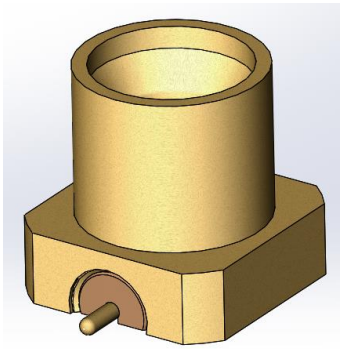
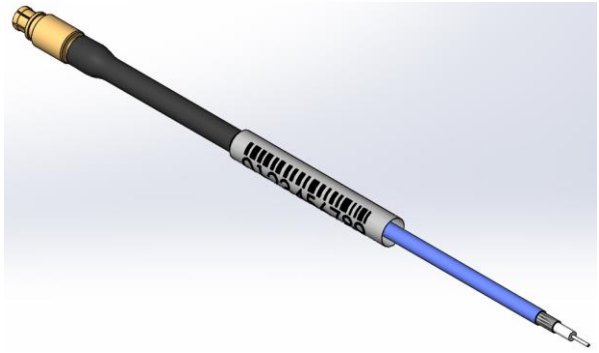
Project Number: Design Qualification Test Report	Tracking Code: 2604769_Report_Rev_1
Requested by: Ross Pritchett	Date: 5/13/2021
Part #: SMPM-PF-P-EG-ST-SM-1/RF047-A-M0SJ-505050-0100	
Part description: SMPM/RF047	Tech: Scott Rollefstad
Test Start: 1/19/2021	Test Completed: 2/26/2021





DESIGN QUALIFICATION TEST REPORT

SMPM/RF047
SMPM-PF-P-EG-ST-SM-1/RF047-A-M0SJ-505050-0100

REVISION HISTORY

DATA	REV.NUM.	DESCRIPTION	ENG
5/13/2021	**1**	**Initial Issue**	**KH**

CERTIFICATION

All instruments and measuring equipment were calibrated to National Institute for Standards and Technology (NIST) traceable standards according to IS0 10012-l and ANSI/NCSL 2540-1, as applicable.

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) After soldering, the parts to be used for LLCR and DWV/IR testing were cleaned according to CO-SC-WI-3029.
4) Either an automated cleaning procedure or an ultrasonic cleaning procedure may be used.
5) The automated procedure is used with aqueous compatible soldering materials.
6) Parts not intended for testing LLCR and DWV/IR are visually inspected and cleaned if necessary.
7) Any additional preparation will be noted in the individual test sequences.
8) Solder Information: Lead Free
9) Samtec Test PCBs used: PCB-110799-TST

FLOWCHARTS

IR/DWV

Pin-to-Ground

Group 1
SMPM-PF-P-EG-ST-SM-1
RF047-A-M0SJ-505050-0100
5 Assemblies

Note: CONNECTORS TESTED AFTER SOLDERED TO BOARD

Step	Description
1.	DWV at Test Voltage (1) - Non Standard Test Voltage = 325 V
2.	IR (3) - Non Standard
3.	DWV Breakdown (2) - Non Standard

Group 2
SMPM-PF-P-EG-ST-SM-1
RF047-A-M0SJ-505050-0100
6 Assemblies

Note: CONNECTORS TESTED AFTER SOLDERED TO BOARD

Step	Description
1.	LLCR (4) - Non Standard
2.	Cycles Quantity = 100 Cycles *Note: PER DSCC 10019*
3.	LLCR (4) - Non Standard MAX DELTA = 15 mOhm
4.	Connector Pull *Note: Record failure force (data only). 3 Samples.*
5.	Connector Shear *Note: Record failure force (data only). 3 Samples.*

Group 3
SMPM-PF-P-EG-ST-SM-1
RF047-A-M0SJ-505050-0100
5 Assemblies

Note: CONNECTORS TESTED WITHOUT BOARD

Step	Description
1.	Interface Gaging
2.	CENTER CONTACT RETENTION RETENTION FORCE = 1.5 lbs *Note: 1.5 pounds (24 oz.) (.002 max. contact movement). Contact movement change can be measured from any body reference surface (delta = before - after).*
3.	Interface Gaging

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(1) DWV at Test Voltage = Other
325 Vrms min. at sea level per DSCC 10019.
DWV test voltage is equal to 75% of the lowest breakdown voltage
Test voltage applied for 60 seconds. PER DSCC-10019 AND MIL-PRF-39012 (PARA 4.6.14)

(2) DWV Breakdown = Other
Record breakdown voltage. (Data only)
MIL-PRF-39012, Para 4.6.14

(3) IR = Other
5000 megohms min per DSCC 10019 and MIL-STD-202-302.
MIL-PRF-39012, Para 4.6.8

(4) LLCR = EIA-364-23
Open Circuit Voltage = 20 mV Max
Test Current = 100 mA Max

FLOWCHARTS Continued

Mechanical Shock/Random Vibration/Event Detection

Group 1
SMPM-PF-P-EG-ST-SM-1
RF047-A-M0SJ-505050-0100
5 Assemblies

Note: CONNECTORS TESTED AFTER SOLDERED TO BOARD

Step	Description
1.	LLCR (1) - Non Standard
2.	Mechanical Shock (2) - Non Standard
3.	Nanosecond Event Detection (Mechanical Shock) (3) - Non Standard
4.	High Frequency Vibration *Note: MIL-STD-202-204, Test Condition D per DSCC 10019. EXCPETION - 50 ns max. electrical interruption.*
5.	Nanosecond Event Detection (Random Vibration) (4) - Non Standard
6.	LLCR (1) - Non Standard MAX DELTA = 15 mOhm

(1) LLCR = EIA-364-23
Open Circuit Voltage = 20 mV Max
Test Current = 100 mA Max

(2) Mechanical Shock = Other
MIL-STD-202, Method 213, Test Condition H. EXCEPTION: 50ns Max electrical interruption.

(3) Nanosecond Event Detection (Mechanical Shock) = Other
Test condition H per DSCC 10019 (75 g). EXCEPTION: 50 ns max. electrical interruption.
MIL-STD-202-213

(4) Nanosecond Event Detection (Random Vibration) = Other
MIL-STD-202-204
Test condition D per DSCC 10019 (15 minutes min.). EXCEPTION - 50 ns max. electrical interruption.

FLOWCHARTS Continued

THERMAL SHOCK/CONTACT RESISTANCE

Group 1
SMPM-PF-P-EG-ST-SM-1
RF047-A-M0SJ-505050-0100
5 Assemblies

Note: CONNECTORS TESTED AFTER SOLDERED TO BOARD

Step	Description
1.	LLCR (1) - Non Standard
2.	Thermal Shock (2) - Non Standard
3.	LLCR (1) - Non Standard MAX DELTA = 15 mOhm

(1) LLCR = EIA-364-23
Open Circuit Voltage = 20 mV Max
Test Current = 100 mA Max

(2) Thermal Shock = Other
MIL-STD-202-107
Test condition B per DSCC 10019. Exception - high temperature to be +165°C. Visual inspection for damage.

ATTRIBUTE DEFINITIONS

The following is a brief, simplified description of attributes.

THERMAL SHOCK:

1) MIL-STD-202-107, *Thermal Shock (Temperature Cycling) Test Procedure for Electrical Connectors*.
2) Test Condition B per DSCC 10019. Exception – high temperature to be +165° C. Visual inspection for damage.
3) All test samples are pre-conditioned at ambient.
4) All test samples are exposed to environmental stressing in the mated condition.

MECHANICAL SHOCK (Specified Pulse):

1) Reference document: MIL-STD-202, *Mechanical Shock Test Procedure for Electrical Connectors*
2) Test Condition: MIL-STD-202, Method 213 Cond. I.

VIBRATION:

1) Reference document: MIL-STD-202, *Vibration Test Procedure for Electrical Connectors*
2) Test Condition: MIL-STD-202-204, Condition D per DSCC 10019.

NANOSECOND-EVENT DETECTION (Mechanical Shock):

1) Reference document: MIL-STD-202-213, *Nanosecond-Event Detection for Electrical Connectors*
2) Test condition H per DSCC 10019(75g).
3) Prior to test, the samples were characterized to assure the low nanosecond event being monitored will trigger the detector.
4) After characterization it was determined the test samples could be monitored for 50 nanosecond events

NANOSECOND-EVENT DETECTION (Random Vibration):

1) Reference document: MIL-STD-202-204, *Nanosecond-Event Detection for Electrical Connectors*
2) Test condition D per DSCC 10019(15 minutes min).
3) Prior to test, the samples were characterized to assure the low nanosecond event being monitored will trigger the detector.
4) After characterization it was determined the test samples could be monitored for 50 nanosecond events

LLCR:

1) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets*.
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. <= +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

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.
5000 megohms min per DSCC 10019 and MIL-STD-202-302. MIL-PRF-39012, Para 4.6.8.

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) Breakdown:
   Record breakdown voltage. (Data only). MIL-PRF-39012, para 4.6.14
2) Test Voltage
   a. 325 Vrms min. at sea level per DSCC 10019.
   b. DWV test voltage is equal to 75% of the lowest breakdown voltage.
   c. Test voltage applied for 60 seconds. Per DSCC-10019 and MIL-PRF-39012, PARA 4.6.14.

RESULTS

Push & Shear Force:

IR/DWV Group 2

Push force

- **Min ---------- 36.738 lbs**
- **Max ---------- 52.108 lbs**

Shear force

- **Min ---------- 83.760 lbs**
- **Max ---------- 88.460 lbs**

Interface Gaging

IR/DWV Group 3

Initial

- **Min ---------- 0.03188 inch**
- **Max ---------- 0.04474 inch**

After retention (1.5 lbs)

- **Min ---------- 0.03197 inch**
- **Max ---------- 0.04422 inch**

Insulation Resistance minimums, IR

IR/DWV Group 1

Pin to Ground

- **Initial**
  - **Mated ---------- 45000 Meg Ω ---------- Passed**
  - **Unmated ---------- 45000 Meg Ω ---------- Passed**

IR/DWV Group 3

Pin to Ground

- **Initial**
  - **Mated ---------- 45000 Meg Ω ---------- Passed**
  - **Unmated ---------- 45000 Meg Ω ---------- Passed**

Dielectric Withstanding Voltage minimums, DWV

IR/DWV Group 1

Pin to Ground

- **Breakdown Voltage ---------- 651 VAC**
- **Test Voltage ---------- 488 VAC**
- **Working Voltage ---------- 163 VAC**

- **Test Voltage ---------- 325 VAC**

IR/DWV Group 1

Pin to Ground

- **Initial DWV ---------- Passed**

Thermal Shock/Contact Resistance Group

Pin to Ground

- **After thermal shock DWV ---------- Passed**

RESULTS Continued

LLCR IR/DWV Group

Group 2 (5 Center contact and 5 Outer body LLCR test points)

Center contact

- **Initial ---------- 26.30 mOhms Max**
- **After 100 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**

Outer Body

- **Initial ---------- 20.46 mOhms Max**
- **After 100 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**

LLCR Thermal Shock (5 Center contact and 5 Outer body LLCR test points)

Center contact

- **Initial ---------- 25.64 mOhms Max**
- **After 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**

Outer Body

- **Initial ---------- 19.59 mOhms Max**
- **After 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**

RESULTS Continued

LLCR Shock & Vibration Group (5 Center contact and 5 Outer body LLCR test points)

Center contact

- **Initial ---------- 33.93 mOhms Max**
- **After Shock & Vibration**
  - **<= +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**

Outer body

- **Initial ----------8.75 mOhms Max**
- **After Shock & Vibration**
  - **<= +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**

Mechanical Shock & Random Vibration:

- **Shock**
  - **No Damage---------- ---------- Pass**
  - **50 Nanoseconds ---------- ---------- Pass**
- **Vibration**
  - **No Damage---------- ---------- Pass**
  - **50 Nanoseconds ---------- ---------- Pass**

DATA SUMMARIES

Push & Shear Force:

IR/DWV Group 2

Push force

	Force (lbs)
Minimum	**36.74**
Maximum	52.11
Average	42.69

Shear force

	Force (lbs)
Minimum	**83.76**
Maximum	88.46
Average	86.08

Interface Gaging

IR/DWV Group 3

Interface Gaging			
Sample	**Initial**	**1.5 Push Force**	**Delta**
Sample 1	0.03188	0.03197	0.00009
Sample 2	0.03673	0.03634	0.00039
Sample 3	0.04107	0.0404	0.00067
Sample 4	0.04062	0.04036	0.00026
Sample 5	0.04474	0.04422	0.00052
Min	0.03188	0.03197	0.00009
Max	0.04474	0.04422	0.00067
Avg	0.039008	0.038658	0.000386

DATA SUMMARIES Continued

INSULATION RESISTANCE (IR):

IR/DWV Group 1

	Pin to Ground
	Mated
	SMPM/RF047
	IR
Minimum	45000
Maximum	45000
Average	45000

IR/DWV Group 3

	Pin to Ground
	Mated
	SMPM/RF047
	IR
Minimum	45000
Maximum	45000
Average	45000

DIELECTRIC WITHSTANDING VOLTAGE (DWV):

IR/DWV Group 1

Breakdown

Voltage Rating Summary	
Minimum	SMPM/RF047
Break Down Voltage	769
Test Voltage	577
Working Voltage	192

DWV

	Pin to Ground
	Mated
	SMPM/RF047
	DWV
Minimum	325
Maximum	325
Average	325

DATA SUMMARIES Continued

Thermal Shock/Contact Resistance Group

Pin to Ground	
Mated	
SMPM/RF047	
	DWV
Minimum	325
Maximum	325
Average	325

DATA SUMMARIES Continued

LLCR IR/DWV:

1) A total of 5 center contact and 5 outer body 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. <= +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

Group 2

	LLCR Measurement Summaries by Pin Type			
Date	2021/2/2	2021/2/8		
Room Temp (Deg C)	23	23		
Rel Humidity (%)	36	36		
Technician	Scott Rollefstad	Scott Rollefstad		
mOhm values	**Actual Initial**	**Delta Cycles**		
	Pin Type: CENTER CONTACT			
Average	24.30	0.37		
St. Dev.	1.66	0.31		
Min	22.15	0.10		
Max	26.3	0.94		
Summary Count	5	5		
Total Count	5	5		
	Pin Type: OUTER BODY			
Average	17.45	0.25		
St. Dev.	2.07	0.04		
Min	15.39	0.22		
Max	20.46	0.29		
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**
100 CYCLES	10	0	0	0	0	0

DATA SUMMARIES Continued

LLCR Thermal Shock/Contact Resistance:

1) 1）A total of 5 center contact and 5 outer body 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. <= +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	2021/2/2	2021/2/8		
Room Temp (Deg C)	23	23		
Rel Humidity (%)	36	36		
Technician	Scott Rollefstad	Scott Rollefstad		
mOhm values	**Actual Initial**	**THERMAL SHOCK**		
	Pin Type: CENTER CONTACT			
Average	23.30	0.28		
St. Dev.	1.63	0.36		
Min	21.27	0.01		
Max	25.64	1.09		
Summary Count	5	5		
Total Count	5	5		
	Pin Type: OUTTER BODY			
Average	16.85	0.05		
St. Dev.	1.85	0.04		
Min	14.94	0.01		
Max	19.59	0.09		
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**
THERMAL SHOCK	**10**	**0**	**0**	**0**	**0**	**0**

DATA SUMMARIES Continued

LLCR Shock &Vibration Group:

1) A total of 5 center contact and 5 outer body 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. <= +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	12/8/2020	1/19/2021		
Room Temp (Deg C)	23	23		
Rel Humidity (%)	36	34		
Technician	Scott Rollefstad	Scott Rollefstad		
mOhm values	Actual **Initial**	**Delta Shock-Vib**		
Pin Type: Center Contact				
Average	33.50	0.21		
St. Dev.	0.32	0.17		
Min	33.15	0.08		
Max	33.93	0.54		
Summary Count	5	5		
Total Count	5	5		
Pin Type: Outer Body				
Average	8.57	0.16		
St. Dev.	0.25	0.13		
Min	8.39	0.03		
Max	8.75	0.37		
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**
SHOCK/VIBE	10	0	0	0	0	0

Nanosecond Event Detection:

Shock and Vibration Event Detection Summary	
Contacts tested	SMPM-PF-P-EE-ST-SM-1/PRFM0-J-C-HG-047A-SD
Test Condition	MIL-STD-202-213 CONDITION H
Shock Events	0
Test Condition	MIL-STD-202-204
Vibration Events	0
Total Events	0

EQUIPMENT AND CALIBRATION SCHEDULES

Equipment #: TCT-04
Description: Dillon Quantrol TC21 25-1000 mm/min series test stand
Manufacturer: Dillon Quantrol
Model: TC2 I series test stand
Serial #: 04-1041-04
Accuracy: Speed Accuracy: +/- 5% of indicated speed; Speed Accuracy: +/- 5% of indicated speed;
… Last Cal: 05/29/2020, Next Cal: 05/29/2021

Equipment #: MO-11
Description: Switch/Multimeter
Manufacturer: Keithley
Model: 3706
Serial #: 120169
Accuracy: See Manual
… Last Cal: 09/11/2020, Next Cal: 09/11/2021

Equipment #: TSC-01
Description: Vertical Thermal Shock Chamber
Manufacturer: Cincinnati Sub Zero
Model: VTS-3-6-6-SC/AC
Serial #: 10-VT14993
Accuracy: See Manual
… Last Cal: 06/30/2020, Next Cal: 06/30/2021

Equipment #: HPT-01
Description: Hipot Safety Tester
Manufacturer: Vitrek
Model: V73
Serial #: 019808
Accuracy:
… Last Cal: 05/15/2020, Next Cal: 05/15/2021

Equipment #: MO-04
Description: Multimeter /Data Acquisition System
Manufacturer: Keithley
Model: 2700
Serial #: 0798688
Accuracy: See Manual
… Last Cal: 09/11/2020, Next Cal: 09/11/2021

Equipment #: PS-02
Description: Power Supply
Manufacturer: Hewlett-Packer
Model: 6033A
Serial #: N/A
Accuracy: See Manual
… Last Cal: NOT CALIBRATED

EQUIPMENT AND CALIBRATION SCHEDULES

Equipment #: SVC-01
Description: Shock & Vibration Table
Manufacturer: Data Physics
Model: LE-DSA-10-20K
Serial #: 10037
Accuracy: See Manual
… Last Cal: 04/22/2020, Next Cal: 04/22/2021

Equipment #: ACLM-01
Description: Accelerometer
Manufacturer: PCB Piezotronics
Model: 352C03
Serial #: 115819
Accuracy: See Manual
… Last Cal: 07/18/2020, Next Cal: 07/18/2021

Equipment #: ED-03
Description: Event Detector
Manufacturer: Analysis Tech
Model: 32EHD
Serial #: 1100604
Accuracy: See Manual
… Last Cal: 10/31/2020, Next Cal: 10/31/2021