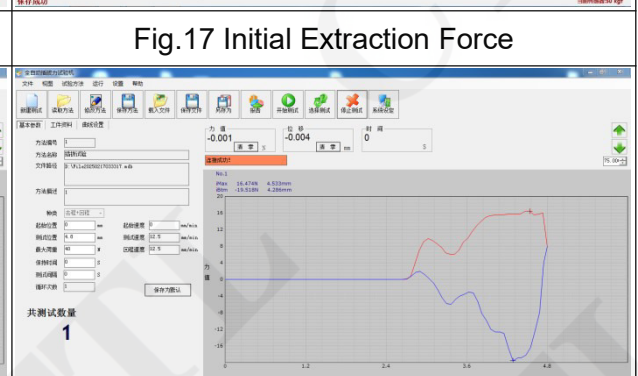
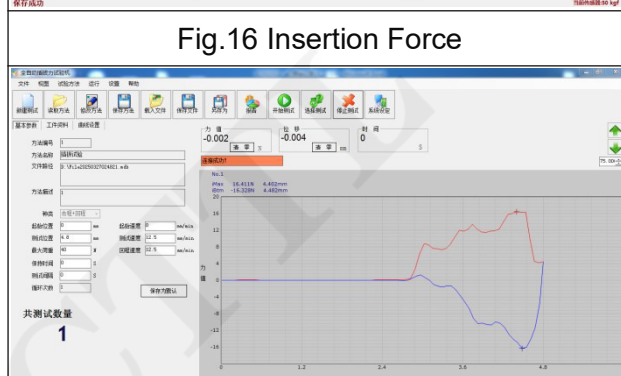
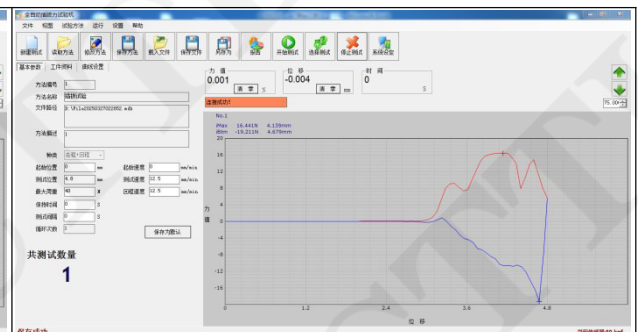
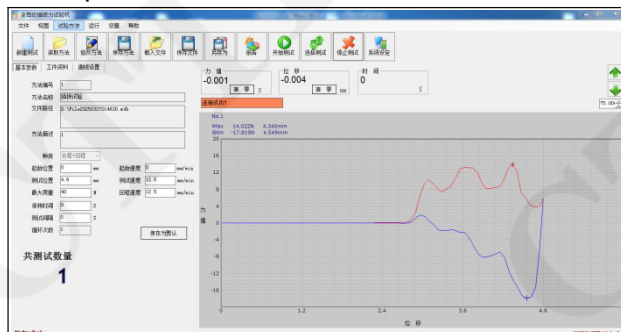


Fig.11 Final Extraction Force

Sample UT53aa



Sample UT54aa



Sample UT55aa

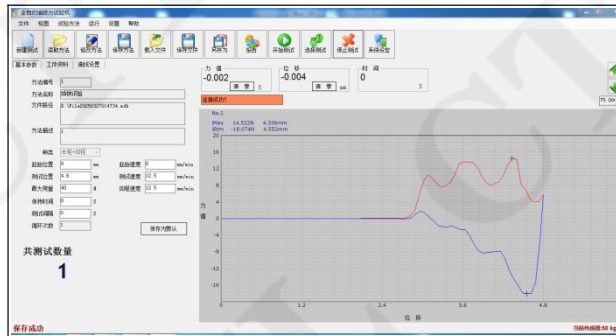


Fig.20 Insertion Force

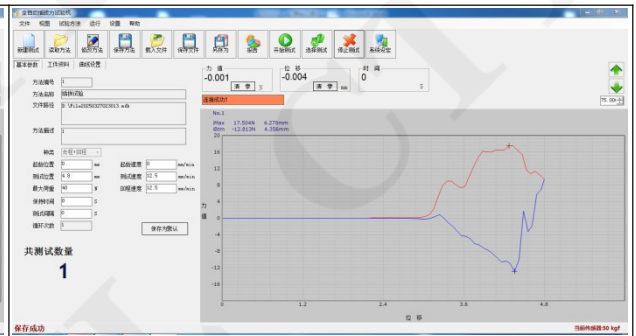


Fig.21 Initial Extraction Force

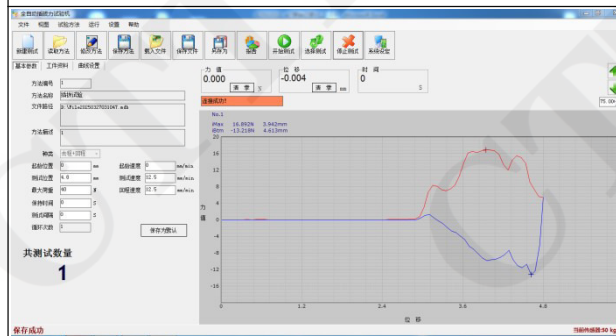


Fig.22 32nd Extraction Force

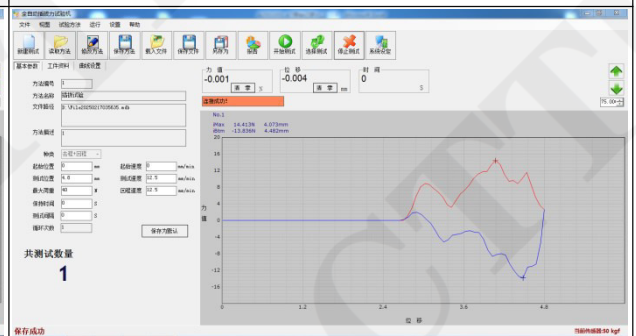


Fig.23 Final Extraction Force

Sample UT56aa

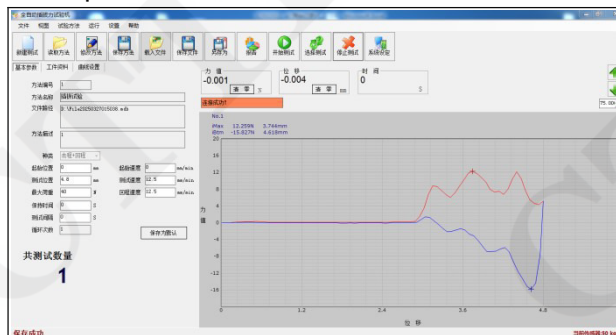


Fig.24 Insertion Force

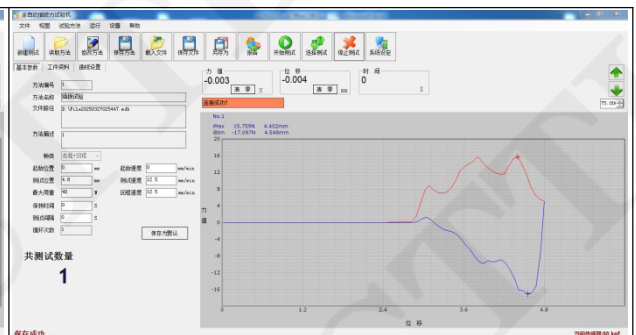


Fig.25 Initial Extraction Force

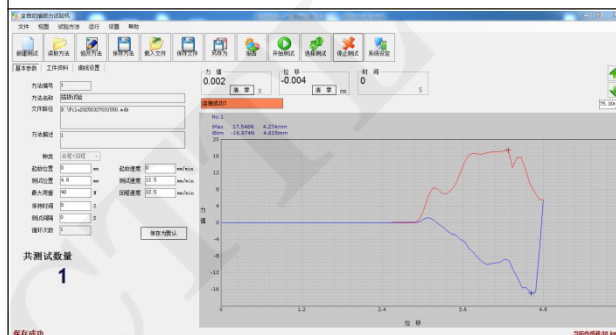


Fig.26 32nd Extraction Force

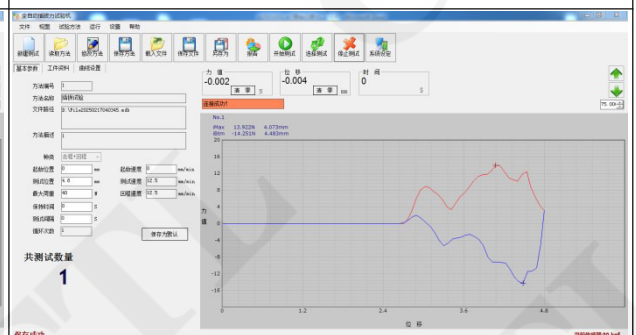
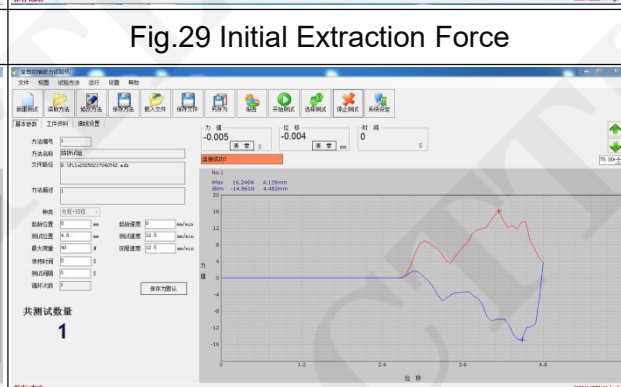
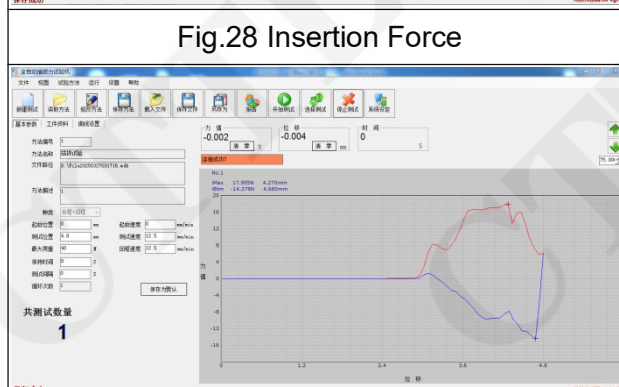
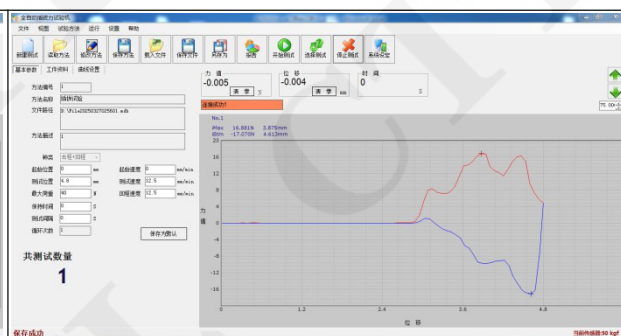
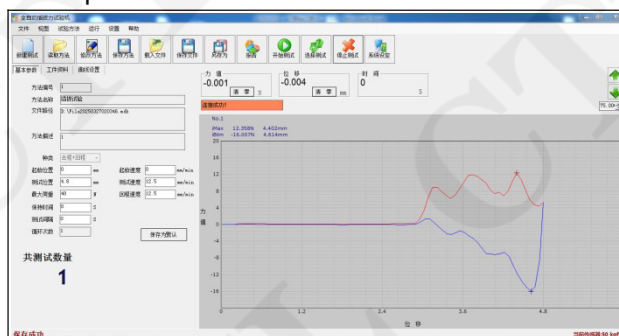
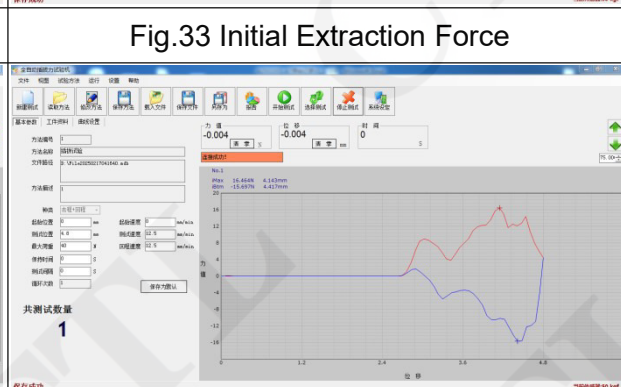
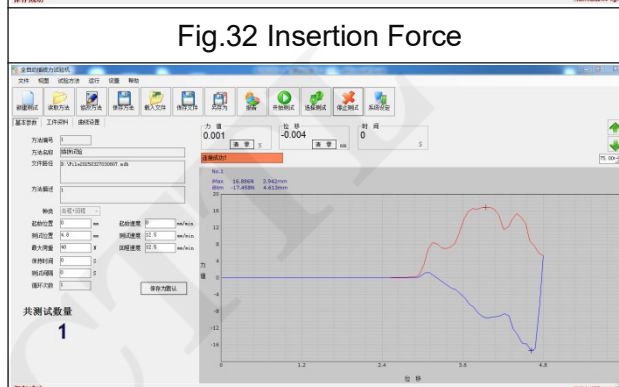
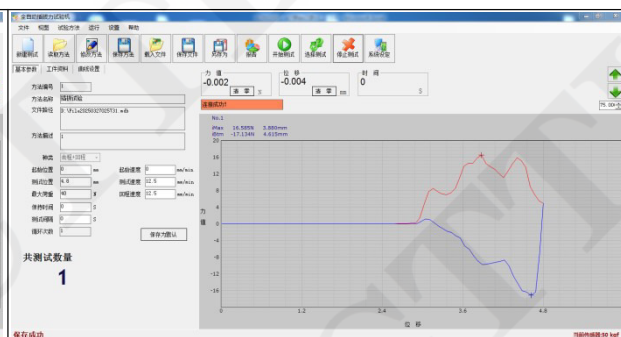
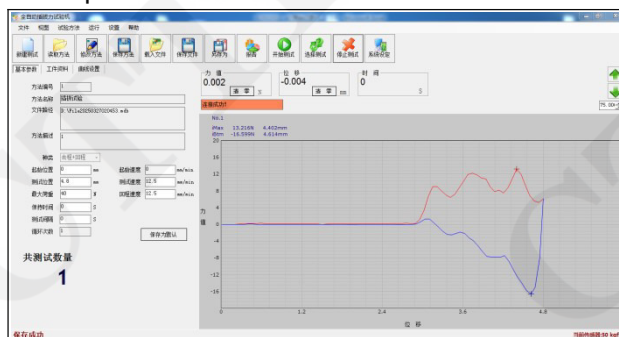


Fig.27 Final Extraction Force

Sample UT57aa



Sample UT58aa



Sample UT59aa

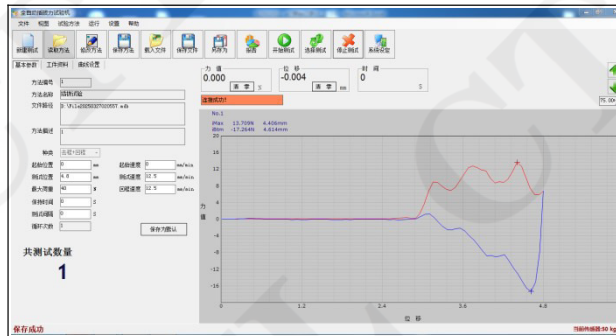


Fig.36 Insertion Force

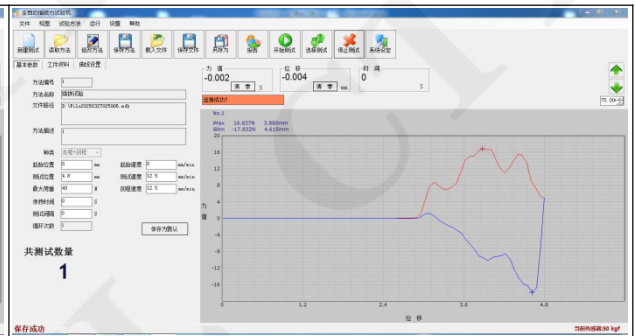


Fig.37 Initial Extraction Force

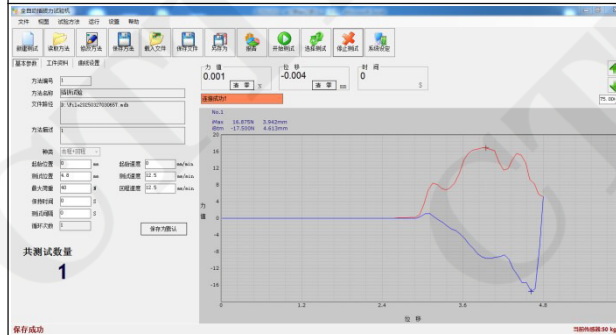


Fig.38 32nd Extraction Force

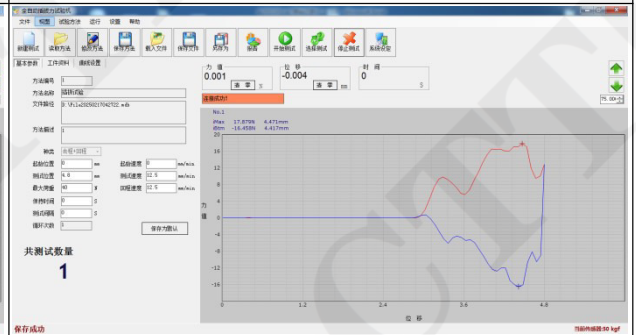


Fig.39 Final Extraction Force

Sample UT60aa

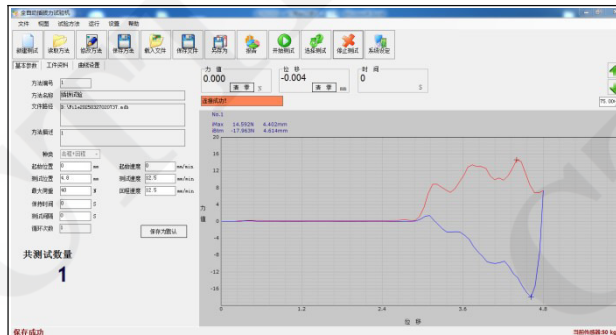


Fig.40 Insertion Force

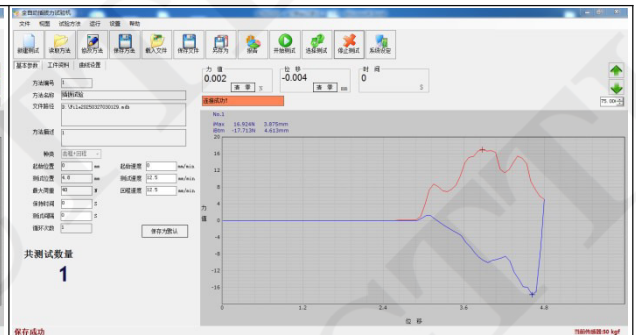


Fig.41 Initial Extraction Force

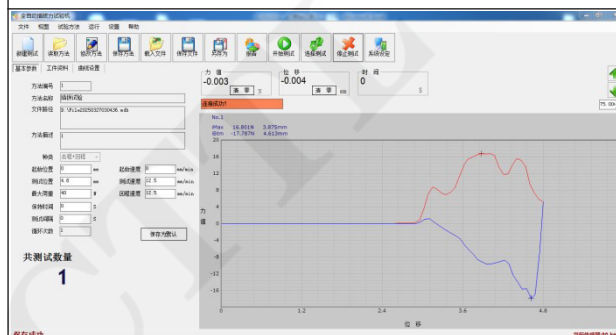


Fig.42 32nd Extraction Force

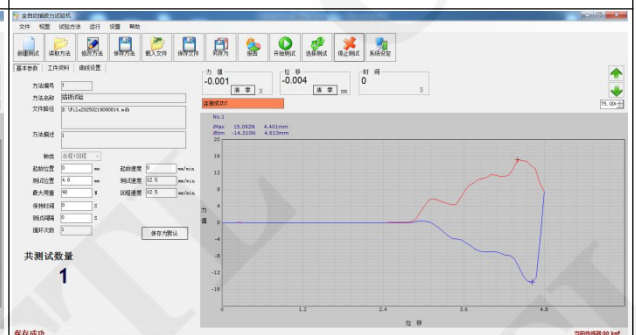


Fig.43 Final Extraction Force

8.9. Clause 3.8.1.3 Durability

A-1-2 Durability				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/17	Temperature(℃)	22.2	Huang Siwei	Pass
	Humidity (RH)	57.4 %		
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
2025/03/17	Temperature(℃)	22.7	Huang Siwei	Pass
	Humidity (RH)	58.8 %		
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
2025/03/12	Temperature(℃)	23.1	Su Kun	Pass
	Humidity (RH)	71.5 %		
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
2025/03/14	Temperature(℃)	22.2	Huang Siwei	Pass
	Humidity (RH)	54.3 %		
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
2025/03/27	Temperature(℃)	25.9	Su Kun	Pass
	Humidity (RH)	63.9 %		
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
2025/03/27	Temperature(℃)	25.9	Su Kun	Pass
	Humidity (RH)	63.9 %		
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
2025/03/31-2025/04/01	Temperature(℃)	20.5 - 22.5	Su Kun	Pass
	Humidity (RH)	50.0- 55.0 %		
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
2025/03/24	Temperature(℃)	22.7	Huang Siwei	Pass
	Humidity (RH)	57.8 %		
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
2025/03/21	Temperature(℃)	21.2	Huang Siwei	Pass
	Humidity (RH)	57.7 %		
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
2025/03/25	Temperature(℃)	22.4	Huang Siwei	Pass
	Humidity (RH)	59.2 %		
Test condition	Manual mating/unmating 3 cycles.			
Criteria	No evidence of physical damages.			

8.11. Clause 3.8.1.6 4-Axis Continuity

B-1-4 4-Axis Continuity				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/18	Temperature(℃)	22.5	Su Kun	Pass
	Humidity (RH)	46.3 %		
Test condition	Mated, 20N Force at 15 mm from receptacle shell mating edge. Duration: 10 seconds; Direction: 0, 90, 180, 270.			
Criteria	No discontinuities greater than 1.0 microsecond during 10 seconds at each axis.			

B-1-4 Mechanical Curve

Sample UT61aa



Fig.44 0 degree

Fig.45 180 degree

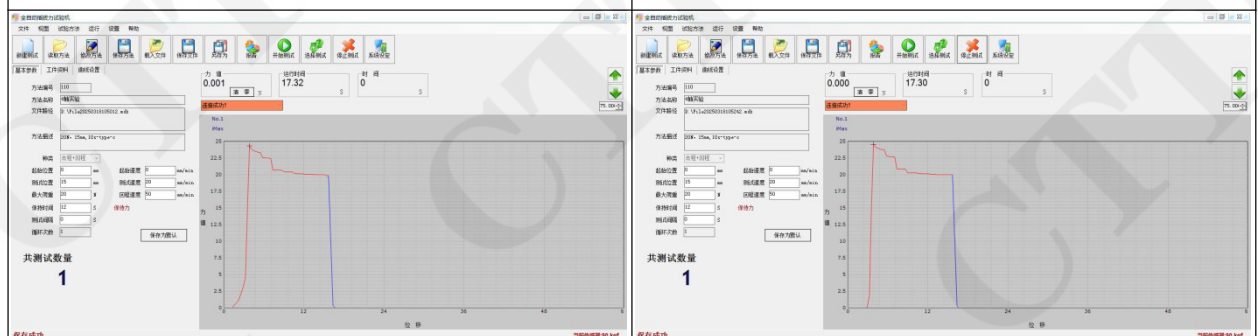


Fig.46 90 degree

Fig.47 270 degree

Sample UT62aa



Fig.48 0 degree

Fig.49 180 degree

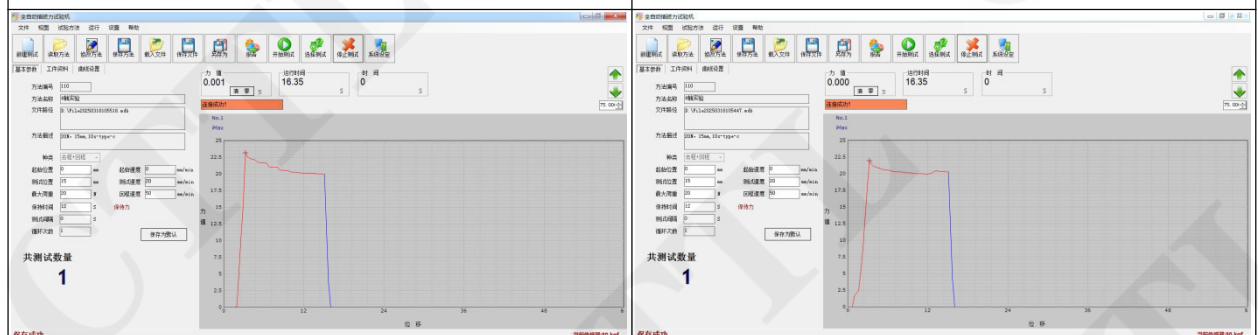


Fig.50 90 degree

Fig.51 270 degree

Sample UT63aa

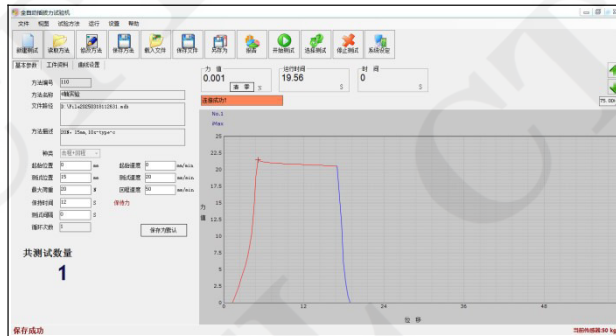


Fig.52 0 degree

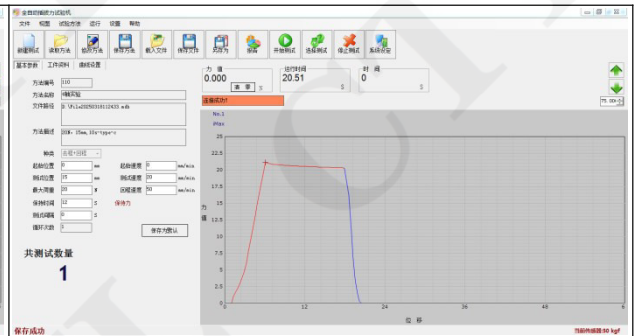


Fig.53 180 degree

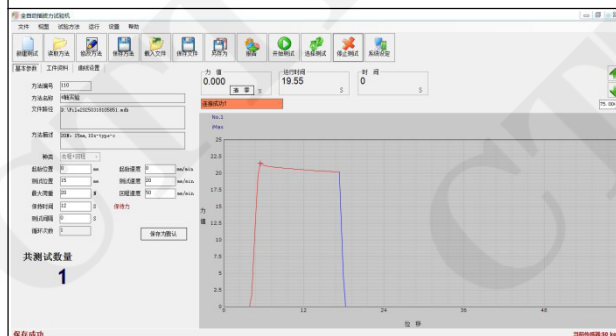


Fig.54 90 degree

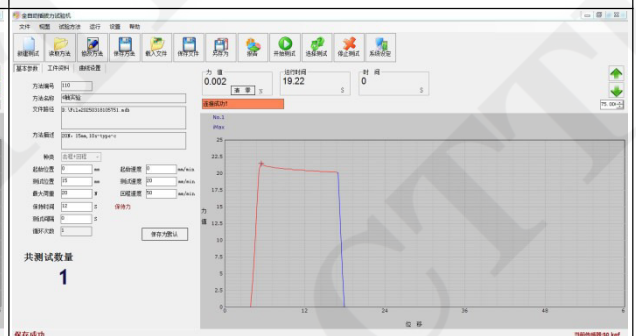


Fig.55 270 degree

Sample UT64aa

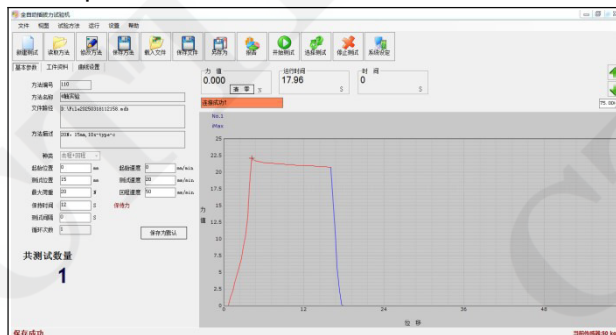


Fig.56 0 degree

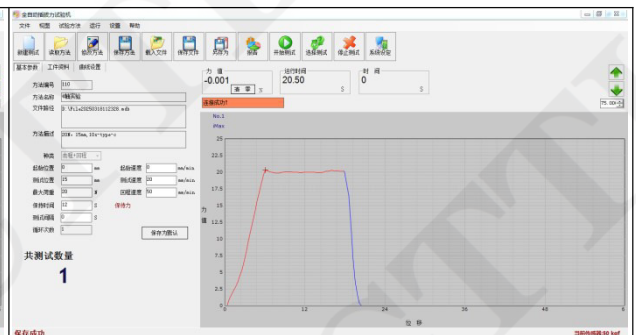


Fig.57 180 degree

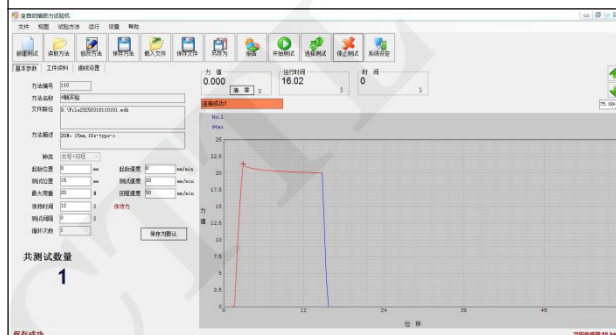


Fig.58 90 degree

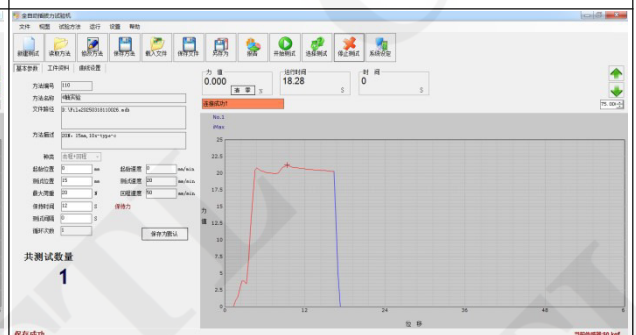
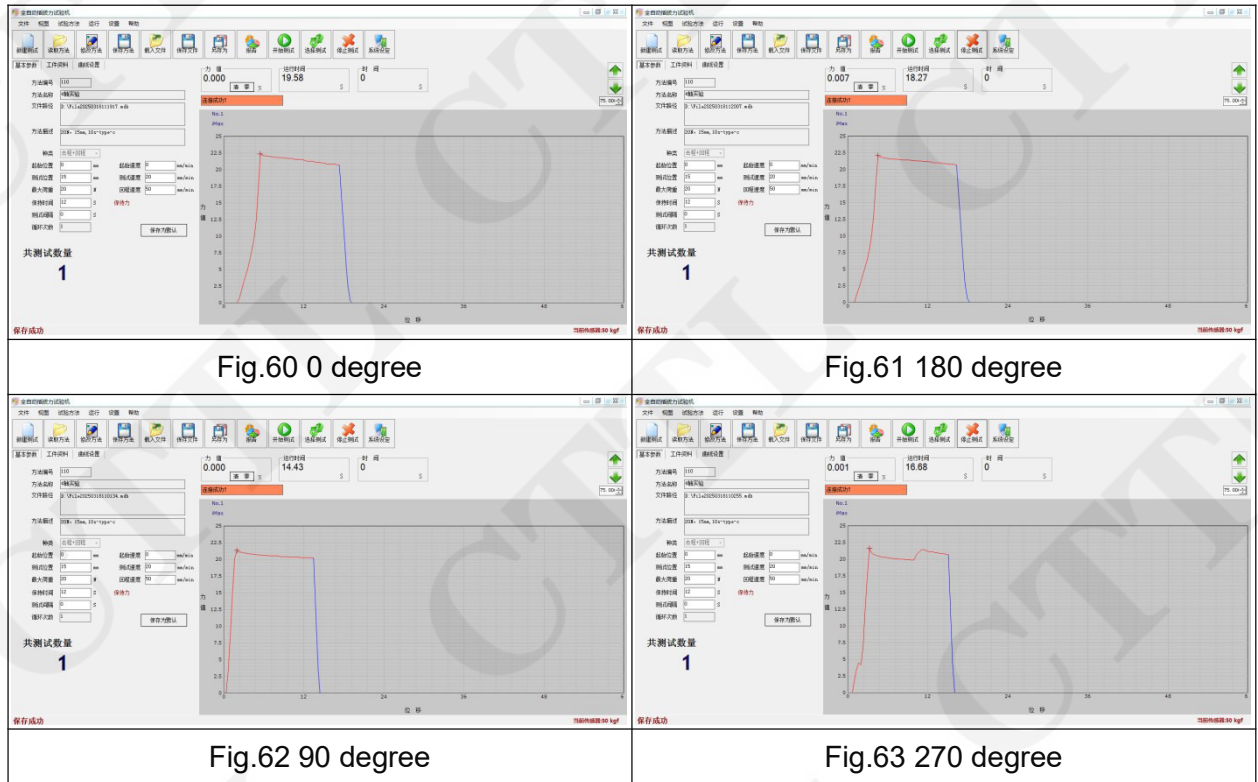
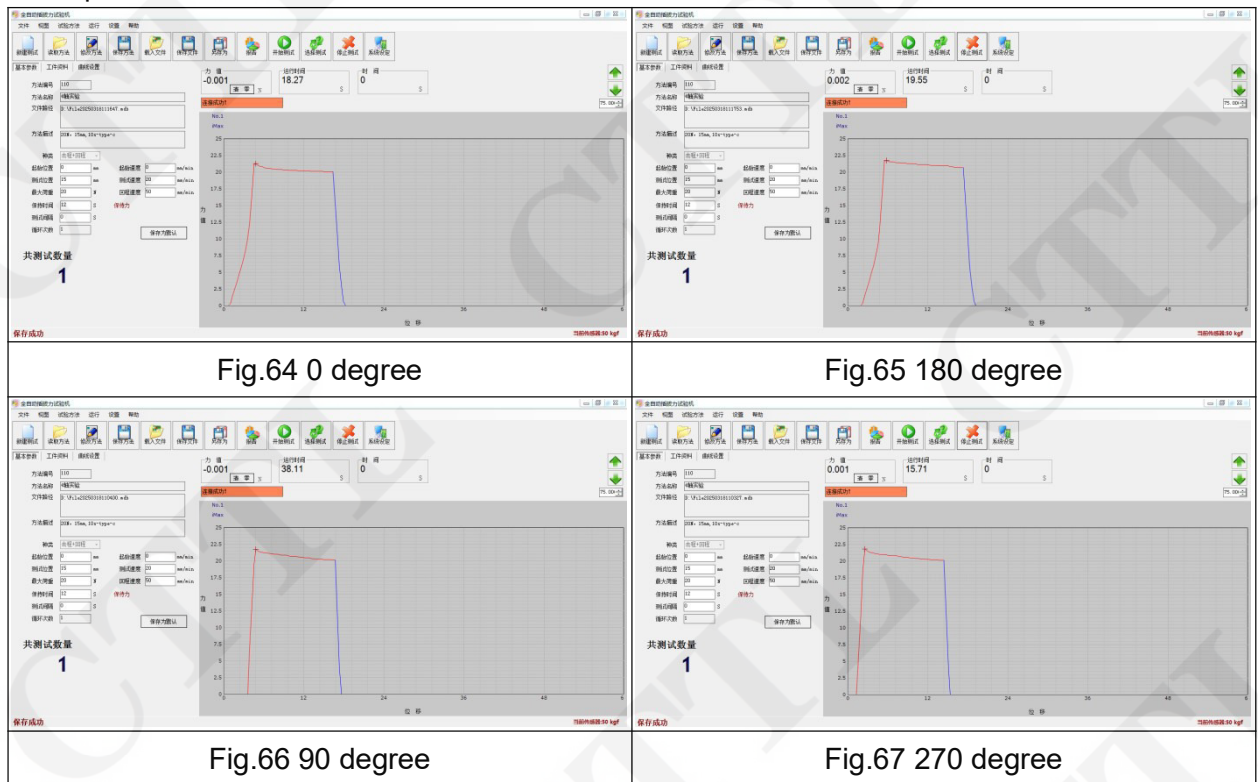


Fig.59 270 degree

Sample UT65aa



Sample UT66aa



Sample UT67aa

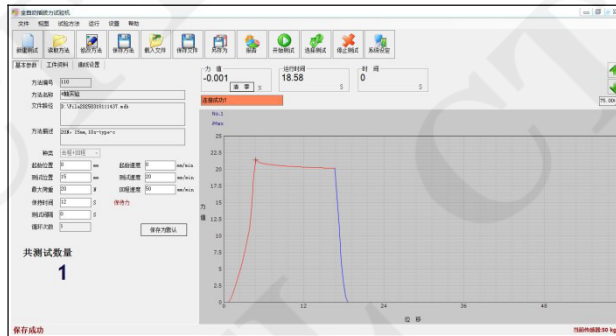


Fig.68 0 degree

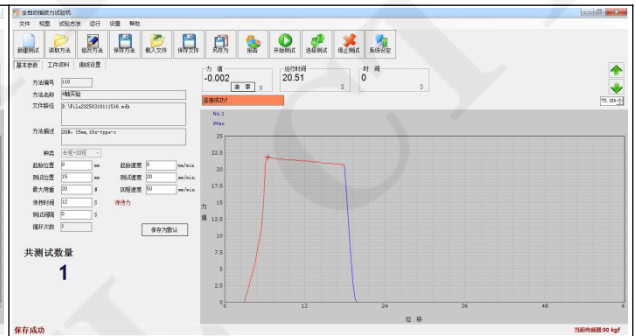


Fig.69 180 degree

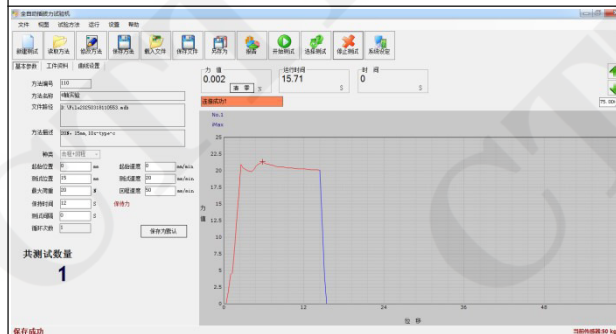


Fig.70 90 degree

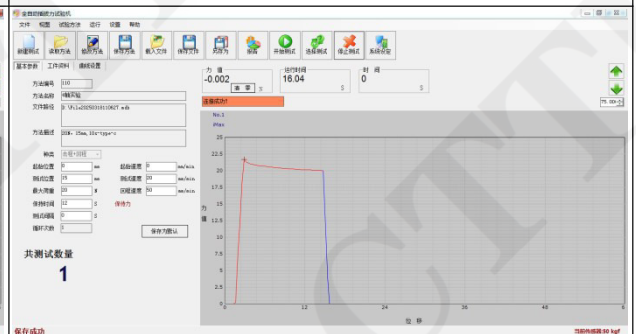


Fig.71 270 degree

Sample UT68aa

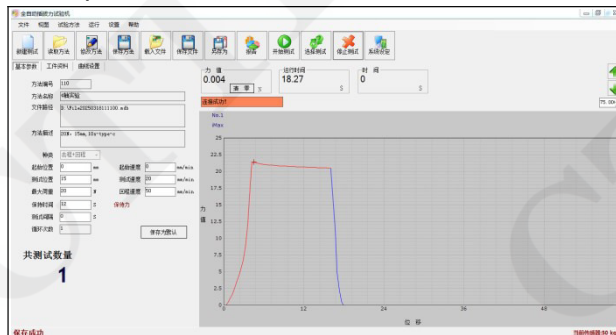


Fig.72 0 degree

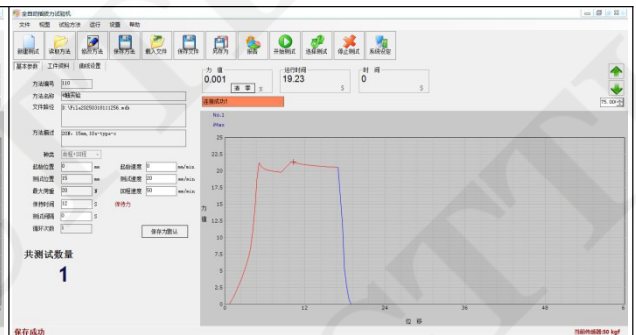


Fig.73 180 degree

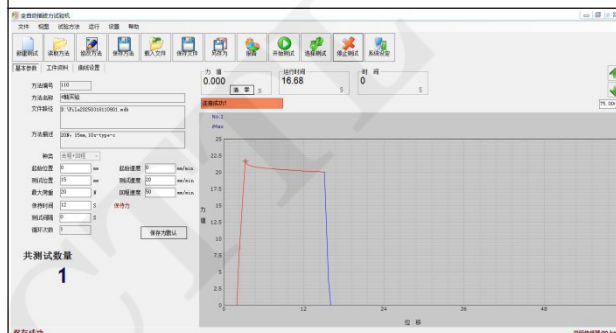


Fig.74 90 degree

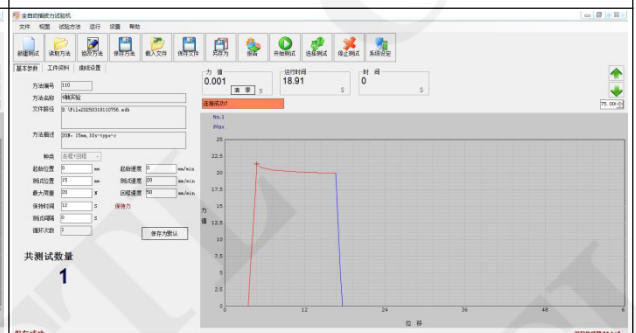


Fig.75 270 degree

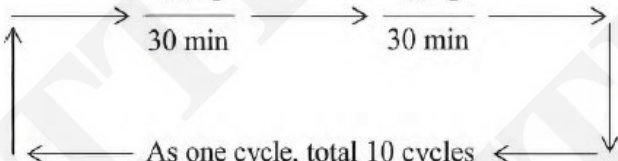
8.12. Clause 3.8.2 Temperature life

A-1-3 Temperature Life				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/17-2025/03/22	Temperature(℃)	21.2 - 22.5	Huang Siwei	Pass
	Humidity (RH)	58.8 - 60.6 %		
Test condition	Mated; Temperature: 105±2℃; Duration: 120h.			
Criteria	No evidence of physical damages.			

A-3-3 Temperature Life				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/12-2025/03/15	Temperature(℃)	21.8 - 23.4	Su Kun	Pass
	Humidity (RH)	63.7 - 73.6 %		
Test condition	Mated; Temperature: 105±2℃; Duration: 72h.			
Criteria	No evidence of physical damages.			

A-4-3 Temperature Life				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/14-2025/03/17	Temperature(℃)	22.3 - 23.6	Huang Siwei	Pass
	Humidity (RH)	55.5 -58.4 %		
Test condition	Mated; Temperature: 105±2℃; Duration: 72h.			
Criteria	No evidence of physical damages.			

8.13. Clause 3.8.2 Thermal shock

A-2-3 Thermal Shock				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/17-2025/03/18	Temperature(°C)	21.5 - 22.9	Huang Siwei	Pass
	Humidity (RH)	59.6 - 60.8 %		
Test condition	Mated: $-55_{-5}^0\text{ }^{\circ}\text{C}$  $85_{+2}^{\circ}\text{ }^{\circ}\text{C}$, 10 cycles. High/low temperature transfer time within 5 min.			
Criteria	No evidence of physical damages.			

8.14. Clause 3.8.2 Cyclic temperature and humidity

A-2-5 Cyclic temperature and humidity				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/18-2025/03/21	Temperature(℃)	21.2 - 22.9	Huang Siwei	Pass
	Humidity (RH)	58.2 - 60.4 %		
Test condition	Mated:			
	Temperature of 25℃±3℃ relative humidity of 80% ±3% to Temperature of 65℃±3℃ relative humidity of 50% ±3% , Thermal ramp time 0.5 hour , maintain 1 hour, 24 cycles. Temperature Humidity Time 65℃ 25℃ 1.0 h 0.5 h 1.0 h 0.5 h 80 %R.H. 50 %R.H. As one cycle, total 24 cycles			
Criteria	No evidence of physical damages.			

8.15. Clause 3.8.2 Vibration

A-3-5 Vibration				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/20	Temperature(℃)	22.7	Su Kun	Pass
	Humidity (RH)	39.8 %		
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

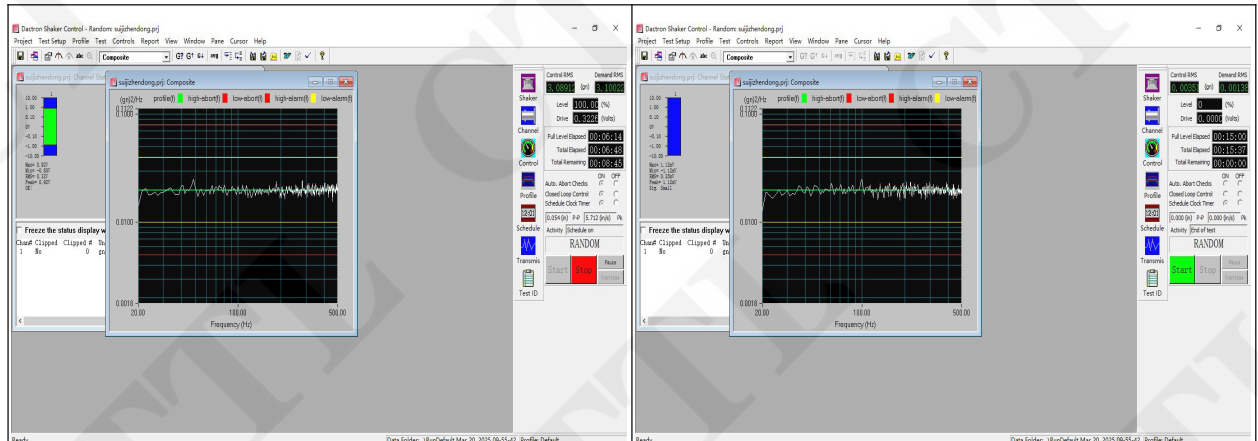


Fig.76 X-axis Under Testing

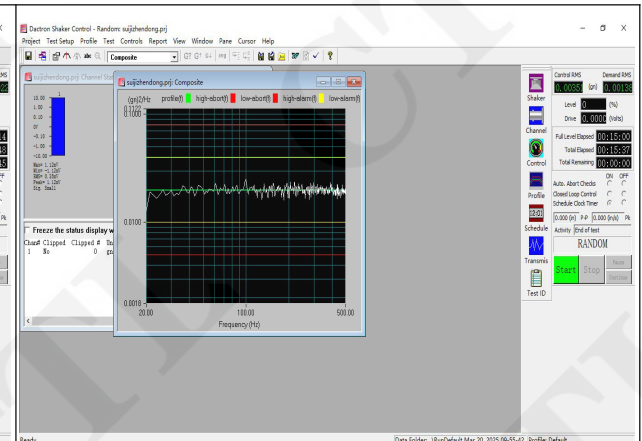


Fig.77 X-axis After Testing

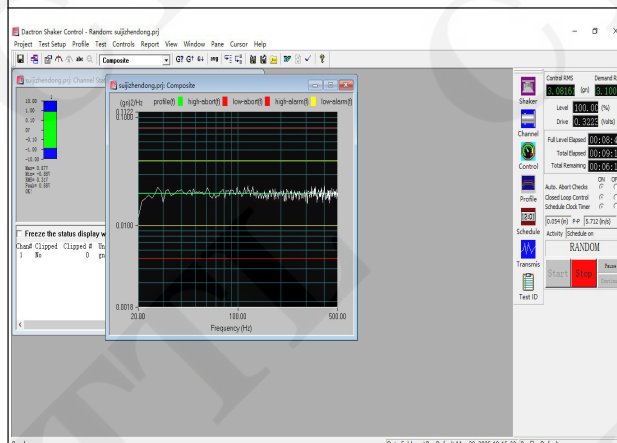


Fig.78 Y-axis Under Testing

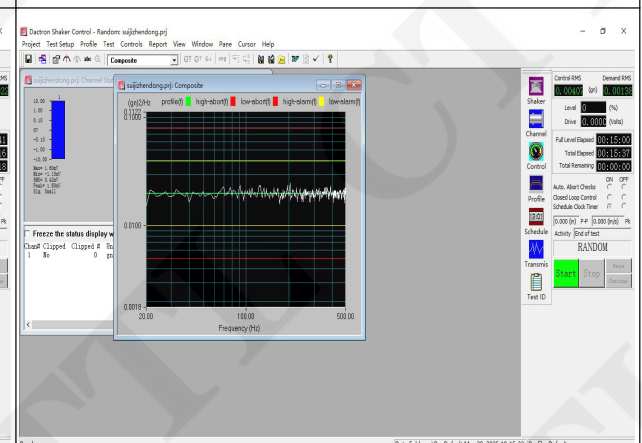


Fig.79 Y-axis After Testing

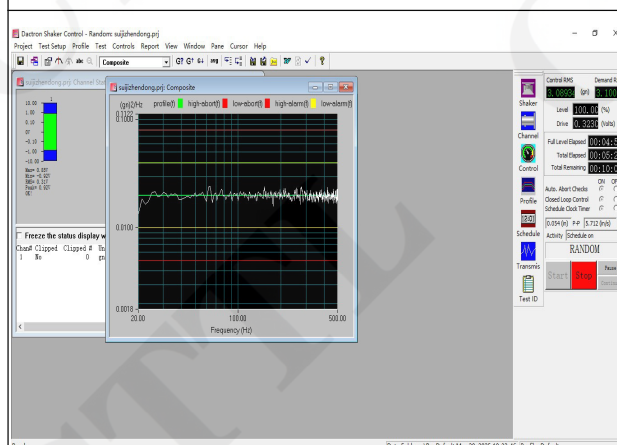


Fig.80 Z-axis Under Testing

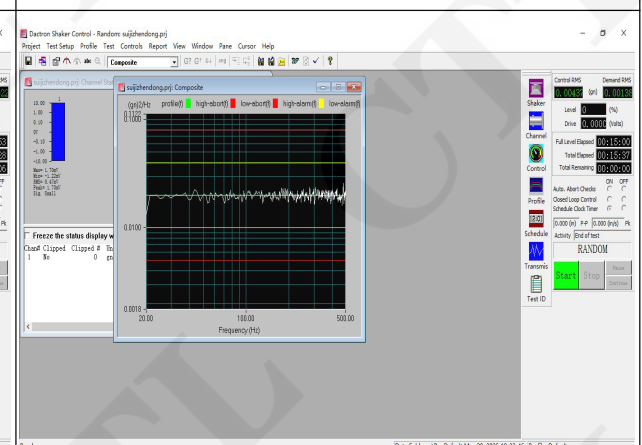


Fig.81 Z-axis After Testing

Sample UT26aa to UT30aa

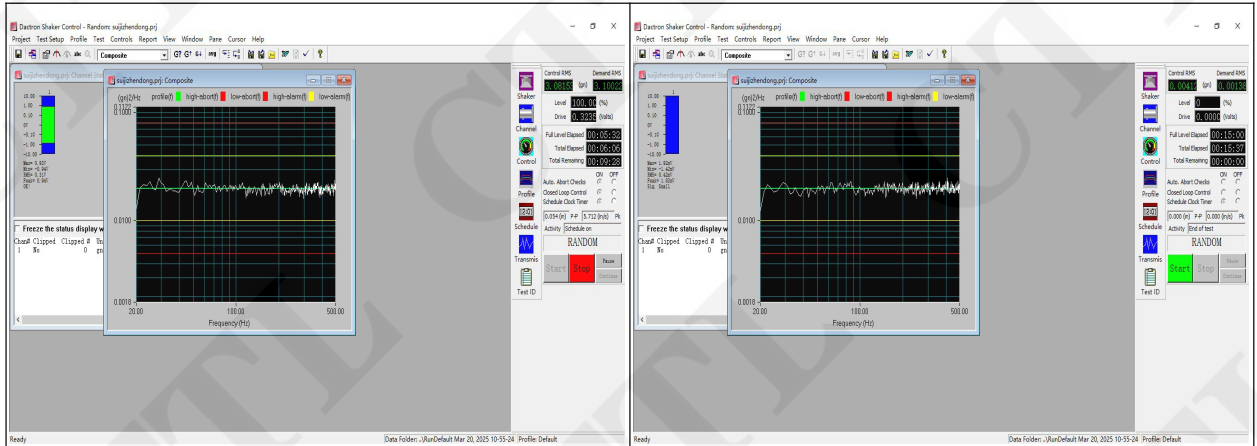


Fig.82 X-axis Under Testing

Fig.83 X-axis After Testing

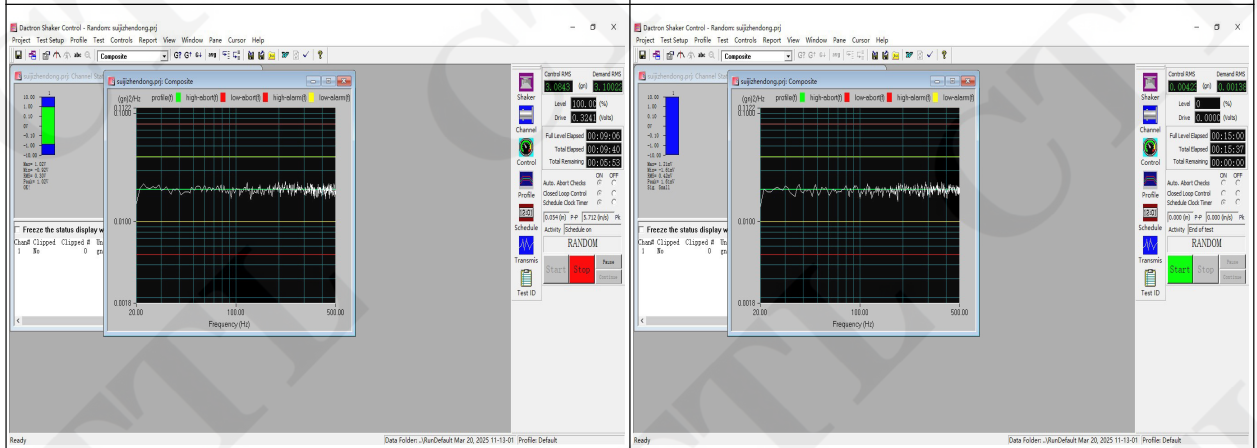


Fig.84 Y-axis Under Testing

Fig.85 Y-axis After Testing

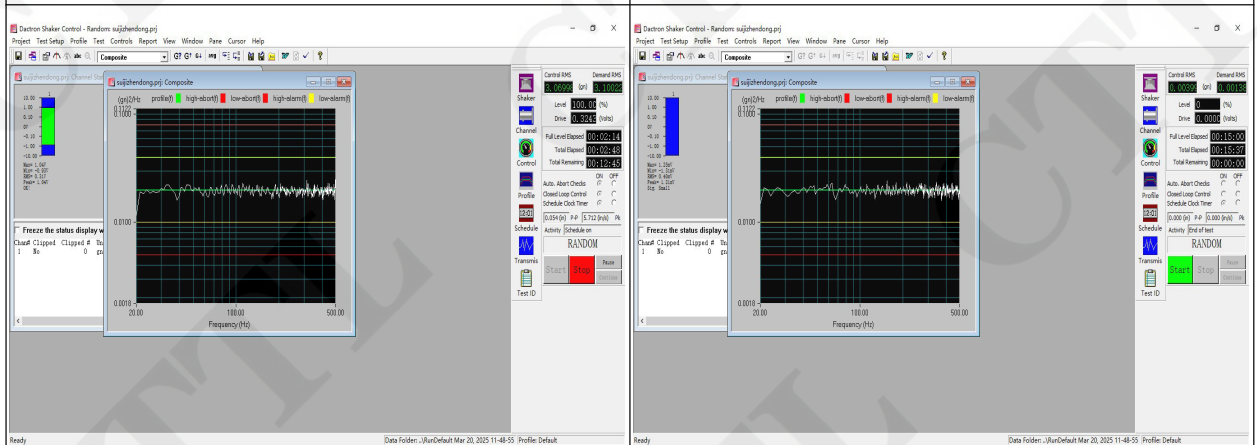


Fig.86 Z-axis Under Testing

Fig.87 Z-axis After Testing

8.16. Clause 3.8.2 Mixed flowing gas

A-4-5 Mixed flowing gas				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/17-2025/03/24	Temperature(℃)	21.9 - 22.6	Huang Siwei	Pass
	Humidity (RH)	58.2 - 60.8 %		
Test condition	CL2:(10±3) ppb; No2:(200±50) ppb; H2S:(10±5) ppb SO2:(100±20) ppb; Temperature:(30±1)℃; 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.			

8.17. Clause 3.8.2 Thermal disturbance

A-4-7 Thermal disturbance				
Testing Period	Measure environment		Test Engineer	Test Result
2025/03/24-2025/03/25	Temperature(°C)	22.2 - 22.9	Huang Siwei	Pass
	Humidity (RH)	59.2 - 61.1 %		
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.			

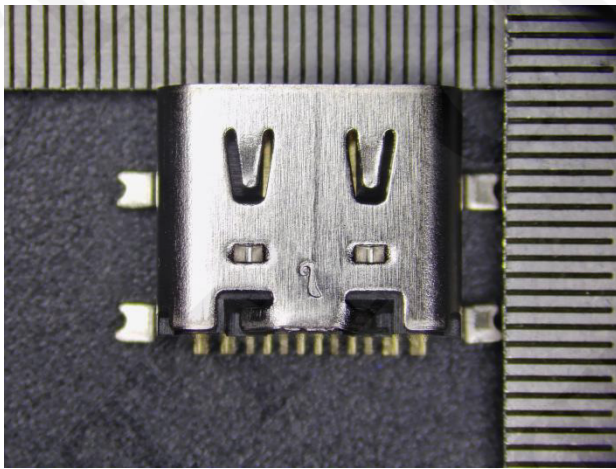
9. Test Equipments Utilized

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

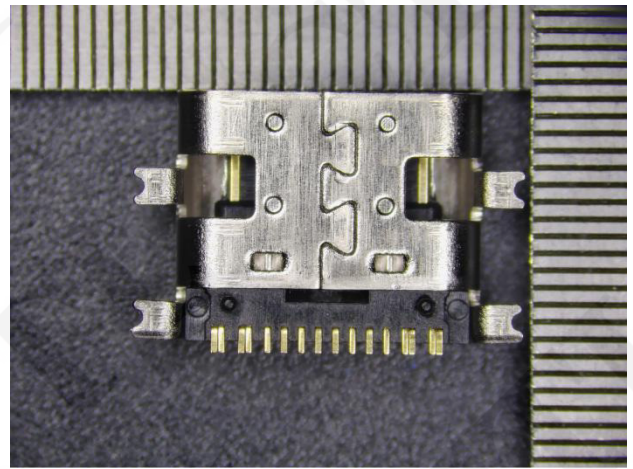


Temperature rise test system	GP10	S5T909482	2024.11.22	2025.11.21
Moment disconnection tester	NM11B	20010112	2024.11.25	2025.11.24
Electrical Safety Analyzer	TOS9201	XK002479	2024.11.22	2025.11.21
AVO meter	87VC	37980325WS	2024.11.22	2025.11.21

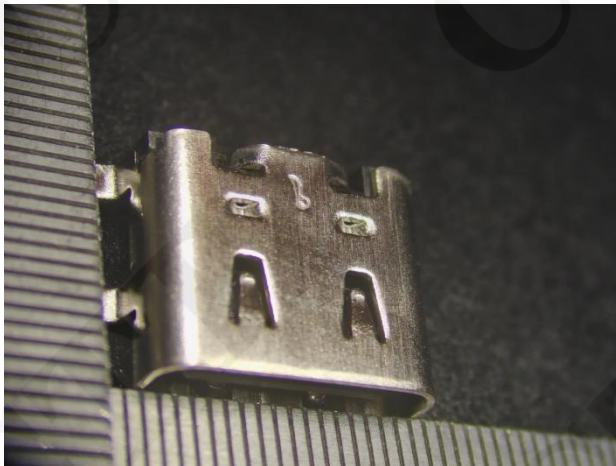
ANNEX A: UUT photograph



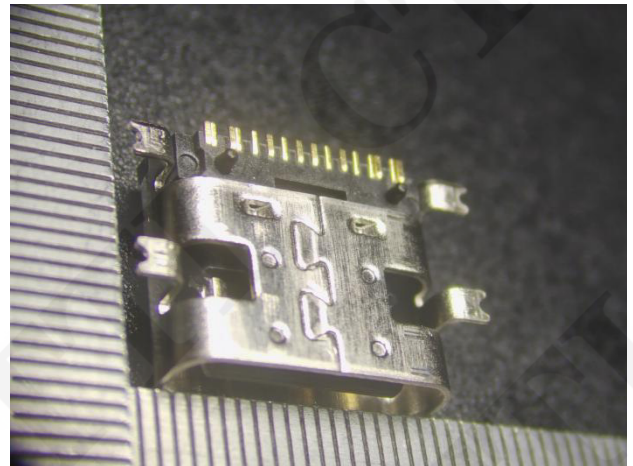
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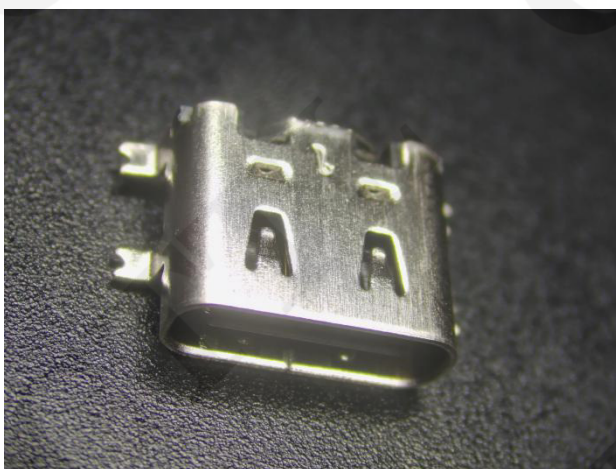
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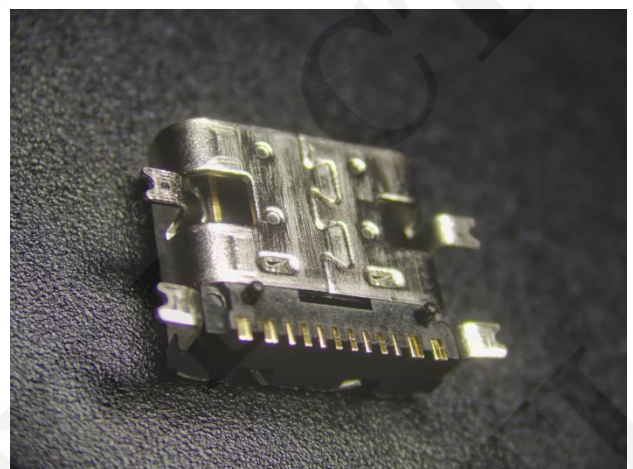
Top



Bottom



Receptacle

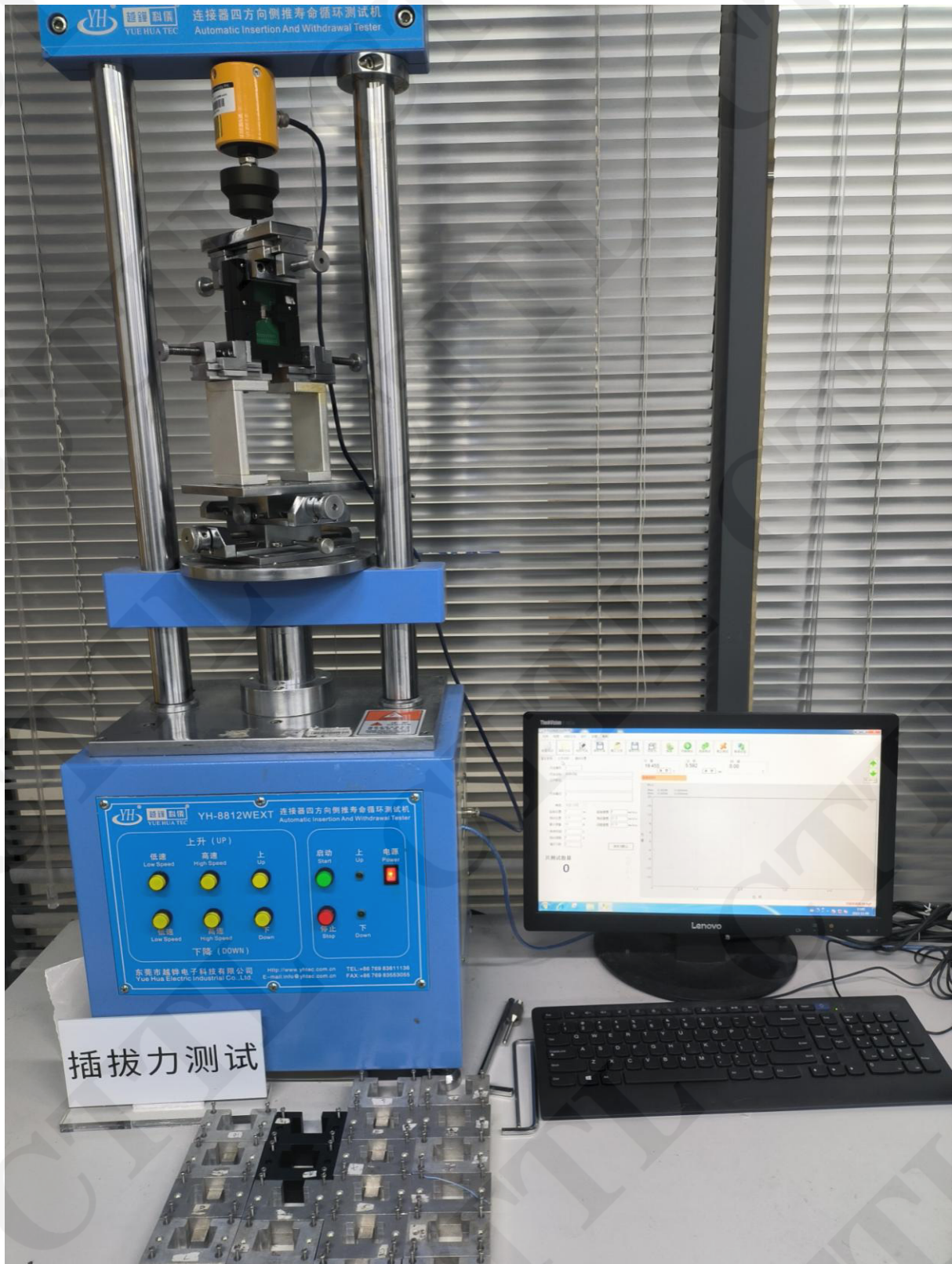


Receptacle

ANNEX B: Drawing



ANNEX C: Insertion Force & Extraction Force Test Layout



ANNEX D: Durability Test Layout



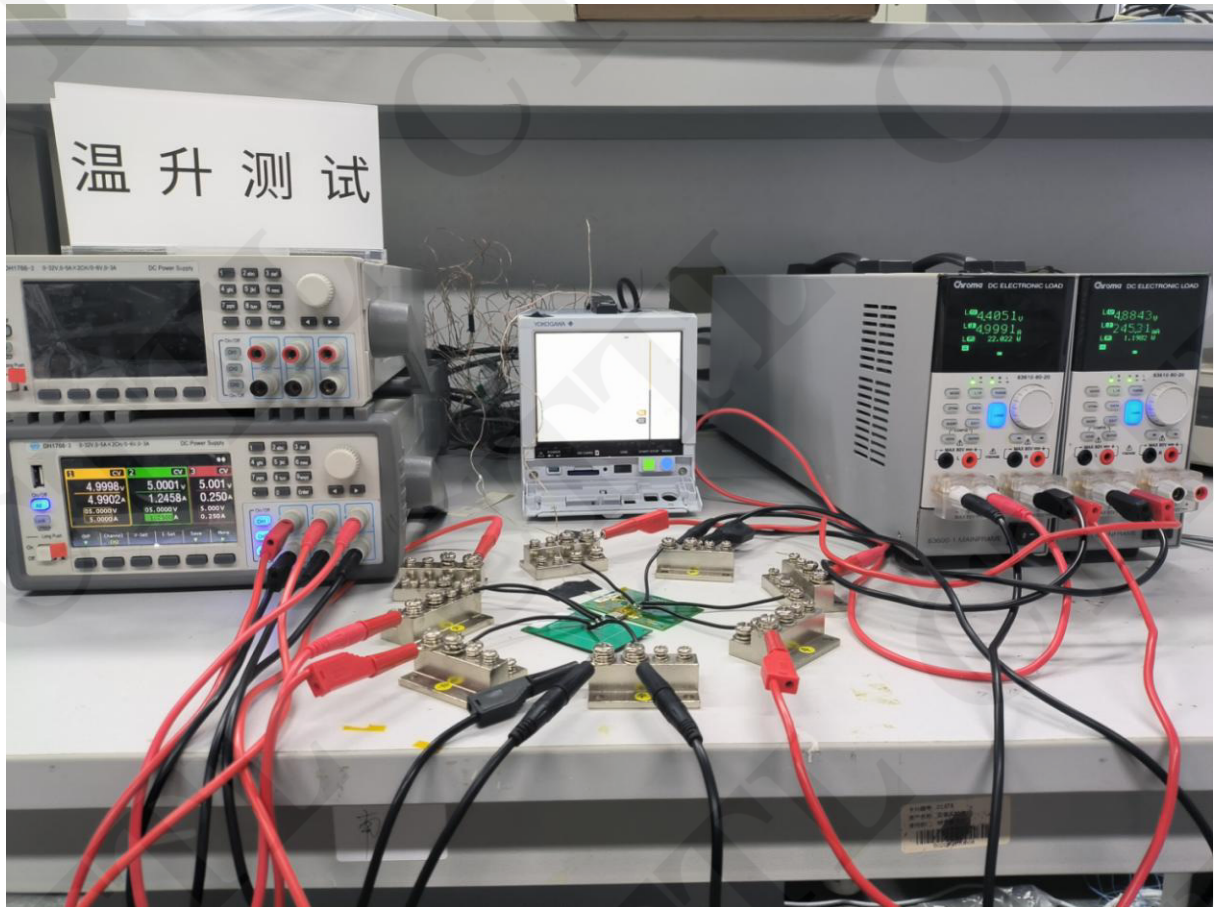
ANNEX E: Dielectric withstanding voltage Test Layout



ANNEX F: Vibration Test Layout



ANNEX G: Contact Current Rating Test Layout



END OF REPORT