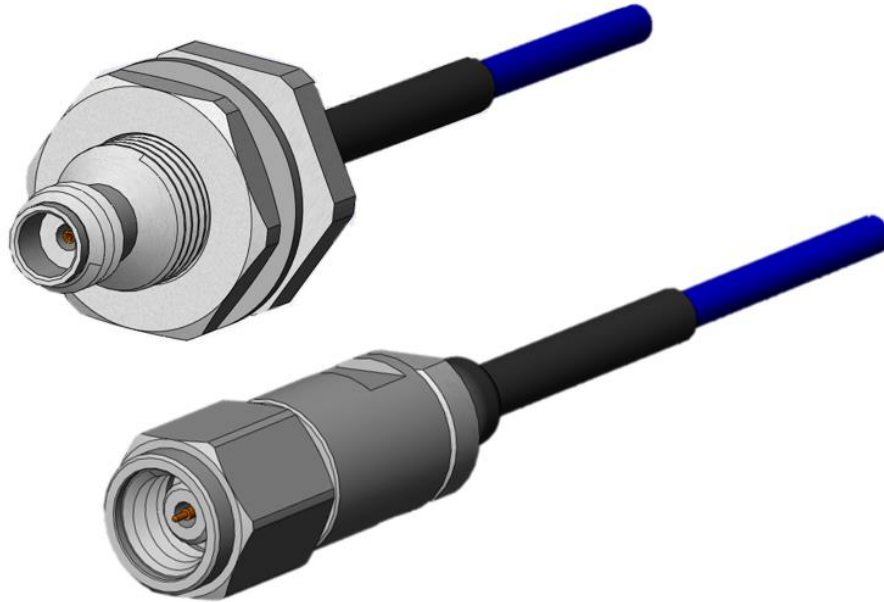




Project Number: Design Qualification Test Report	Tracking Code: 3397534_Report_Rev_1
Requested by: Ryan Lai	Date: 5/17/2023
Part #: N-RF047-A-10BJ-505050-0152/N-RF047-A-10SP-505050-0152	
Part description: RF047-10BJ / RF047-10SP	Tech: Keney Chen
Test Start: 7/10/2022	Test Completed: 7/16/2022



DESIGN QUALIFICATION TEST REPORT

RF047-10BJ / RF047-10SP

N-RF047-A-10BJ-505050-0152 /N-RF047-A-10SP-505050-0152

REVISION HISTORY

DATA	REV.NUM.	DESCRIPTION	ENG
8/2/2022	1	Initial Issue	KC

CERTIFICATION

All instruments and measuring equipment were calibrated to National Institute for Standards and Technology (NIST) traceable standards according to ISO 10012-1 and ANSI/NCSL 2540-1, as applicable.

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SCOPE

To perform the following tests: Design Qualification test. Please see test plan.

APPLICABLE DOCUMENTS

Standards: MIL-PRF-39012.

TEST SAMPLES AND PREPARATION

- 1) All materials were manufactured in accordance with the applicable product specification.
- 2) All test samples were identified and encoded to maintain traceability throughout the test sequences.
- 3) Parts not intended for testing LLCR and DWV/IR are visually inspected and cleaned if necessary.
- 4) Any additional preparation will be noted in the individual test sequences.

FLOWCHARTS

IR/DWV

Pin-to-Ground

Group 1

N-RF047-A-10BJ-505050-0152

N-RF047-A-10SP-505050-0152

5 Assemblies

Note: For STEP 6, please put the following additional cable assemblies in the thermal shock chamber (ride along parts).

Plug & jack versions are mated with dust caps (Yellow) on open ends.

Jack version: N-RF047-A-10BJ-505050-0152 (5 PCS)

Plug version: N-RF047-A-10SP-505050-0152 (5 PCS)

Step	Description
1.	Length & Mass
2.	Interface Gaging
3.	IR (2) - Non Standard
4.	DWV at Test Voltage (1) - Non Standard Test Voltage = 500 VAC
5.	LLCR (3) - Non Standard <i>Note: Signal and ground.</i>
6.	Thermal Shock (4) - Non Standard
7.	IR (2) - Non Standard
8.	DWV at Test Voltage (1) - Non Standard Test Voltage = 500 VAC
9.	LLCR (3) - Non Standard Max Delta = 15 mOhm <i>Note: Signal and ground.</i>
10.	Interface Gaging

(1) DWV at Test Voltage = Other

Test Condition = 1 (Sea Level) Test voltage applied for 60 seconds
MIL-PRF-39012, Paragraph. 4.6.14 per MIL-STD-202-301

(2) IR = Other

Test Condition = 500V DC, 2 Minutes Max
MIL-PRF-39012, Paragraph 4.6.8 per MIL-STD-202-302

(3) LLCR = Other

Open Circuit Voltage = 20 mV Max
Test Current = 100 mA Max
MIL-PRF-39012, Paragraph 4.6.13 except current to be 100mA nominal and voltage to be 20 mV maximum.

(4) Thermal Shock = Other

Exposure Time at Temperature Extremes = 1/2 Hour
Test Condition = I (-65°C to +125°C)
Test Duration = test condition B except 10 cycles instead of 5.
MIL-PRF-39012, Paragraph. 4.6.17 per MIL-STD-202-107

FLOWCHARTS Continued**Cable Pull**

<u>Group 1</u> N-RF047-A-10BJ-505050-0152		<u>Group 2</u> N-RF047-A-10SP-505050-0152		<u>Group 3</u> N-RF047-A-10BJ-505050-0152 N-RF047-A-10SP-505050-0152	
5 Assemblies 0 Degrees		5 Assemblies 0 Degrees		5 Assemblies 0 Degrees	
Step	Description	Step	Description	Step	Description
1.	Cable Retention (2) - Non Standard <i>Note: Pull-to-destruct.</i>	1.	Cable Retention (2) - Non Standard <i>Note: Pull-to-destruct.</i>	1.	Length & Mass
				2.	Interface Gaging
				3.	LLCR (3) - Non Standard <i>Note: Signal and ground.</i>
				4.	Cable Retention (1) - Non Standard <i>Note: Apply 5 pounds (2.3 kg) for Cable Retention test.</i>
				5.	LLCR (3) - Non Standard <i>Note: Signal and ground.</i>
				6.	Interface Gaging

(1) Cable Retention = Other
Apply 5 pounds (2.3 kg) for Cable Retention test.
MIL-PRF-30192, Paragraph 4.6.21

(2) Cable Retention = Other
Pull-to-destruct.
MIL-PRF-30192, Paragraph 4.6.21

(3) LLCR = Other
Open Circuit Voltage = 20 mV Max
Test Current = 100 mA Max
MIL-PRF-39012, Paragraph 4.6.13 except current to be 100mA nominal and voltage to be 20 mV maximum.

FLOWCHARTS Continued**Mating/Unmating/Durability**Group 1

N-RF047-A-10BJ-505050-0152

N-RF047-A-10SP-505050-0152

5 Assemblies

Step	Description
1.	Length & Mass
2.	Interface Gaging
3.	DWV at Test Voltage ⁽¹⁾ - Non Standard DWV = 500 VAC
4.	LLCR ⁽²⁾ - Non Standard <i>Note: Signal and ground.</i>
5.	Cycles Quantity = 500 Cycles <i>Note: By hand. Torque each time to 4 in-lbs. Rotate plug coupling nut only. Do not rotate entire assembly. MIL-PRF-39012, Paragraph. 4.6.12</i>
6.	LLCR ⁽²⁾ - Non Standard Max Delta = 15 mOhm <i>Note: Signal and ground.</i>
7.	Interface Gaging

(1) DWV at Test Voltage = Other

Test Condition = 1 (Sea Level) Test voltage applied for 60 seconds
MIL-PRF-39012, Paragraph. 4.6.14 per MIL-STD-202-301

(2) LLCR = Other

Open Circuit Voltage = 20 mV Max
Test Current = 100 mA Max
MIL-PRF-39012, Paragraph 4.6.13 except current to be 100mA nominal and voltage to be 20 mV maximum.

ATTRIBUTE DEFINITIONS

The following is a brief, simplified description of attributes.

THERMAL SHOCK:

- 1) MIL-PRF-39012, paragraph. 4.6.17 per MIL-STD-202-107.
- 2) Test Condition I: -65°C to +125°C
- 3) Test Time: ½ hour dwell at each temperature extreme
- 4) Test Duration: test condition B except 10 cycles instead of 5.
- 5) All test samples are pre-conditioned at ambient.
- 6) All test samples are exposed to environmental stressing in the mated condition.

LLCR:

- 1) MIL-PRF-39012, Paragraph 4.6.13 except current to be 100 mA nominal and voltage to be 20 mV maximum.
- 2) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
- 3) The following guidelines are used to categorize the changes in LLCR as a result from stressing
 - a. $\leq +5.0$ mOhms: -----Stable
 - b. $+5.1$ to $+10.0$ mOhms:-----Minor
 - c. $+10.1$ to $+15.0$ mOhms: -----Acceptable
 - d. $+15.1$ to $+50.0$ mOhms: -----Marginal
 - e. $+50.1$ to $+1000$ mOhms: -----Unstable
 - f. $>+1000$ mOhms:-----Open Failure

CABLE RETENTION:

- 1) Apply 5 pounds (2.3 kg) for cable retention test.
- 2) Pull to destruct.
- 3) MIL-PRF-30192, paragraph. 4.6.21.

MATING/UNMATING:

- 1) MIL-PRF-30192, paragraph. 4.6.12.
- 2) By hand. Torque each time to 4 in-lbs.

ATTRIBUTE DEFINITIONS Continued

The following is a brief, simplified description of attributes

INSULATION RESISTANCE (IR):

To determine the resistance of insulation materials to leakage of current through or on the surface of these materials when a DC potential is applied.

- 1) PROCEDURE:
 - a. Reference document: MIL-PRF-39012, paragraph. 4.6.8 per MIL-STD-202-302.
 - b. Test Conditions:
 - i. Between Adjacent Contacts or Signal-to-Ground
 - ii. Electrification Time 2.0 minutes
 - iii. Test Voltage (500 VDC) corresponds to calibration settings for measuring resistances.
- 2) MEASUREMENTS:
- 3) When the specified test voltage is applied (VDC), the insulation resistance shall not be less than 1000 megohms.

DIELECTRIC WITHSTANDING VOLTAGE (DWV):

To determine if the sockets can operate at its rated voltage and withstand momentary over potentials due to switching, surges, and other similar phenomenon. Separate samples are used to evaluate the effect of environmental stresses so not to influence the readings from arcing that occurs during the measurement process.

- 1) PROCEDURE:
 - a. Reference document: MIL-PRF-39012, paragraph. 4.6.14 per MIL-STD-202-301.
 - b. Test Conditions:
 - i. Between Adjacent Contacts or Signal-to-Ground
 - ii. Barometric Test Condition 1(Sea Level) Test voltage applied for 60 seconds.
 - iii. Rate of Application 500 V/Sec
 - iv. Test Voltage (VAC) until breakdown occurs
- 2) MEASUREMENTS/CALCULATIONS
 - a. The breakdown voltage shall be measured and recorded.
 - b. The dielectric withstanding voltage shall be recorded as 75% of the minimum breakdown voltage.
 - c. The working voltage shall be recorded as one-third (1/3) of the dielectric withstanding voltage (one-fourth of the breakdown voltage).

RESULTS

Cable Pull force

- 0° Pull
 - Group 1 N-RF047-A-10BJ-505050-0152
 - Min -----10.119 lbs
 - Max -----12.755 lbs
 - Group 2 N-RF047-A-10SP-505050-0152
 - Min ----- 9.448 lbs
 - Max -----14.236 lbs

Insulation Resistance minimums, IR

Pin to Ground

- Initial
 - Mated -----45000 Meg Ω ----- Passed
- Thermal Shock
 - Mated -----45000 Meg Ω ----- Passed

Dielectric Withstanding Voltage minimums, DWV

- Minimums
 - Test Voltage -----500 VAC

Pin to Ground

- Initial DWV -----Passed
- Thermal DWV-----Passed

Mating/Unmating Durability Group

- Minimums
 - Test Voltage -----500 VAC

Pin to Ground

- Initial DWV -----Passed

RESULTS Continued**Length & Mass****IR/DWV Group****Length****10SP**

- **Min** ----- **145.00 mm**
- **Max** ----- **152.00 mm**

10BJ

- **Min** ----- **153.00 mm**
- **Max** ----- **155.00 mm**

Mass**10SP**

- **Min** ----- **3.66 g**
- **Max** ----- **3.72 g**

10BJ

- **Min** ----- **3.38 g**
- **Max** ----- **3.39 g**

Cable Pull Group**Length****10SP**

- **Min** ----- **151.00 mm**
- **Max** ----- **154.00 mm**

10BJ

- **Min** ----- **154.00 mm**
- **Max** ----- **158.00 mm**

Mass**10SP**

- **Min** ----- **3.65 g**
- **Max** ----- **3.70 g**

10BJ

- **Min** ----- **3.38 g**
- **Max** ----- **3.41 g**

• **RESULTS Continued**

Durability Group

500 Cycles

Length

10SP

- **Min** ----- **150.00 mm**
- **Max** ----- **150.00 mm**

10BJ

- **Min** ----- **155.00 mm**
- **Max** ----- **155.00 mm**

Mass

10SP

- **Min** ----- **3.69 g**
- **Max** ----- **3.71 g**

10BJ

- **Min** ----- **3.36 g**
- **Max** ----- **3.39 g**

RESULTS Continued**Interface Gaging****IR/DWV Group****10SP****Initial**

- **Min** ----- **0.010 mm**
- **Max** ----- **0.030 mm**

After Thermal Shock

- **Min** ----- **0.020 mm**
- **Max** ----- **0.030 mm**

10BJ**Initial**

- **Min** ----- **0.020 mm**
- **Max** ----- **0.030 mm**

After Thermal Shock

- **Min** ----- **0.020 mm**
- **Max** ----- **0.030 mm**

Cable Pull Group**10SP****Initial**

- **Min** ----- **0.010 mm**
- **Max** ----- **0.030 mm**

After Retention

- **Min** ----- **0.020 mm**
- **Max** ----- **0.040 mm**

10BJ**Initial**

- **Min** ----- **0.020 mm**
- **Max** ----- **0.030 mm**

After Retention

- **Min** ----- **0.020 mm**
- **Max** ----- **0.030 mm**

Durability Group**10SP****Initial**

- **Min** ----- **0.010 mm**
- **Max** ----- **0.030 mm**

After 500 Cycles

- **Min** ----- **0.010 mm**
- **Max** ----- **0.040 mm**

10BJ**Initial**

- **Min** ----- **0.020 mm**
- **Max** ----- **0.030 mm**

After 500 Cycles

- **Min** ----- **0.010 mm**
- **Max** ----- **0.020 mm**

RESULTS Continued**LLCR IR/DWV (5 ground and 5 signal LLCR test points)****Ground pin**

- **Initial** ----- 30.86 mOhms Max
- **Thermal Shock**
 - <= +5.0 mOhms-----5 Points ----- Stable
 - +5.1 to +10.0 mOhms -----0 Points ----- Minor
 - +10.1 to +15.0 mOhms -----0 Points ----- Acceptable
 - +15.1 to +50.0 mOhms -----0 Points ----- Marginal
 - +50.1 to +1000 mOhms-----0 Points ----- Unstable
 - >+1000 mOhms-----0 Points ----- Open Failure

Signal pin

- **Initial** ----- 85.84 mOhms Max
- **Thermal Shock**
 - <= +5.0 mOhms-----5 Points ----- Stable
 - +5.1 to +10.0 mOhms -----0 Points ----- Minor
 - +10.1 to +15.0 mOhms -----0 Points ----- Acceptable
 - +15.1 to +50.0 mOhms -----0 Points ----- Marginal
 - +50.1 to +1000 mOhms-----0 Points ----- Unstable
 - >+1000 mOhms-----0 Points ----- Open Failure

LLCR Cable Pull (5 ground and 5 signal LLCR test points)**Ground pin**

- **Initial** ----- 30.83 mOhms Max
- **After 25lb Retention**
 - <= +5.0 mOhms-----5 Points ----- Stable
 - +5.1 to +10.0 mOhms -----0 Points ----- Minor
 - +10.1 to +15.0 mOhms -----0 Points ----- Acceptable
 - +15.1 to +50.0 mOhms -----0 Points ----- Marginal
 - +50.1 to +1000 mOhms-----0 Points ----- Unstable
 - >+1000 mOhms-----0 Points ----- Open Failure

Signal pin

- **Initial** ----- 86.09 mOhms Max
- **After 25lb Retention**
 - <= +5.0 mOhms-----5 Points ----- Stable
 - +5.1 to +10.0 mOhms -----0 Points ----- Minor
 - +10.1 to +15.0 mOhms -----0 Points ----- Acceptable
 - +15.1 to +50.0 mOhms -----0 Points ----- Marginal
 - +50.1 to +1000 mOhms-----0 Points ----- Unstable
 - >+1000 mOhms-----0 Points ----- Open Failure

RESULTS Continued

Mating/Unmating Durability (5 ground and 5 signal LLCR test points)

Ground pin

- **Initial** ----- **31.50 mOhms Max**
- **After 500 Cycles**
 - **<= +5.0 mOhms**-----**5 Points** ----- **Stable**
 - **+5.1 to +10.0 mOhms** -----**0 Points** ----- **Minor**
 - **+10.1 to +15.0 mOhms** -----**0 Points** ----- **Acceptable**
 - **+15.1 to +50.0 mOhms** -----**0 Points** ----- **Marginal**
 - **+50.1 to +1000 mOhms**-----**0 Points** ----- **Unstable**
 - **>+1000 mOhms**-----**0 Points** ----- **Open Failure**

Signal pin

- **Initial** ----- **87.20 mOhms Max**
- **After 500 Cycles**
 - **<= +5.0 mOhms**-----**5 Points** ----- **Stable**
 - **+5.1 to +10.0 mOhms** -----**0 Points** ----- **Minor**
 - **+10.1 to +15.0 mOhms** -----**0 Points** ----- **Acceptable**
 - **+15.1 to +50.0 mOhms** -----**0 Points** ----- **Marginal**
 - **+50.1 to +1000 mOhms**-----**0 Points** ----- **Unstable**
 - **>+1000 mOhms**-----**0 Points** ----- **Open Failure**

DATA SUMMARIES**INSULATION RESISTANCE (IR):**

Pin to Ground	
	Mated
Minimum	RF047-10SP/RF047-10BJ
Initial	45000
Thermal Shock	45000

DIELECTRIC WITHSTANDING VOLTAGE (DWV):**IR/DWV Group**

Voltage Rating Summary	
Minimum	RF047-10SP/RF047-10BJ
Test Voltage	500

Pin to Ground	
Initial Test Voltage	Pass
After Thermal Shock Test Voltage	Pass

Durability Group

Voltage Rating Summary	
Minimum	RF047-10SP/RF047-10BJ
Test Voltage	500

Pin to Ground	
Initial Test Voltage	Pass

Cable Pull Force:**0° Pull****Group 1 N-RF047-A-10SP-505050-0152**

	Force (lbs)
Minimum	9.45
Maximum	14.24
Average	11.14

Group 2 N-RF047-A-10BJ-505050-0152

	Force (lbs)
Minimum	10.12
Maximum	12.76
Average	10.84

DATA SUMMARIES Continued**LENGTH & MASS****IR/DWV Group**

10SP	Length (mm)	Mass (g)	10BJ	Length (mm)	Mass (g)
1	145.00	3.66	1	155.00	3.38
2	152.00	3.72	2	155.00	3.38
3	150.00	3.69	3	155.00	3.38
4	150.00	3.70	4	155.00	3.39
5	150.00	3.68	5	153.00	3.38

Cable Pull Group

10SP	Length (mm)	Mass (g)	10BJ	Length (mm)	Mass (g)
1	154.0	3.700	1	155.0	3.390
2	151.0	3.680	2	155.0	3.380
3	153.0	3.690	3	154.0	3.380
4	153.0	3.690	4	155.0	3.380
5	144.0	3.650	5	158.0	3.410

Durability Group

10SP	Length (mm)	Mass (g)	10BJ	Length (mm)	Mass (g)
1	150.00	3.70	1	155.00	3.39
2	150.00	3.71	2	155.00	3.38
3	150.00	3.69	3	155.00	3.37
4	150.00	3.70	4	155.00	3.38
5	150.00	3.69	5	155.00	3.36

DATA SUMMARIES Continued**LLCR IR/DWV:**

- 1) A total of 4 signal and 4 ground points were measured.
- 2) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets*.
- 3) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
- 4) The following guidelines are used to categorize the changes in LLCR as a result from stressing.
 - a. $\leq +5.0$ mOhms: -----Stable
 - b. $+5.1$ to $+10.0$ mOhms:-----Minor
 - c. $+10.1$ to $+15.0$ mOhms: -----Acceptable
 - d. $+15.1$ to $+50.0$ mOhms: -----Marginal
 - e. $+50.1$ to $+1000$ mOhms: -----Unstable
 - f. $>+1000$ mOhms:-----Open Failure

LLCR Measurement Summaries by Pin Type				
Date	7/11/2022	7/13/2022		
Room Temp (Deg C)	22	22		
Rel Humidity (%)	50	50		
Technician	Keney Chen	Keney Chen		
mOhm values	Actual	Delta		
	Initial	Thermal Shock		
Pin Type: Signal 1				
Average	85.274	0.51		
St. Dev.	0.3672	0.6040		
Min	84.91	0.02		
Max	85.84	1.31		
Summary Count	5	5		
Total Count	5	5		
Pin Type: GND 1				
Average	29.972	1.31		
St. Dev.	1.0338	0.7578		
Min	28.44	0.14		
Max	30.86	1.97		
Summary Count	5	5		
Total Count	5	5		

LLCR Delta Count by Category						
	Stable	Minor	Acceptable	Marginal	Unstable	Open
mOhms	≤ 5	>5 & ≤ 10	>10 & ≤ 15	>15 & ≤ 50	>50 & ≤ 1000	>1000
After Thermal Shock	10	0	0	0	0	0

DATA SUMMARIES Continued**LLCR Cable Pull:**

- 1) A total of 4 signal and 4 ground points were measured.
- 2) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets*.
- 3) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
- 4) The following guidelines are used to categorize the changes in LLCR as a result from stressing.
 - a. $\leq +5.0$ mOhms: -----Stable
 - b. $+5.1$ to $+10.0$ mOhms: -----Minor
 - c. $+10.1$ to $+15.0$ mOhms: -----Acceptable
 - d. $+15.1$ to $+50.0$ mOhms: -----Marginal
 - e. $+50.1$ to $+1000$ mOhms: -----Unstable
 - f. $>+1000$ mOhms: -----Open Failure

LLCR Measurement Summaries by Pin Type

Date	7/11/2022	7/12/2022		
Room Temp (Deg C)	20	20		
Rel Humidity (%)	50	50		
Technician	Keney Chen	Keney Chen		
mOhm values	Actual Initial	Delta after 5lb Retention		
Pin Type: Signal 1				
Average	85.50	0.68		
St. Dev.	0.65	0.61		
Min	84.64	0.16		
Max	86.09	1.35		
Summary Count	5	5		
Total Count	5	5		
Pin Type: GND 1				
Average	30.26	0.81		
St. Dev.	0.50	0.51		
Min	29.67	0.22		
Max	30.83	1.55		
Summary Count	5	5		
Total Count	5	5		

LLCR Delta Count by Category

	Stable	Minor	Acceptable	Marginal	Unstable	Open
mOhms	≤ 5	>5 & ≤ 10	>10 & ≤ 15	>15 & ≤ 50	>50 & ≤ 1000	>1000
After 5lb Retention	10	0	0	0	0	0

DATA SUMMARIES Continued

Mating/Unmating Durability:

- 1) A total of 4 signal and 4 ground points were measured.
- 2) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets*.
- 3) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
- 4) The following guidelines are used to categorize the changes in LLCR as a result from stressing.
 - a. $\leq +5.0$ mOhms: -----Stable
 - b. $+5.1$ to $+10.0$ mOhms: -----Minor
 - c. $+10.1$ to $+15.0$ mOhms: -----Acceptable
 - d. $+15.1$ to $+50.0$ mOhms: -----Marginal
 - e. $+50.1$ to $+1000$ mOhms: -----Unstable
 - f. $>+1000$ mOhms: -----Open Failure

LLCR Measurement Summaries by Pin Type				
Date	7/11/2022	7/12/2022		
Room Temp (Deg C)	22	22		
Rel Humidity (%)	50	50		
Technician	Keney Chen	Keney Chen		
mOhm values	Actual Initial	Delta 500 CYCLES		
Pin Type: Signal 1				
Average	86.00	0.37		
St. Dev.	1.16	0.16		
Min	84.39	0.22		
Max	87.20	0.64		
Summary Count	5	5		
Total Count	5	5		
Pin Type: GND 1				
Average	31.00	1.53		
St. Dev.	0.67	1.28		
Min	29.82	0.34		
Max	31.50	3.47		
Summary Count	5	5		
Total Count	5	5		

LLCR Delta Count by Category						
	Stable	Minor	Acceptable	Marginal	Unstable	Open
mOhms	≤ 5	>5 & ≤ 10	>10 & ≤ 15	>15 & ≤ 50	>50 & ≤ 1000	>1000
500 Cycles	10	0	0	0	0	0

EQUIPMENT AND CALIBRATION SCHEDULES**Equipment #:** HZ-TCT-01**Description:** Normal force analyzer**Manufacturer:** Mecmesin Multitester**Model:** Mecmesin Multitester 2.5-i**Serial #:** 08-1049-04**Accuracy:** Last Cal: 3/4/2022, Next Cal: 3/3/2023**Equipment #:** HZ-TSC-01**Description:** Vertical Thermal Shock Chamber**Manufacturer:** Cincinnatti Sub Zero**Model:** VTS-3-6-6-SC/AC**Serial #:** 10-VT14994**Accuracy:** See Manual

... Last Cal: 04/16/2022, Next Cal: 04/15/2023

Equipment #: DG-HPT-01**Description:** Hipot Safety Tester**Manufacturer:** Vitrek**Model:** V73**Serial #:** 025866**Accuracy:**

... Last Cal: 04/16/2022, Next Cal: 04/15/2023

Equipment #: HZ-MO-05**Description:** Micro-ohmmeter**Manufacturer:** Keithley**Model:** 3706**Serial #:** 1285188**Accuracy:** Last Cal: 12/17/2021, Next Cal: 12/16/2022