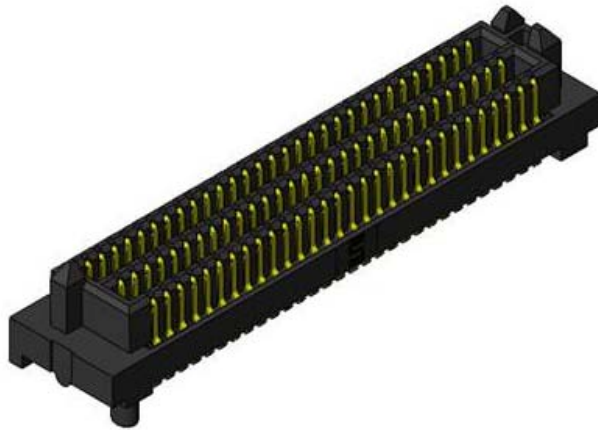
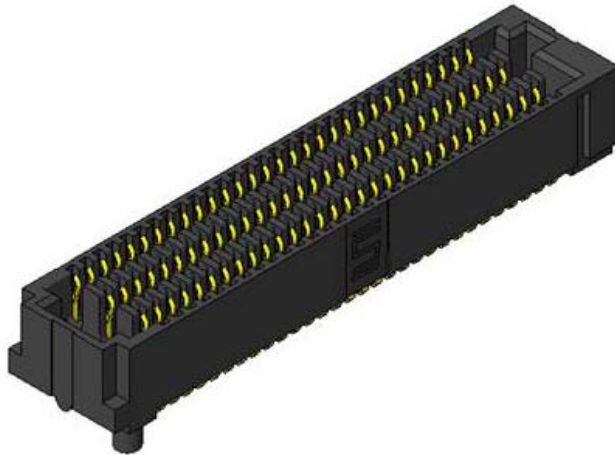




Project Number: Design Verification Test Report		Tracking Code: TC1021—3406_Report_Rev_5	
Requested by: Corey Rose		Date: 4/1/2015	Product Rev: 0
Part #: SEAF8-30-05.0-L-06-2-TR/ SEAM8-30-S05.0-L-06-2-TR SEAM8-50-S05.0-S-10-2-K/SEAF8-50-05.0-S-10-2-K		Lot #: na	Tech: Aaron McKim Tony Wagoner
Part description: SEAx8			Qty to test: 150
Test Start: 6/2/2010		Test Completed: 8/19/2010	



DESIGN VERIFICATION TEST REPORT

SEAx8

SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Tracking Code: TC1021—3406_Report_Rev_5	Part #: SEAF8-30-05.0-L-06-2-TR/ SEAM8-30-S05.0-L-06-2-TR SEAM8-50-S05.0-S-10-2-K/SEAF8-50-05.0-S-10-2-K
Part description: SEAx8	

REVISION HISTORY

DATA	REV.NUM.	DESCRIPTION	ENG
3/17/2015	4	Add the gas tight, durability test data	PC
4/1/2015	5	Add the Shock and Vibration test data	KH

Tracking Code: TC1021—3406_Report_Rev_5	Part #: SEAF8-30-05.0-L-06-2-TR/ SEAM8-30-S05.0-L-06-2-TR
Part description: SEAx8	

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

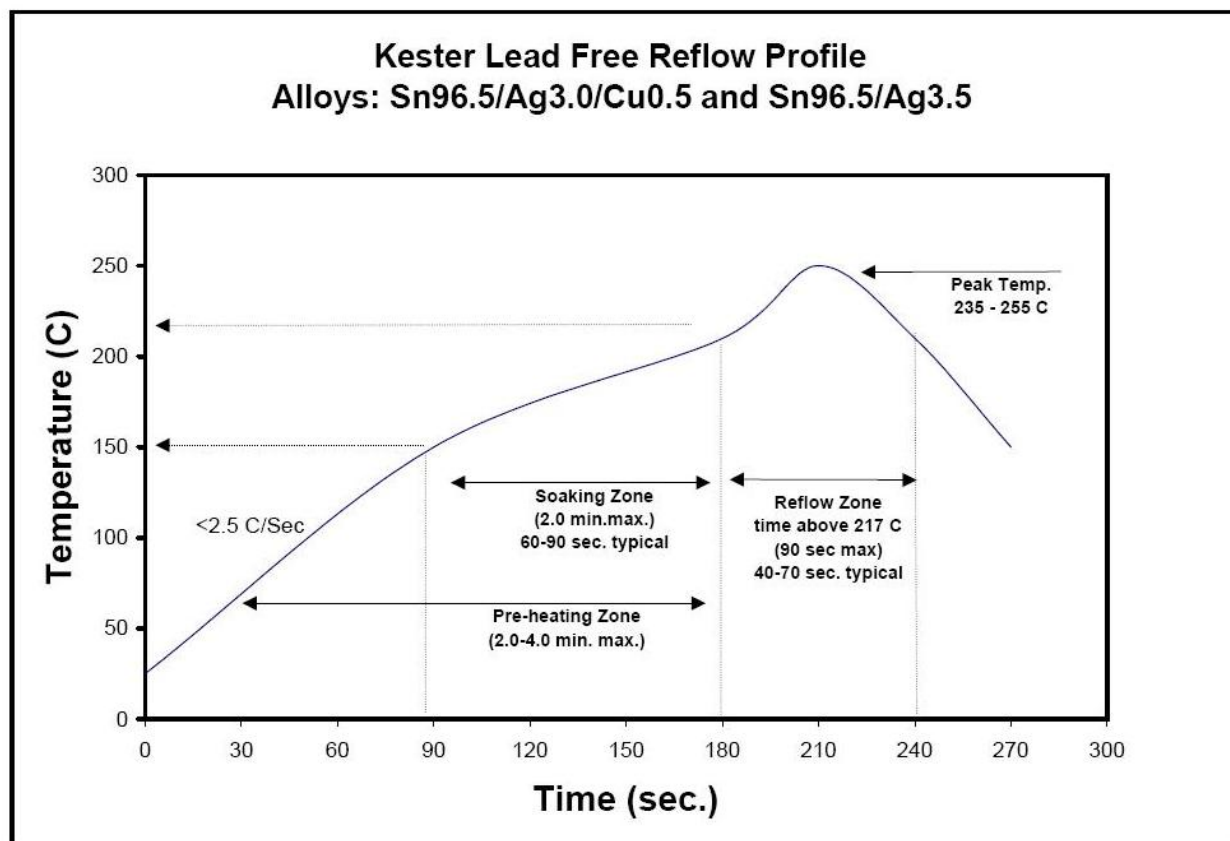
To perform the following tests: Design verification test. See test plan.

APPLICABLE DOCUMENTS

Standards: EIA Publication 364

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 TLWI-0001.
- 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) Re-Flow Time/Temp: See accompanying profile.
- 10) Samtec Test PCBs used: PCB-102170-TST/ PCB-102179-TST

TYPICAL OVEN PROFILE (Soldering Parts to Test Boards)

Tracking Code: TC1021—3406_Report_Rev_5	Part #: SEAF8-30-05.0-L-06-2-TR/ SEAM8-30-S05.0-L-06-2-TR
Part description: SEAx8	

FLOWCHARTS

Gas Tight

TEST STEP	GROUP A1 192 Points
01	LLCR-1
02	Gas Tight
03	LLCR-2

Gas Tight = EIA-364-36A

LLCR = EIA-364-23, LLCR

use Keithley 580 in the dry circuit mode, 10 mA Max

FLOWCHARTS CONTINUED**Mating/Unmating/Gaps/Normal Force/Deflection Force**

TEST STEP	GROUP A1 10 Boards (smallest position submitted)	GROUP B1 Individual Contacts (8-10 min)	GROUP B2 Individual Contacts (8-10 min)
01	Contact Gaps	Contact Gaps	Contact Gaps
02	Mating / Unmating	Setup Approved	Setup Approved
03	25 Cycles	Normal Force (in the body and soldered on PCB unless otherwise specified)	Thermal Aging (Mated)
04	Clean w/Compressed Air		Contact Gaps
05	Mating / Unmating		Normal Force (in the body and soldered on PCB unless otherwise specified)
06	Contact Gaps		
07	Thermal Aging (Mated)		
08	Mating / Unmating		
09	Contact Gaps		
10	Cyclic Humidity (Mated)		
11	Mating / Unmating		

Thermal Aging = EIA-364-17, Test Condition 4 (105°C)

Time Condition 'B' (250 Hours)

Humidity = EIA-364-31, Test Condition B (240 Hours)

and Method III (+25°C to +65°C @ 90% RH to 98% RH)

ambient pre-condition and delete steps 7a and 7b

Mating/Un-Mating Forces = EIA-364-13

Normal Force = EIA-364-04

(Perpendicular) displacement Force = 12.7 mm/min +/- 6 mm/min

Spec is 50 N @ 1 mm displacement

Contact Gaps/Height - No standard method. Usually measured optically

FLOWCHARTS CONTINUED**IR & DWV**

TEST STEP	GROUP A1 2 Mated Sets Break Down - Pin to Pin	GROUP A2 2 Unmated of Part # Being Tested Break Down - Pin to Pin	GROUP A3 2 Unmated of Mating Part # Break Down - Pin to Pin	GROUP B1 2 Mated Sets Pin to Pin	GROUP B2 2 Mated Sets Pin to Pin
01	DWV/Break Down Voltage	DWV/Break Down Voltage	DWV/Break Down Voltage	IR & DWV at test voltage (on both mated sets and on each connector unmated)	IR & DWV at test voltage (on both mated sets and on each connector unmated)
02				Thermal Aging (both sets unmated)	Thermal Shock (both sets unmated)
03				IR & DWV at test voltage (on both mated sets and on each connector unmated)	IR & DWV at test voltage (on both mated sets and on each connector unmated)
04				Cyclic Humidity (both sets unmated)	Cyclic Humidity (both sets unmated)
05				IR & DWV at test voltage (on both mated sets and on each connector unmated)	IR & DWV at test voltage (on both mated sets and on each connector unmated)

DWV on group B1 to be performed at Test Voltage

DWV test voltage is equal to 75% of the lowest break down voltage from group A1, A2 or A3

Thermal Aging = EIA-364-17, Test Condition 4 (105°C)

Time Condition 'B' (250 Hours)

Thermal Shock = EIA-364-32, Table II, Test Condition I:

-55 ° C to +85 ° C 1/2 hour dwell, 100 cycles

Humidity = EIA-364-31, Test Condition B (240 Hours)

and Method III (+25°C to +65°C @ 90% RH to 98% RH)

ambient pre-condition and delete steps 7a and 7b

IR = EIA-364-21

DWV = EIA-364-20, Test Condition 1

Additional Groups Below May Be Needed Based Upon Part Options and Geometry

TEST STEP	GROUP C1 2 Mated Sets Break Down - Row to Row	GROUP C2 2 Unmated of Part # Being Tested Break Down - Row to Row	GROUP C3 2 Unmated of Mating Part # Break Down - Row to Row	GROUP D1 2 Mated Sets Row to Row	GROUP D2 2 Mated Sets Row to Row
01	DWV/Break Down Voltage	DWV/Break Down Voltage	DWV/Break Down Voltage	IR & DWV at test voltage (on both mated sets and on each connector unmated)	IR & DWV at test voltage (on both mated sets and on each connector unmated)
02				Thermal Aging (both sets unmated)	Thermal Shock (both sets unmated)
03				IR & DWV at test voltage (on both mated sets and on each connector unmated)	IR & DWV at test voltage (on both mated sets and on each connector unmated)
04				Cyclic Humidity (both sets unmated)	Cyclic Humidity (both sets unmated)
05				IR & DWV at test voltage (on both mated sets and on each connector unmated)	IR & DWV at test voltage (on both mated sets and on each connector unmated)

FLOWCHARTS CONTINUED**Durability/Thermal Age/Cyclic Humidity**

TEST STEP	GROUP A1 192 Points 25 Cycles
01	LLCR-1
02	25 Cycles
03	Clean Mating Interface
04	LLCR-2
05	Thermal Age (Mated and undisturbed)
06	LLCR-3
07	Cyclic Humidity (Mated and undisturbed)
08	LLCR-4

TEST STEP	GROUP A2 192 Points 25 Cycles
01	LLCR-1
02	25 Cycles
03	Clean Mating Interface
04	LLCR-2
05	Thermal Shock (mated and undisturbed)
06	LLCR-3
07	Cyclic Humidity (Mated and undisturbed)
08	LLCR-4

Thermal Aging = EIA-364-17, Test Condition 4 (105°C)

Time Condition 'B' (250 Hours)

Thermal Shock =EIA-364-32, Table II, Test Condition I:

-55 ° C to +85 ° C 1/2 hour dwell, 100 cycles

Humidity =EIA-364-31, Test Condition 'B' (240 Hours)

and Method III (+25°C to +65°C @ 90% RH to 98% RH)

ambient pre-condition and delete steps 7a and 7b

LLCR = EIA-364-23, LLCR

use Keithley 580 in the dry circuit mode, 10 mA Max

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

SEAM8-50-S05.0-S-10-2-K

SEAF8-50-05.0-S-10-2-K

8 Assemblies

Step	Description
1.	Contact Gaps
2.	LLCR (2)
3.	Mating/Unmating Force (3)
4.	Cycles Quantity = 25 Cycles
5.	Mating/Unmating Force (3)
6.	Contact Gaps
7.	LLCR (2) Max Delta = 15 mOhm
8.	Thermal Shock (4)
9.	LLCR (2) Max Delta = 15 mOhm
10.	Humidity (1)
11.	LLCR (2) Max Delta = 15 mOhm
12.	Mating/Unmating Force (3)

(1) Humidity = EIA-364-31

Test Condition = B (240 Hours)

Test Method = III (+25°C to +65°C @ 90% RH to 98% RH)

Test Exceptions: ambient pre-condition and delete steps 7a and 7b

(2) LLCR = EIA-364-23

Open Circuit Voltage = 20 mV Max

Test Current = 100 mA Max

(3) Mating/Unmating Force = EIA-364-13

(4) Thermal Shock = EIA-364-32

Exposure Time at Temperature Extremes = 1/2 Hour

Method A, Test Condition = I (-55°C to +85°C)

Test Duration = A-3 (100 Cycles)

Tracking Code: TC1021—3406_Report_Rev_5	Part #: SEAF8-30-05.0-L-06-2-TR/ SEAM8-30-S05.0-L-06-2-TR
Part description: SEAx8	

FLOWCHARTS CONTINUED

Current Carrying Capacity

<u>Group 1</u> SEAF8-50-05.0-S-10-2 SEAM8-50-S05.0-S-10-2 10 Pins Powered Signal		<u>Group 2</u> SEAF8-50-05.0-S-10-2 SEAM8-50-S05.0-S-10-2 20 Pins Powered Signal		<u>Group 3</u> SEAF8-50-05.0-S-10-2 SEAM8-50-S05.0-S-10-2 30 Pins Powered Signal		<u>Group 4</u> SEAF8-50-05.0-S-10-2 SEAM8-50-S05.0-S-10-2 40 Pins Powered Signal	
Step	Description	Step	Description	Step	Description	Step	Description
1.	CCC ⁽¹⁾ Rows = 10 Number of Positions = 1	1.	CCC ⁽¹⁾ Rows = 10 Number of Positions = 2	1.	CCC ⁽¹⁾ Rows = 10 Number of Positions = 3	1.	CCC ⁽¹⁾ Rows = 10 Number of Positions = 4

<u>Group 5</u> SEAF8-50-05.0-S-10-2 SEAM8-50-S05.0-S-10-2 500 Pins Powered Signal	
Step	Description
1.	CCC ⁽¹⁾ Rows = 10 Number of Positions = 50

(1) CCC = EIA-364-70
Method 2, Temperature Rise Versus Current Curve
(TIN PLATING) - Tabulate calculated current at RT, 65°C, 75°C and 95°C after derating 20% and based on 105°C
(GOLD PLATING) - Tabulate calculated current at RT, 85°C, 95°C and 115°C after derating 20% and based on 125°C

FLOWCHARTS CONTINUED**Mechanical Shock / Vibration / LLCR**

TEST STEP	GROUP A1 8 boards
01	LLCR-1
02	Shock
03	Vibration
04	LLCR-2

Mechanical Shock = EIA 364-27 Half Sine,

100 g's, 6 milliSeconds (Condition "C") each axis

Vibration = EIA 364-28, Random Vibration

7.56 g RMS, Condition VB --- 2 hours/axis

LLCR = EIA-364-23, LLCR

20 mV Max, 100 mA Max

Use Keithley 580 or 3706 in 4 wire dry circuit mode

Shock / Vibration / nanoSecond Event Detection

TEST STEP	GROUP A1 30 Points
01	Event Detection, Shock
02	Event Detection, Vibration

Mechanical Shock = EIA 364-27 Half Sine,

100 g's, 6 milliSeconds (Condition "C") each axis

Vibration = EIA 364-28, Random Vibration

7.56 g RMS, Condition VB --- 2 hours/axis

Event detection requirement during Shock / Vibration is 50 nanoseconds minimum

ATTRIBUTE DEFINITIONS

The following is a brief, simplified description of attributes.

THERMAL AGEING:

- 1) EIA-364-17, *Temperature Life with or without Electrical Load Test Procedure for Electrical Connectors*.
- 2) Test Condition 4 at 105° C.
- 3) Test Time Condition B for 250 hours.
- 4) All test samples are pre-conditioned at ambient.
- 5) All test samples are exposed to environmental stressing in the mated condition.

THERMAL SHOCK:

- 1) EIA-364-32, *Thermal Shock (Temperature Cycling) Test Procedure for Electrical Connectors and Sockets*
- 2) Table II, Test Condition I.
- 3) -55 ° C to +85 ° C 1/2 hour dwell, 100 cycles
- 4) All test samples are pre-conditioned at ambient.

HUMIDITY:

- 1) Reference document: EIA-364-31, *Humidity Test Procedure for Electrical Connectors*.
- 2) Test Condition B, 240 Hours.
- 3) Method III, +25° C to + 65° C, 90% to 98% Relative Humidity excluding sub-cycles 7a and 7b.
- 4) All samples are pre-conditioned at ambient.
- 5) All test samples are exposed to environmental stressing in the mated condition.

MECHANICAL SHOCK (Specified Pulse):

- 1) Reference document: EIA-364-27, *Mechanical Shock Test Procedure for Electrical Connectors*
- 2) Test Condition C
- 3) Peak Value: 100 G
- 4) Duration: 6 Milliseconds
- 5) Wave Form: Half Sine
- 6) Velocity: 12.3 ft/s
- 7) Number of Shocks: 3 Shocks / Direction, 3 Axis (18 Total)

VIBRATION:

- 1) Reference document: EIA-364-28, *Vibration Test Procedure for Electrical Connectors*
- 2) Test Condition V, Letter B
- 3) Power Spectral Density: 0.04 G² / Hz
- 4) G 'RMS': 7.56
- 5) Frequency: 50 to 2000 Hz
- 6) Duration: 2.0 Hours per axis (3 axis total)

NANOSECOND-EVENT DETECTION:

- 1) Reference document: EIA-364-87, *Nanosecond-Event Detection for Electrical Connectors*
- 2) Prior to test, the samples were characterized to assure the low nanosecond event being monitored will trigger the detector.
- 3) After characterization it was determined the test samples could be monitored for 50 nanosecond events

TEMPERATURE RISE (Current Carrying Capacity, CCC):

- 1) EIA-364-70, *Temperature Rise versus Current Test Procedure for Electrical Connectors and Sockets*.
- 2) When current passes through a contact, the temperature of the contact increases as a result of I^2R (resistive) heating.
- 3) The number of contacts being investigated plays a significant part in power dissipation and therefore temperature rise.
- 4) The size of the temperature probe can affect the measured temperature.
- 5) Copper traces on PC boards will contribute to temperature rise:
 - a. Self heating (resistive)
 - b. Reduction in heat sink capacity affecting the heated contacts
- 6) A de-rating curve, usually 20%, is calculated.
- 7) Calculated de-rated currents at four temperature points are reported:
 - a. Ambient
 - b. 85° C
 - c. 95° C
 - d. 115° C
- 8) Typically, neighboring contacts (in close proximity to maximize heat build up) are energized.
- 9) The thermocouple (or temperature measuring probe) will be positioned at a location to sense the maximum temperature in the vicinity of the heat generation area.
- 10) A computer program, *TR 803.exe*, ensures accurate stability for data acquisition.
- 11) Hook-up wire cross section is larger than the cross section of any connector leads/PC board traces, jumpers, etc.
- 12) Hook-up wire length is longer than the minimum specified in the referencing standard.

CONTACT GAPS:

- 1) Gaps above the surrounding plastic surface were measured before and after stressing the contacts (e.g. thermal aging, mechanical cycling, etc.).
- 2) Typically, all contacts on the connector are measured.

MATING/UNMATING:

- 1) Reference document: EIA-364-13, *Mating and Unmating Forces Test Procedure for Electrical Connectors*.
- 2) The full insertion position was to within 0.003” to 0.004” of the plug bottoming out in the receptacle to prevent damage to the system under test.
- 3) One of the mating parts is secured to a floating X-Y table to prevent damage during cycling.

NORMAL FORCE (FOR CONTACTS TESTED IN THE HOUSING):

- 1) Reference document: EIA-364-04, *Normal Force Test Procedure for Electrical Connectors*.
- 2) The contacts shall be tested in the connector housing.
- 3) If necessary, a “window” shall be made in the connector body to allow a probe to engage and deflect the contact at the same attitude and distance (plus 0.05 mm [0.002”]) as would occur in actual use.
- 4) The connector housing shall be placed in a holding fixture that does not interfere with or otherwise influence the contact force or deflection.
- 5) Said holding fixture shall be mounted on a floating, adjustable, X-Y table on the base of the Dillon TC², computer controlled test stand with a deflection measurement system accuracy of 5.0 µm (0.0002”).
- 6) The nominal deflection rate shall be 5 mm (0.2”)/minute.
- 7) Unless otherwise noted a minimum of five contacts shall be tested.
- 8) The force/deflection characteristic to load and unload each contact shall be repeated five times.
- 9) The system shall utilize the TC² software in order to acquire and record the test data.
- 10) The permanent set of each contact shall be measured within the TC² software.
- 11) The acquired data shall be graphed with the deflection data on the X-axis and the force data on the Y-axis and a print out will be stored with the Tracking Code paperwork.

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: EIA-364-21, *Insulation Resistance Test Procedure for Electrical Connectors*.
 - 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 5000 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: EIA-364-20, *Withstanding Voltage Test Procedure for Electrical Connectors*.
- b. Test Conditions:
 - i. Between Adjacent Contacts or Signal-to-Ground
 - ii. Barometric Test Condition 1
 - 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).

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. $\leq +5.0$ 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 $+2000$ mOhms: ----- Unstable
 - f. $>+2000$ mOhms: ----- Open Failure

GAS TIGHT:

To provide method for evaluating the ability of the contacting surfaces in preventing penetration of harsh vapors which might lead to oxide formation that may degrade the electrical performance of the contact system.

- 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. $\leq +5.0$ 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 $+2000$ mOhms: ----- Unstable
 - f. $>+2000$ mOhms: ----- Open Failure
- 4) Procedure:
 - a. Reference document: EIA-364-36, *Test Procedure for Determination of Gas-Tight Characteristics for Electrical Connectors, Sockets and/or Contact Systems*.
 - b. Test Conditions:
 - i. Class II--- Mated pairs of contacts assembled to their plastic housings.
 - ii. Reagent grade Nitric Acid shall be used of sufficient volume to saturate the test chamber
 - iii. The ratio of the volume of the test chamber to the surface area of the acid shall be 10:1.
 - iv. The chamber shall be saturated with the vapor for at least 15 minutes before samples are added.
 - v. Exposure time, 55 to 65 minutes.
 - vi. The samples shall be no closer to the chamber walls than 1 inches and no closer to the surface of the acid than 3 inches.
 - vii. The samples shall be dried after exposure for a minimum of 1 hour.
 - viii. Drying temperature 50° C
 - ix. The final LLCR shall be conducted within 1 hour after drying.

RESULTS**Temperature Rise, CCC at a 20% de-rating**

- CCC for a 30°C Temperature Rise-----1.3 A per contact with 10 adjacent contacts powered
- CCC for a 30°C Temperature Rise-----0.9 A per contact with 20 adjacent contacts powered
- CCC for a 30°C Temperature Rise-----0.7 A per contact with 30 adjacent contacts powered
- CCC for a 30°C Temperature Rise-----0.7 A per contact with 40 adjacent contacts powered
- CCC for a 30°C Temperature Rise-----0.3 A per contact with 500 adjacent contacts powered

Contact Gaps**SEAF8**

- Initial
 - Min-----0.3380 mm
 - Max-----0.4320 mm
- After 25 Cycles
 - Min-----0.3540 mm
 - Max-----0.4400 mm
- Thermal
 - Min-----0.3720 mm
 - Max-----0.4640 mm

Contact Gaps**SEAM8**

- Initial
 - Min-----0.7940 mm
 - Max-----0.9979 mm
- After 25 Cycles
 - Min-----0.7900 mm
 - Max-----0.9539 mm
- Thermal
 - Min-----0.8040 mm
 - Max-----0.9960 mm

Contact Gaps**SEAF8**

- Initial
 - Min-----0.3400 mm
 - Max-----0.4260 mm
- Thermal
 - Min-----0.3340 mm
 - Max-----0.4260 mm

Contact Gaps**SEAM8**

- Initial
 - Min-----0.8060 mm
 - Max-----0.9899 mm
- Thermal
 - Min-----0.8160 mm
 - Max-----0.9719 mm

Mating – Unmating Forces**SEAF8-30-05.0-L-06-2-TR/SEAM8-30-S05.0-L-06-2-TR**

- **Initial**
 - **Mating**
 - **Min** ----- 7.06 Lbs
 - **Max** ----- 10.48 Lbs
 - **Unmating**
 - **Min** ----- 4.18 Lbs
 - **Max** ----- 7.11 Lbs
- **After 25 Cycles**
 - **Mating**
 - **Min** ----- 8.91 Lbs
 - **Max** ----- 11.70 Lbs
 - **Unmating**
 - **Min** ----- 4.59 Lbs
 - **Max** ----- 6.40 Lbs
- **Thermal**
 - **Mating**
 - **Min** ----- 5.49 Lbs
 - **Max** ----- 6.48 Lbs
 - **Unmating**
 - **Min** ----- 2.56 Lbs
 - **Max** ----- 3.38 Lbs
- **Humidity**
 - **Mating**
 - **Min** ----- 6.15 Lbs
 - **Max** ----- 7.38 Lbs
 - **Unmating**
 - **Min** ----- 3.33 Lbs
 - **Max** ----- 3.93 Lbs

SEAM8-50-S05.0-S-10-2-K/SEAF8-50-05.0-S-10-2-K

- **Initial**
 - **Mating**
 - **Min** ----- 26.57 Lbs
 - **Max** ----- 30.53 Lbs
 - **Unmating**
 - **Min** ----- 21.99 Lbs
 - **Max** ----- 26.04 Lbs
- **After 25 Cycles**
 - **Mating**
 - **Min** ----- 30.67 Lbs
 - **Max** ----- 34.74 Lbs
 - **Unmating**
 - **Min** ----- 18.05 Lbs
 - **Max** ----- 22.31 Lbs
- **Humidity**
 - **Mating**
 - **Min** ----- 19.42 Lbs
 - **Max** ----- 21.60 Lbs
 - **Unmating**
 - **Min** ----- 11.86 Lbs
 - **Max** ----- 15.12 Lbs

Normal Force at .009" deflection

- **Initial**
 - Min-----46.30 g Set ---- 0.0001"
 - Max-----51.30 g Set ---- 0.0002"
- **Thermal**
 - Min-----39.70 g Set ---- 0.0001"
 - Max-----55.70 g Set ---- 0.0002"

Insulation Resistance minimums, IR**Group B1 (Pin to pin)**

- **Initial**
 - Mated-----100,000 Meg Ω ----- Pass
 - Unmated -----100,000 Meg Ω ----- Pass
- **Thermal ageing**
 - Mated-----100,000 Meg Ω ----- Pass
 - Unmated -----100,000 Meg Ω ----- Pass
- **Humidity**
 - Mated-----100,000 Meg Ω ----- Pass
 - Unmated -----100,000 Meg Ω ----- Pass

Group B2 (Pin to pin)

- **Initial**
 - Mated-----100,000 Meg Ω ----- Pass
 - Unmated -----100,000 Meg Ω ----- Pass
- **Thermal shock**
 - Mated-----25,000 Meg Ω ----- Pass
 - Unmated -----20,000 Meg Ω ----- Pass
- **Humidity**
 - Mated-----15,000 Meg Ω ----- Pass
 - Unmated -----15,000 Meg Ω ----- Pass

Group D1 (Row to row)

- **Initial**
 - Mated-----100,000 Meg Ω ----- Pass
 - Unmated -----100,000 Meg Ω ----- Pass
- **Thermal ageing**
 - Mated-----100,000 Meg Ω ----- Pass
 - Unmated -----100,000 Meg Ω ----- Pass
- **Humidity**
 - Mated-----100,000 Meg Ω ----- Pass
 - Unmated -----100,000 Meg Ω ----- Pass

Group D2 (Row to row)

- **Initial**
 - Mated-----100,000 Meg Ω ----- Pass
 - Unmated -----100,000 Meg Ω ----- Pass
- **Thermal shock**
 - Mated-----100,000 Meg Ω ----- Pass
 - Unmated -----100,000 Meg Ω ----- Pass
- **Humidity**
 - Mated-----15,000 Meg Ω ----- Pass
 - Unmated -----15,000 Meg Ω ----- Pass

Dielectric Withstanding Voltage minimums, DWV**Group B1 (Pin to pin)**

- **Minimums**
 - Breakdown Voltage-----880 VAC
 - Test Voltage -----660 VAC
 - Working Voltage -----220 VAC
- **Initial DWV -----Passed**
- **Thermal Ageing DWV -----Passed**
- **Humidity DWV-----Passed**

Group B2 (Pin to pin)

- **Minimums**
 - Breakdown Voltage-----880 VAC
 - Test Voltage -----660 VAC
 - Working Voltage -----220 VAC
- **Initial DWV -----Passed**
- **Thermal Shock DWV -----Passed**
- **Humidity DWV-----Passed**

Group D1 (Row to row)

- **Minimums**
 - Breakdown Voltage-----880 VAC
 - Test Voltage -----660 VAC
 - Working Voltage -----220 VAC
- **Initial DWV -----Passed**
- **Thermal Ageing DWV -----Passed**
- **Humidity DWV-----Passed**

Group D2 (Row to row)

- **Minimums**
 - Breakdown Voltage-----880 VAC
 - Test Voltage -----660 VAC
 - Working Voltage -----220 VAC
- **Initial DWV -----Passed**
- **Thermal Shock DWV -----Passed**
- **Humidity DWV-----Passed**

LLCR Durability (192 LLCR test points)**SEAF8-30-05.0-L-06-2-TR/SEAM8-30-S05.0-L-06-2-TR****Group A1**

- **Initial**----- 18.2 mOhms Max
- **Durability, 25 Cycles**
 - o <= +5.0 mOhms ----- 191 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 0 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 1 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure
- **Thermal ageing**
 - o <= +5.0 mOhms ----- 191 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 1 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure
- **Humidity**
 - o <= +5.0 mOhms ----- 191 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 1 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure

Group A2

- **Initial**----- 19.0 mOhms Max
- **Durability, 25 Cycles**
 - o <= +5.0 mOhms ----- 192 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 0 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure
- **Thermal Shock**
 - o <= +5.0 mOhms ----- 192 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 0 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure
- **Humidity**
 - o <= +5.0 mOhms ----- 191 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 0 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 1 Points ----- Open Failure *

* Remark: The test board on sample 8 / position 9 had poor plating in the via connecting the inside row of test points to the solder pad causing high resistance reading post humidity. This is a failure in the test board and not the product.

SEAM8-50-S05.0-S-10-2-K/SEAF8-50-05.0-S-10-2-K

- **Initial**----- 17.47 mOhms Max
- **Durability, 25 Cycles**
 - o <= +5.0 mOhms ----- 192 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 0 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure
- **Thermal shock**
 - o <= +5.0 mOhms ----- 192 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 0 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure
- **Humidity**
 - o <= +5.0 mOhms ----- 192 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 0 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure

LLCR Gas Tight (192 LLCR test points)**SEAM8-50-S05.0-S-10-2-K/SEAF8-50-05.0-S-10-2-K**

- **Initial**----- 17.15 mOhms Max
- **Gas-Tight**
 - o <= +5.0 mOhms ----- 192 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 0 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure

LLCR Shock & Vibration (192 LLCR test points)

- **Initial**----- 20.68 mOhms Max
- **Shock & Vibration**
 - o <= +5.0 mOhms ----- 191 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 1 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure

Mechanical Shock & Random Vibration:

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

DATA SUMMARIES**TEMPERATURE RISE - SIGNALS (Current Carrying Capacity, CCC):**

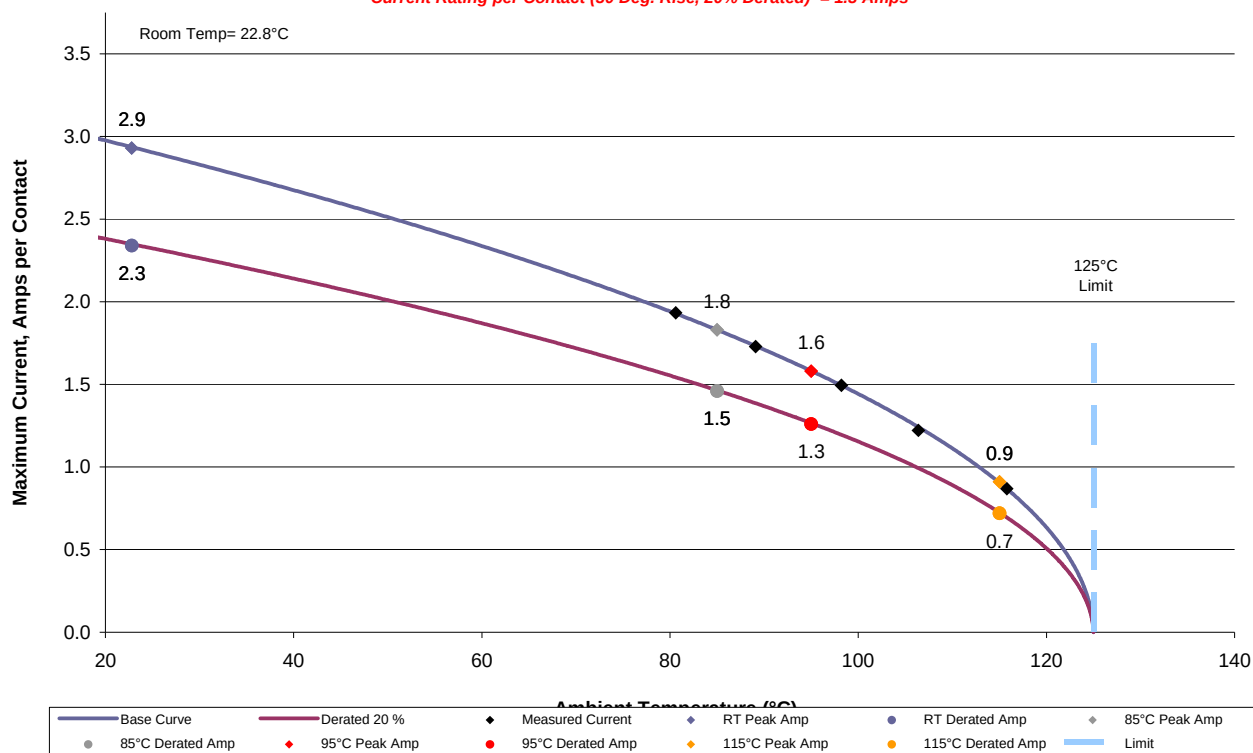
- 1) High quality thermocouples whose temperature slopes track one another were used for temperature monitoring.
- 2) The thermocouples were placed at a location to sense the maximum temperature generated during testing.
- 3) Temperature readings recorded are those for which three successive readings, 15 minutes apart, differ less than 1° C (computer controlled data acquisition).
- 4) Adjacent contacts were powered:

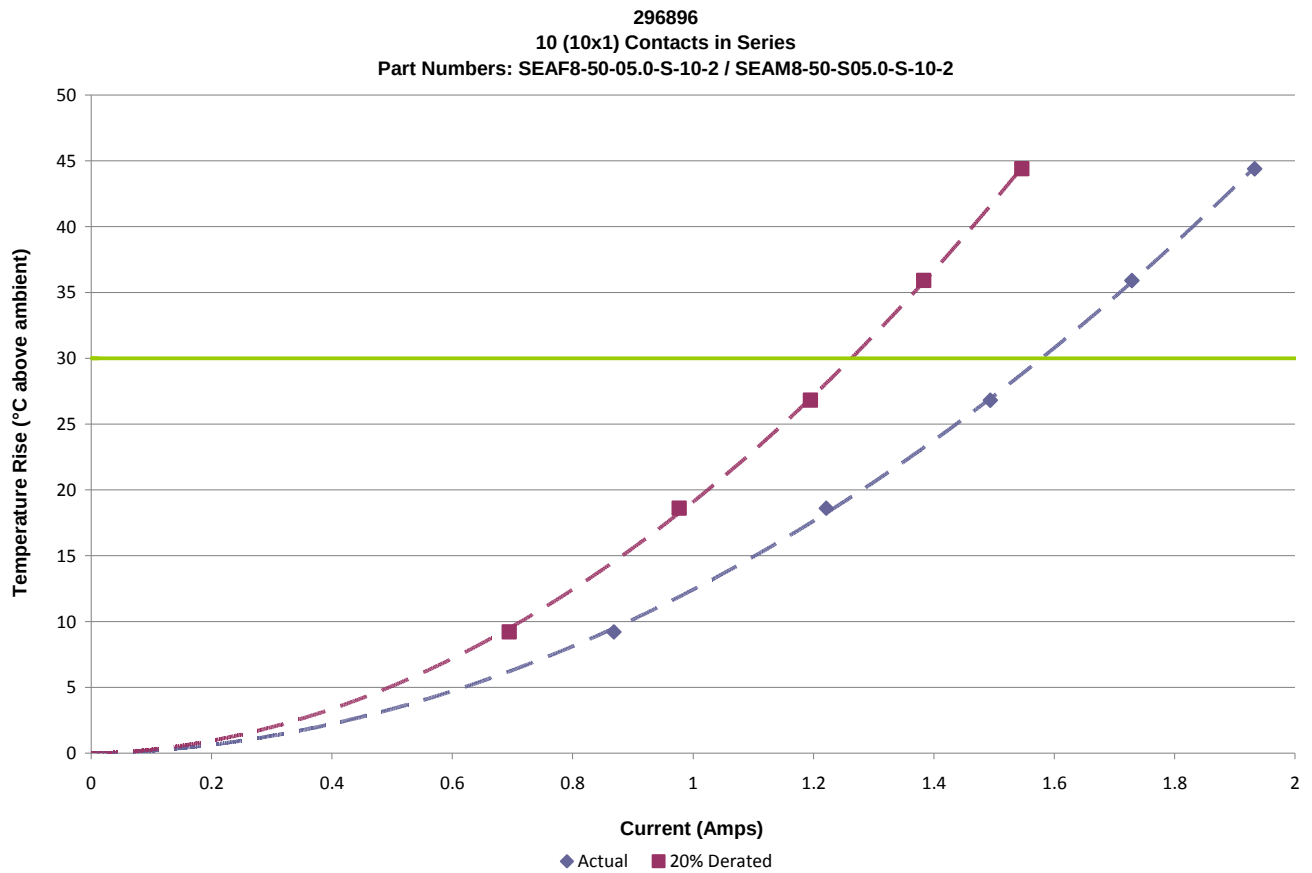
- a. Linear configuration with 10 adjacent conductors/contacts powered

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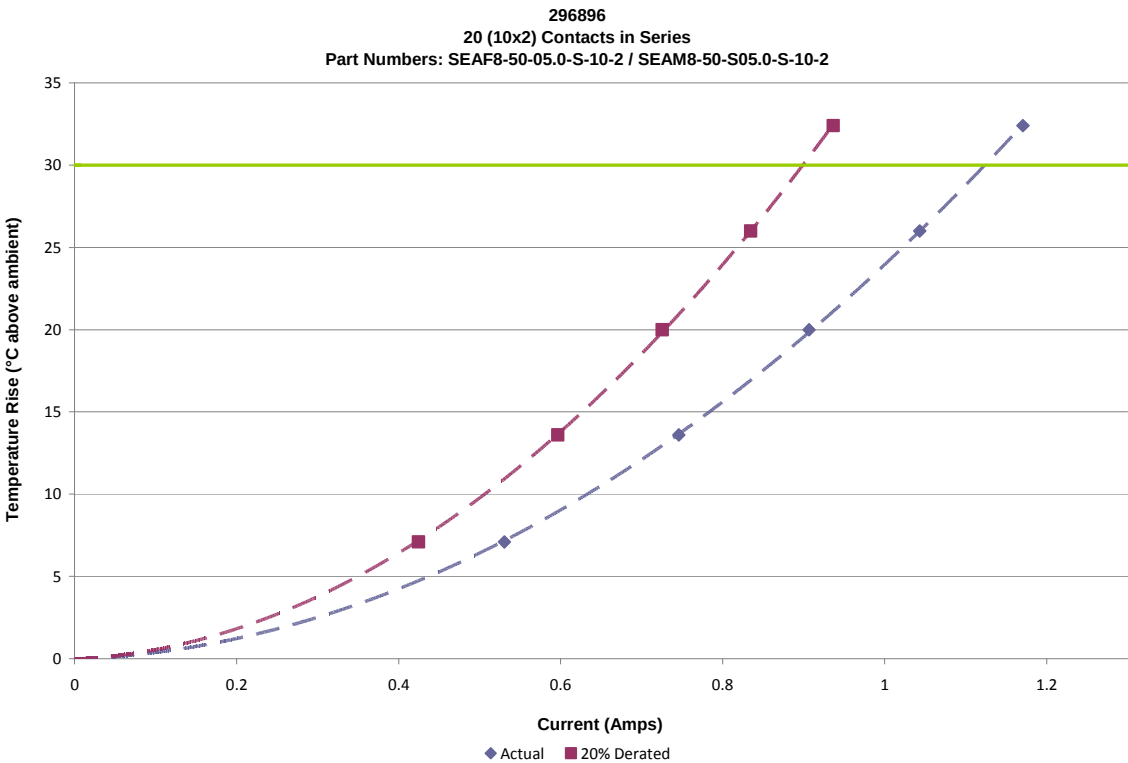
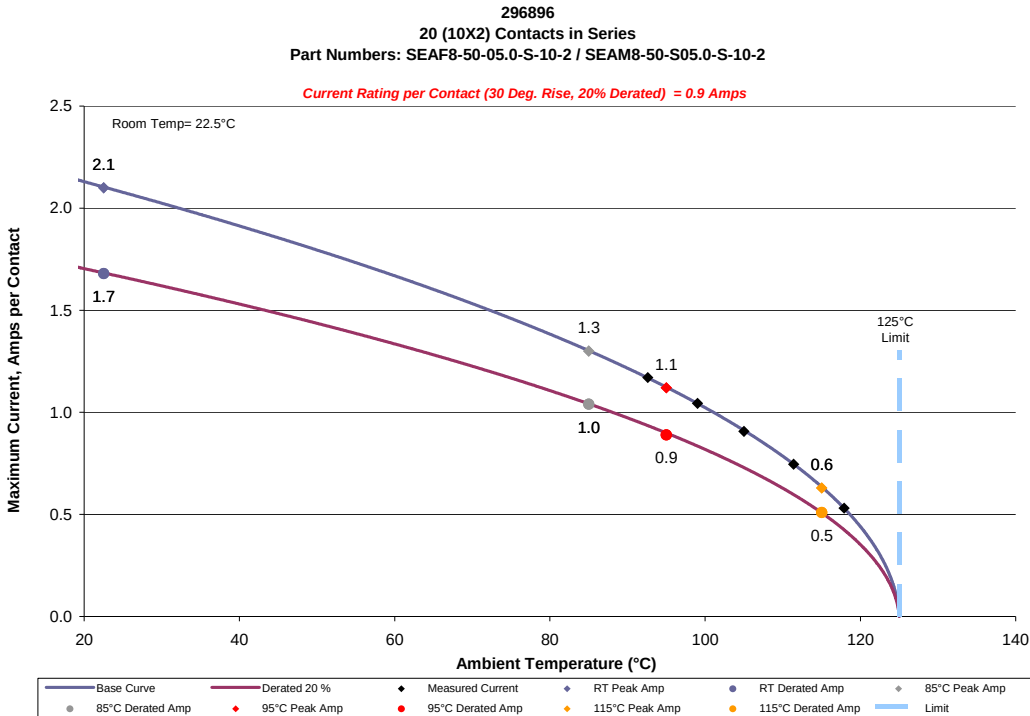
10 (10X1) Contacts in Series

Part Numbers: SEAF8-50-05.0-S-10-2 / SEAM8-50-S05.0-S-10-2

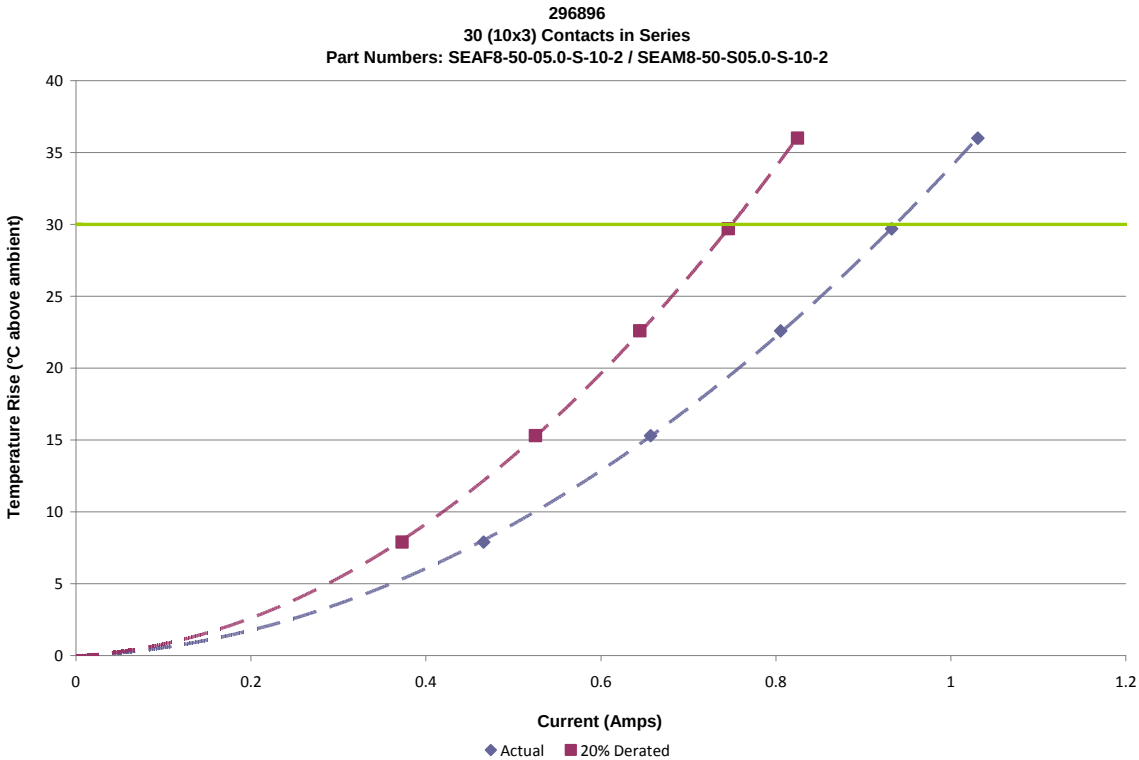
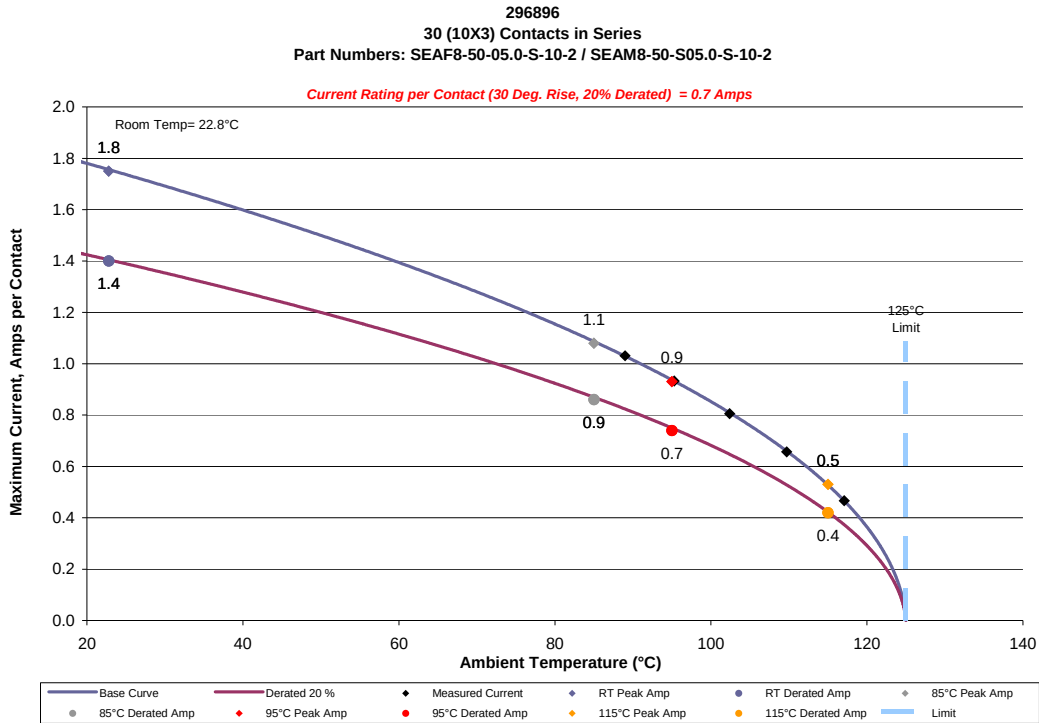
Current Rating per Contact (30 Deg. Rise, 20% Derated) = 1.3 Amps



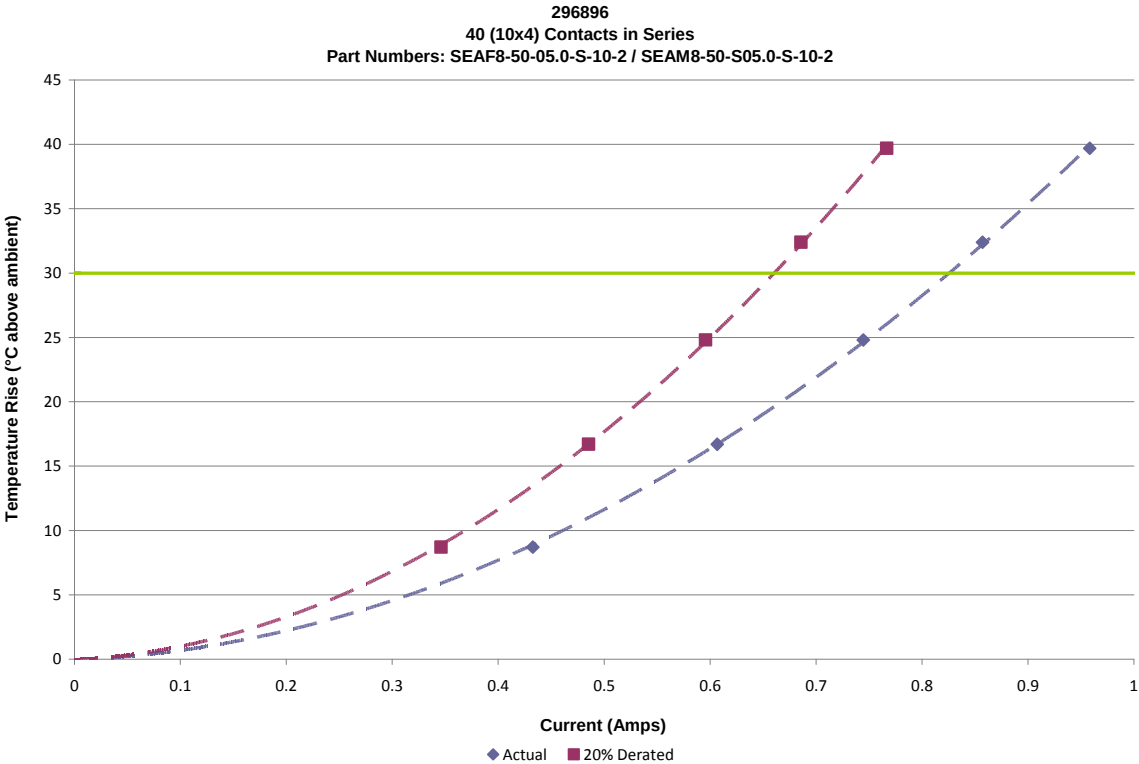
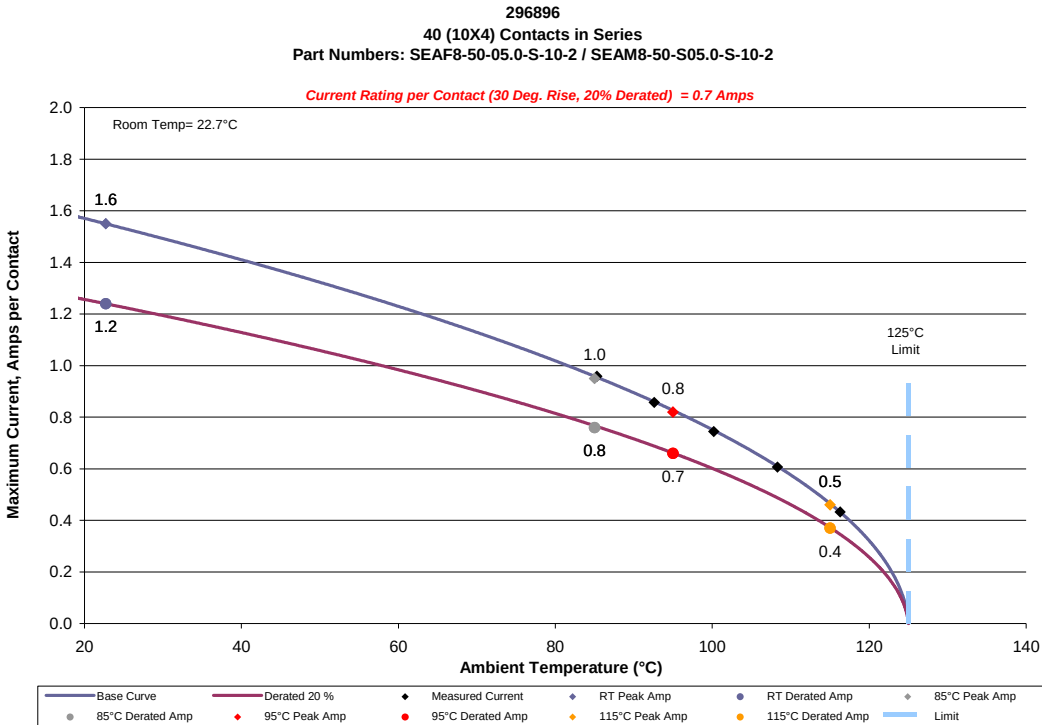
b. Linear configuration with 20 adjacent conductors/contacts powered



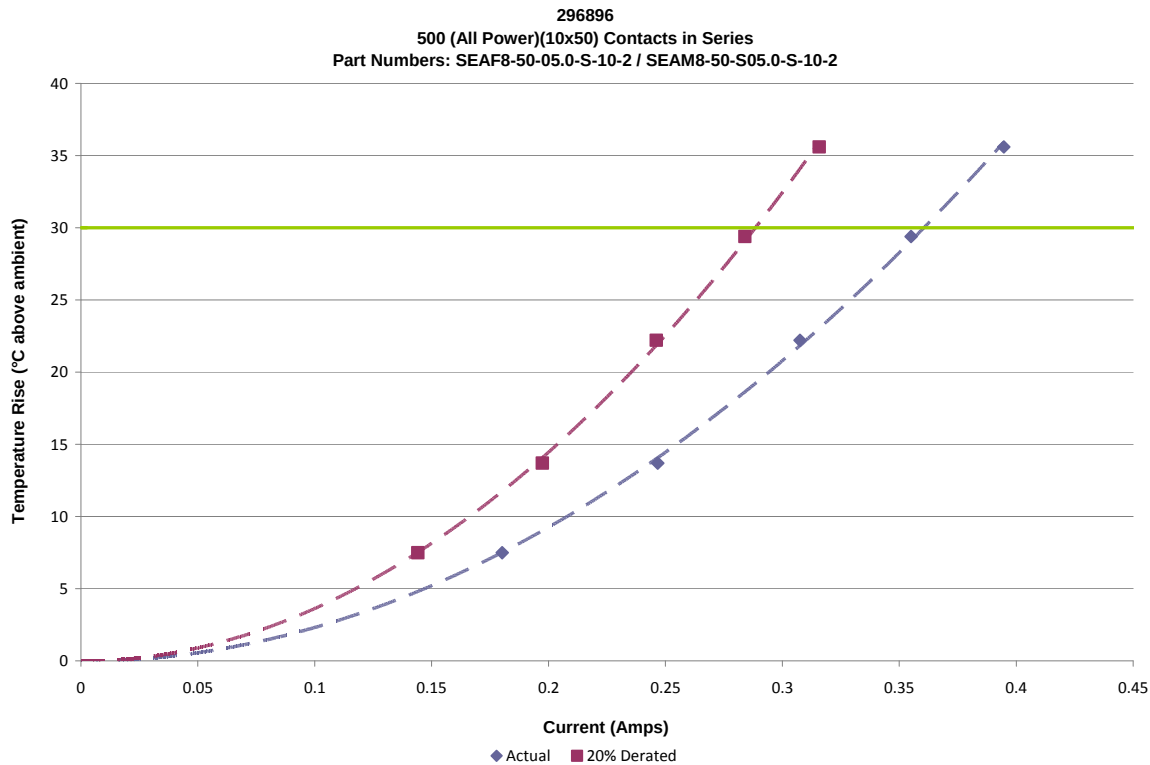
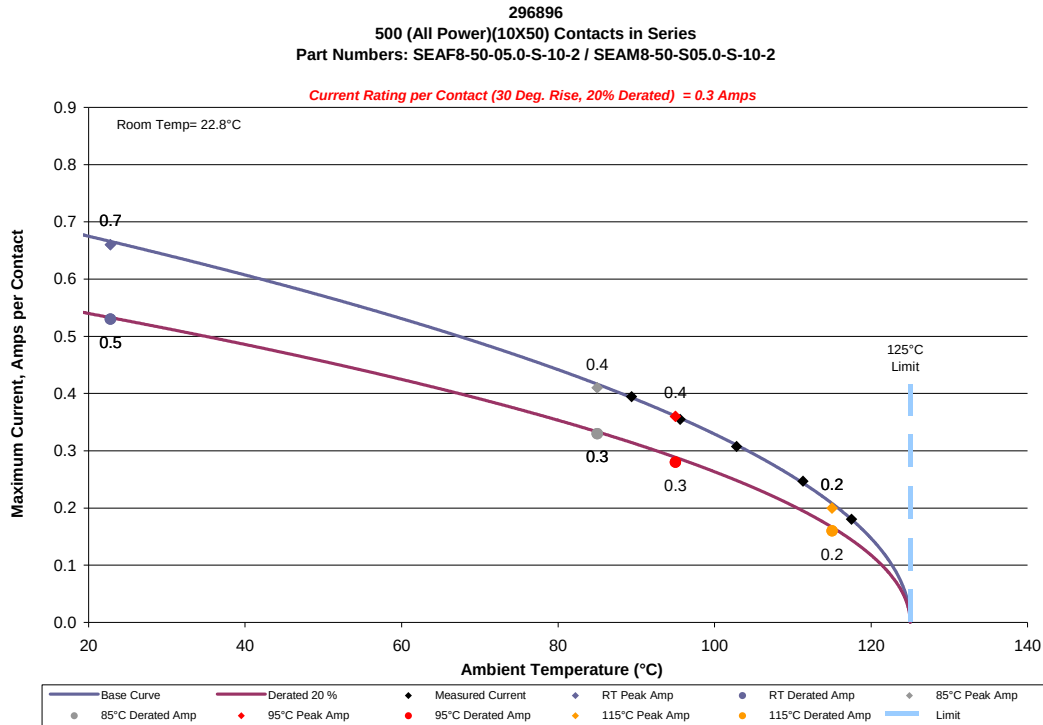
c. Linear configuration with 30 adjacent conductors/contacts powered



d. Linear configuration with 40 adjacent conductors/contacts powered



e. Linear configuration with all adjacent conductors/contacts powered



CONTACT GAPS:**SEAF8**

Initial		After 25 Cycles		After Thermal	
Units: mm		Units: mm		Units: mm	
<i>Minimum</i>	0.3380	<i>Minimum</i>	0.3540	<i>Minimum</i>	0.3720
<i>Maximum</i>	0.4320	<i>Maximum</i>	0.4400	<i>Maximum</i>	0.4640
<i>Average</i>	0.3820	<i>Average</i>	0.3977	<i>Average</i>	0.4250
<i>St. Dev.</i>	0.0167	<i>St. Dev.</i>	0.0158	<i>St. Dev.</i>	0.0153
<i>Count</i>	180	<i>Count</i>	180	<i>Count</i>	180

SEAM8

Initial		After 25 Cycles		After Thermal	
Units: mm		Units: mm		Units: mm	
<i>Minimum</i>	0.7940	<i>Minimum</i>	0.7900	<i>Minimum</i>	0.8040
<i>Maximum</i>	0.9979	<i>Maximum</i>	0.9539	<i>Maximum</i>	0.9960
<i>Average</i>	0.8742	<i>Average</i>	0.8561	<i>Average</i>	0.8685
<i>St. Dev.</i>	0.0362	<i>St. Dev.</i>	0.0331	<i>St. Dev.</i>	0.0356
<i>Count</i>	180	<i>Count</i>	180	<i>Count</i>	180

SEAF8**SEAF8**

Initial Measurements Summary		after Thermals Measurements Summary	
<i>Minimum</i>	0.3400	<i>Minimum</i>	0.3340
<i>Maximum</i>	0.4260	<i>Maximum</i>	0.4260
<i>Average</i>	0.3816	<i>Average</i>	0.3792
<i>St. Dev.</i>	0.0173	<i>St. Dev.</i>	0.0153
<i>Count</i>	180	<i>Count</i>	180

SEAM8**SEAM8**

Initial Measurements Summary		after Thermals Measurements Summary	
<i>Minimum</i>	0.8060	<i>Minimum</i>	0.8160
<i>Maximum</i>	0.9899	<i>Maximum</i>	0.9719
<i>Average</i>	0.8799	<i>Average</i>	0.8787
<i>St. Dev.</i>	0.0363	<i>St. Dev.</i>	0.0377
<i>Count</i>	180	<i>Count</i>	180

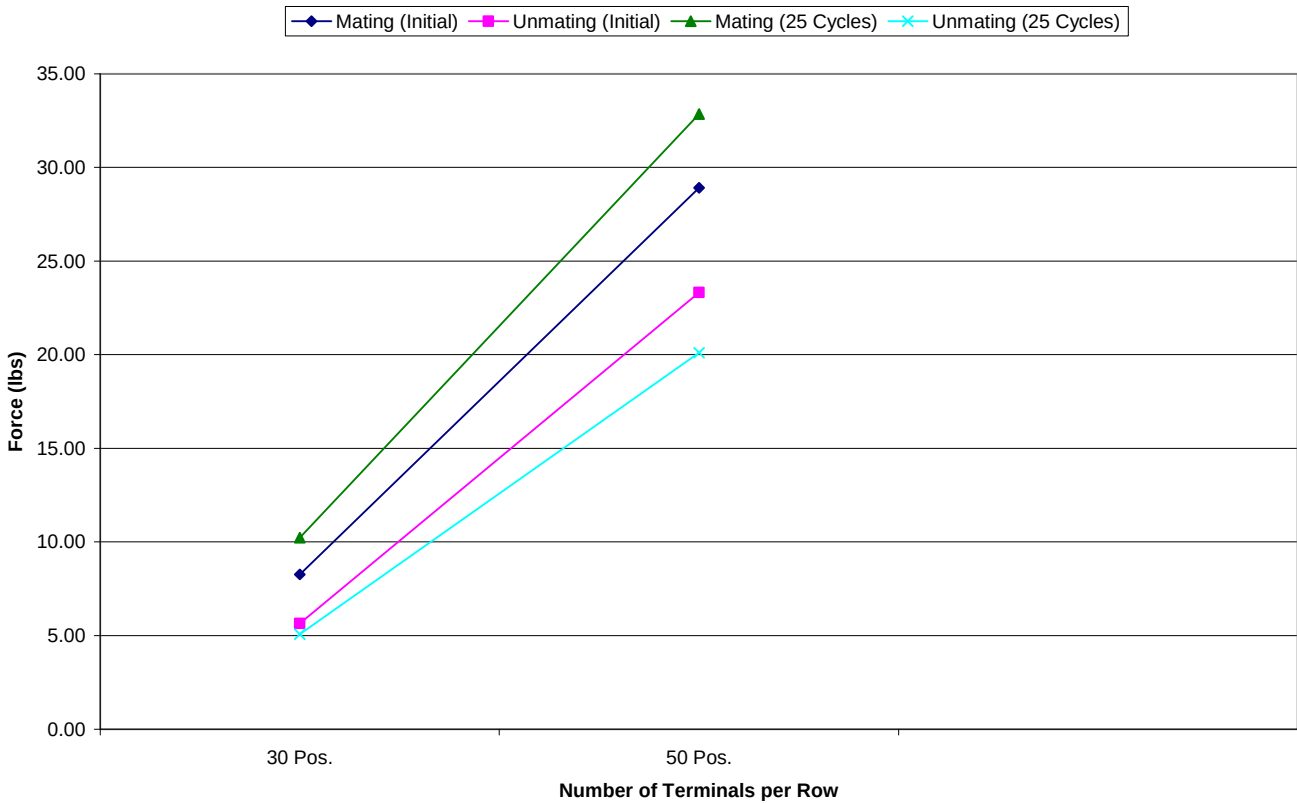
MATING/UNMATING:**SEAF8-30-05.0-L-06-2-TR/SEAM8-30-S05.0-L-06-2-TR**

	Initial				After 25 Cycles			
	Mating		Unmating		Mating		Unmating	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	31.40	7.06	18.58	4.18	39.63	8.91	20.42	4.59
Maximum	46.61	10.48	31.64	7.11	52.04	11.70	28.45	6.40
Average	36.78	8.27	25.12	5.65	45.50	10.23	22.57	5.07
St Dev	4.38	0.99	4.81	1.08	4.26	0.96	2.34	0.53
Count	10	10	10	10	10	10	10	10
	After Thermals				After Humidity			
	Mating		Unmating		Mating		Unmating	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	24.40	5.49	11.40	2.56	27.33	6.15	14.82	3.33
Maximum	28.80	6.48	15.05	3.38	32.83	7.38	17.47	3.93
Average	26.48	5.95	13.44	3.02	30.61	6.88	16.31	3.67
St Dev	1.38	0.31	1.27	0.29	1.77	0.40	1.11	0.25
Count	10	10	10	10	10	10	10	10

SEAM8-50-S05.0-S-10-2-K/SEAF8-50-05.0-S-10-2-K

	Initial				25 Cycles			
	Mating		Unmating		Mating		Unmating	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	118.18	26.57	97.81	21.99	136.42	30.67	80.27	18.05
Maximum	135.82	30.53	115.81	26.04	154.52	34.74	99.25	22.31
Average	128.58	28.91	103.73	23.32	146.12	32.85	89.42	20.10
St Dev	6.52	1.47	6.95	1.56	5.13	1.15	5.74	1.29
Count	8	8	8	8	8	8	8	8
	After Humidity							
	Mating		Unmating					
	Newtons	Force (Lbs)	Newtons	Force (Lbs)				
Minimum	86.36	19.42	52.76	11.86				
Maximum	96.07	21.60	67.27	15.12				
Average	91.29	20.52	59.47	13.37				
St Dev	3.35	0.75	4.52	1.02				
Count	8	8	8	8				

Mating/Unmating Data for 30 and 50 Position SEAF8/SEAM8



NORMAL FORCE (FOR CONTACTS TESTED IN THE HOUSING):

- 1) Calibrated force gauges are used along with computer controlled positioning equipment.
- 2) For Normal force 8-10 measurements are taken and the averages reported.

Initial	Deflections in inches Forces in Grams										
	0.0009	0.0018	0.0027	0.0036	0.0045	0.0054	0.0063	0.0072	0.0081	0.0090	SET
Averages	4.97	9.98	15.00	19.94	24.83	29.72	34.51	39.30	43.94	48.47	0.0002
Min	4.80	9.60	14.50	19.20	23.70	28.30	32.80	37.40	41.90	46.30	0.0001
Max	5.40	10.60	15.80	21.00	26.30	31.50	36.70	41.80	46.60	51.30	0.0002
St. Dev	0.206	0.338	0.461	0.611	0.803	1.032	1.223	1.413	1.512	1.683	0.0001
Count	9	9	9	9	9	9	9	9	9	9	9

After Thermals	Deflections in inches Forces in Grams										
	0.0009	0.0018	0.0027	0.0036	0.0045	0.0054	0.0063	0.0072	0.0081	0.0090	SET
Averages	4.52	9.17	14.03	19.14	24.41	29.85	35.64	41.35	47.23	49.18	0.0001
Min	3.90	8.50	13.20	18.10	23.30	28.60	34.10	39.30	45.20	39.70	0.0000
Max	5.40	9.90	15.20	20.10	25.50	31.30	37.10	42.90	49.70	55.70	0.0002
St. Dev	0.395	0.403	0.533	0.620	0.795	0.906	0.929	1.133	1.195	5.265	0.0001
Count	12	12	12	12	12	12	12	12	12	12	12

INSULATION RESISTANCE (IR):**Group B1 (Pin to pin)**

	Pin to Pin		
	Mated	Unmated	Unmated
Minimum	SEAF8/SEAM8	SEAF8	SEAM8
Initial	100000	100000	100000
Thermal	100000	100000	100000
Humidity	100000	100000	100000

Group B2 (Pin to pin)

	Pin to Pin		
	Mated	Unmated	Unmated
Minimum	SEAF8/SEAM8	SEAF8	SEAM8
Initial	100000	100000	100000
Thermal	25000	50000	20000
Humidity	15000	15000	15000

Group D1 (Row to row)

	Row to Row		
	Mated	Unmated	Unmated
Minimum	SEAF8/SEAM8	SEAF8	SEAM8
Initial	100000	100000	100000
Thermal Age	100000	100000	100000
Humidity	100000	100000	100000

Group D2 (Row to row)

	Row to Row		
	Mated	Unmated	Unmated
Minimum	SEAF8/SEAM8	SEAF8	SEAM8
Initial	100000	100000	100000
Thermal	100000	100000	100000
Humidity	15000	15000	15000

DIELECTRIC WITHSTANDING VOLTAGE (DWV):**Group B1, D1**

Voltage Rating Summary	
Minimum	SEAF8/SEAM8
Break Down Voltage	880
Test Voltage	660
Working Voltage	220
Pin to Pin	
Initial Test Voltage	Passed
After Thermal Test Voltage	Passed
After Humidity Test Voltage	Passed
Row to Row	
Initial Test Voltage	Passed
After Thermal Test Voltage	Passed
After Humidity Test Voltage	Passed

Group B2,D2

Voltage Rating Summary	
Minimum	SEAF8/SEAM8
Break Down Voltage	880
Test Voltage	660
Working Voltage	220
Pin to Pin	
Initial Test Voltage	Passed
After Thermal Test Voltage	Passed
After Humidity Test Voltage	Passed
Row to Row	
Initial Test Voltage	Passed
After Thermal Test Voltage	Passed
After Humidity Test Voltage	Passed

LLCR:

- 1) A total of 192 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 $+2000$ mOhms ----- Unstable
 - f. $>+2000$ mOhms: ----- Open Failure

SEAF8-30-05.0-L-06-2-TR/ SEAM8-30-S05.0-L-06-2-TR

Group A1

Date	2010-6-2	2010-6-3	2010-6-17	2010-7-2
Room Temp C	23	24	24	24
RH	40%	48%	45%	47%
Name	Aaron McKim	Aaron McKim	Aaron McKim	Aaron McKim
mOhm values	Actual Initial	Delta 25 Cycles	Delta Thermal Age	Delta Humidity
Average	16.9	-0.2	-0.1	-0.6
St. Dev.	0.3	2.9	0.9	0.7
Min	16.2	-2.4	-2.3	-2.2
Max	18.2	38.6	7.1	6.0
Count	192	192	192	192

How many samples are being tested?

8

How many contacts are on each board?

24

	Stable	Minor	Acceptable	Marginal	Unstable	Open
25 Cycles	191	0	0	1	0	0
Thermal Age	191	1	0	0	0	0
Humidity	191	1	0	0	0	0

Group A2

Date	7/9/2010	7/13/2010	7/19/2010	8/3/2010
Room Temp				
C	22	24	22	23
RH	47%	48%	58%	49%
Name	Aaron McKim	Aaron McKim	Aaron McKim	Aaron McKim
mOhm values	Actual Initial	Delta 25 Cycles	Delta Thermal Shock	Delta Humidity
Average	16.8	0.0	-0.4	-0.2
St. Dev.	0.4	0.4	0.4	0.6
Min	16.0	-1.0	-3.1	-3.1
Max	19.0	1.6	0.8	2.5
Count	192	192	192	191

How many samples are being tested?

8

How many contacts are on each board?

24

	Stable	Minor	Acceptable	Marginal	Unstable	Open
25 Cycles	192	0	0	0	0	0
Thermal Shock	192	0	0	0	0	0
Humidity	191	0	0	0	0	1

SEAM8-50-S05.0-S-10-2-K/SEAF8-50-05.0-S-10-2-K

LLCR Measurement Summaries by Pin Type				
Date	2/9/2015	2/16/2015	2/24/2015	3/6/2015
Room Temp (Deg C)	22	22	22	22
Rel Humidity (%)	36	36	36	36
Technician	Tony Wagoner	Tony Wagoner	Tony Wagoner	Tony Wagoner
mOhm values	Actual	Delta	Delta Therm Shck	Delta Humidity
	Initial	25 Cycles		
Pin Type 1: Signal				
Average	15.70	0.35	0.77	0.83
St. Dev.	0.58	0.30	0.46	0.49
Min	14.40	0.01	0.01	0.01
Max	17.47	1.36	2.33	2.34
Summary Count	192	192	192	192
Total Count	192	192	192	192

LLCR Delta Count by Category						
	Stable	Minor	Acceptable	Marginal	Unstable	Open
mOhms	<=5	>5 & <=10	>10 & <=15	>15 & <=50	>50 & <=1000	>1000
25 Cycles	192	0	0	0	0	0
Therm Shck	192	0	0	0	0	0
Humidity	192	0	0	0	0	0

GAS TIGHT:

- 1) A total of 192 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 $+2000$ mOhms: ----- Unstable
 - f. $>+2000$ mOhms: ----- Open Failure

SEAM8-50-S05.0-S-10-2-K/SEAF8-50-05.0-S-10-2-K

LLCR Measurement Summaries by Pin Type				
Date	1/29/2015	1/30/2015		
Room Temp (Deg C)	22	22		
Rel Humidity (%)	36	36		
Technician	Tony Wagoner	Tony Wagoner		
mOhm values	Actual Initial	Delta Acid Vapor	Delta	Delta
Pin Type 1: Signal				
Average	15.45	0.11		
St. Dev.	0.57	0.12		
Min	14.26	0.00		
Max	17.15	0.95		
Summary Count	192	192		
Total Count	192	192		

LLCR Delta Count by Category						
mOhms	Stable	Minor	Acceptable	Marginal	Unstable	Open
	≤ 5	>5 & ≤ 10	>10 & ≤ 15	>15 & ≤ 50	>50 & ≤ 1000	>1000
Acid Vapor	192	0	0	0	0	0

LLCR Shock & Vibration:

- 1). A total of 192 points were measured.
- 2). EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets*.
- 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 $+2000$ mOhms ----- Unstable
 - f. $>+2000$ mOhms: ----- Open Failure

LLCR Measurement Summaries by Pin Type				
Date	9/20/2012	10/10/2012		
Room Temp (Deg C)	22	22		
Rel Humidity (%)	37	34		
Technician	Troy Cook	Troy Cook		
mOhm values	Actual Initial	Delta Shock-Vib	Delta	Delta
Pin Type 1: Signal				
Average	17.01	0.54		
St. Dev.	0.80	0.80		
Min	15.82	0.00		
Max	20.68	7.58		
Summary Count	192	192		
Total Count	192	192		

LLCR Delta Count by Category						
	Stable	Minor	Acceptable	Marginal	Unstable	Open
mOhms	≤ 5	$>5 \text{ \& } \leq 10$	$>10 \text{ \& } \leq 15$	$>15 \text{ \& } \leq 50$	$>50 \text{ \& } \leq 1000$	>1000
Shock-Vib	191	1	0	0	0	0

Nanosecond Event Detection:

Shock and Vibration Event Detection Summary	
Contacts tested	30
Test Condition	C, 100g's, 6ms, Half-Sine
Shock Events	0
Test Condition	V-B, 7.56 rms g
Vibration Events	0
Total Events	0

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

DATA**CONTACT GAPS:****Group A1—SEAF8**

Initial		
Units: mm		
Pos.#	B1	B2
1	0.4140	0.4000
2	0.4220	0.4220
3	0.3840	0.3640
4	0.4060	0.4060
5	0.4000	0.3700
6	0.3780	0.3800
7	0.3880	0.3840
8	0.3540	0.3640
9	0.3800	0.3780
10	0.3640	0.3840
11	0.3920	0.3840
12	0.3840	0.3920
13	0.3740	0.3500
14	0.3780	0.3800
15	0.3940	0.3760
16	0.3860	0.3820
17	0.3820	0.3720
18	0.3500	0.3800
19	0.3720	0.3800
20	0.3720	0.3900
21	0.3780	0.3760
22	0.3620	0.3820
23	0.3480	0.3620
24	0.3740	0.3880
25	0.3760	0.3860
26	0.3580	0.3800
27	0.3800	0.3760
28	0.3380	0.3820
29	0.3860	0.3860
30	0.3860	0.4160
31	0.3780	0.4060
32	0.4040	0.3980
33	0.3600	0.3860
34	0.3920	0.4000
35	0.3780	0.4020
36	0.3840	0.3960
37	0.3760	0.3940
38	0.3460	0.3540
39	0.3800	0.4000
40	0.3940	0.3840
41	0.3540	0.4080

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

42	0.3780	0.3920
43	0.3380	0.3740
44	0.3840	0.4060
45	0.3880	0.3940
46	0.4060	0.3900
47	0.3860	0.3840
48	0.3700	0.3600
49	0.4040	0.3860
50	0.4040	0.3560
51	0.3740	0.4100
52	0.3960	0.4060
53	0.3640	0.3720
54	0.3920	0.3920
55	0.4020	0.4020
56	0.3960	0.4040
57	0.4000	0.4140
58	0.3740	0.3820
59	0.3880	0.4320
60	0.4000	0.4040
61	0.3900	0.4140
62	0.4020	0.3960
63	0.3580	0.3740
64	0.3820	0.3860
65	0.3700	0.3820
66	0.3940	0.3900
67	0.3700	0.3900
68	0.3560	0.3720
69	0.3700	0.3920
70	0.3660	0.4100
71	0.3680	0.3820
72	0.3700	0.4020
73	0.3660	0.3720
74	0.3760	0.3680
75	0.3820	0.3800
76	0.3680	0.3740
77	0.3700	0.3800
78	0.3500	0.3740
79	0.3680	0.3880
80	0.3760	0.3780
81	0.3660	0.3860
82	0.3780	0.3780
83	0.3600	0.3660
84	0.3760	0.3700
85	0.3680	0.3720
86	0.3900	0.3580
87	0.3640	0.3820
88	0.3600	0.3640
89	0.3920	0.3840
90	0.3980	0.3860

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

After 25 Cycles		
Units: mm		
Pos.#	B1	B2
1	0.4240	0.4280
2	0.4240	0.4000
3	0.4020	0.4040
4	0.4180	0.4180
5	0.4120	0.4060
6	0.3940	0.4120
7	0.4020	0.4120
8	0.3760	0.3800
9	0.3900	0.3940
10	0.3760	0.3860
11	0.4020	0.4080
12	0.3940	0.3920
13	0.3820	0.3920
14	0.3800	0.3960
15	0.3980	0.3980
16	0.3920	0.3880
17	0.3960	0.3840
18	0.3660	0.3760
19	0.3840	0.4000
20	0.3820	0.3960
21	0.3920	0.4040
22	0.3720	0.3940
23	0.3600	0.3800
24	0.3940	0.4000
25	0.3940	0.3920
26	0.3720	0.3900
27	0.3960	0.4140
28	0.3560	0.3760
29	0.4020	0.4300
30	0.4040	0.4280
31	0.4120	0.4140
32	0.3980	0.4040
33	0.3800	0.3920
34	0.4200	0.4000
35	0.4020	0.4120
36	0.4140	0.4040
37	0.4100	0.4100
38	0.3740	0.3720
39	0.4040	0.4100
40	0.3980	0.3940
41	0.4160	0.4260
42	0.4180	0.4160
43	0.3840	0.3920
44	0.4100	0.4180
45	0.4160	0.4120

Tracking Code: TC1021—3406_Report_Rev_5	Part #: SEAF8-30-05.0-L-06-2-TR/ SEAM8-30-S05.0-L-06-2-TR
Part description: SEAx8	

46	0.4100	0.4140
47	0.3960	0.4060
48	0.3540	0.3760
49	0.3880	0.3980
50	0.3660	0.3800
51	0.4060	0.4180
52	0.4000	0.4160
53	0.3620	0.3920
54	0.3920	0.4040
55	0.3920	0.4100
56	0.3940	0.4180
57	0.4040	0.4260
58	0.3780	0.3940
59	0.4200	0.4400
60	0.4000	0.4140
61	0.4000	0.4100
62	0.4100	0.4060
63	0.3760	0.3900
64	0.3920	0.4100
65	0.3860	0.3820
66	0.4000	0.3980
67	0.3820	0.3860
68	0.3720	0.3860
69	0.3880	0.3980
70	0.3760	0.4020
71	0.3820	0.3920
72	0.3840	0.4040
73	0.3800	0.3900
74	0.3940	0.4000
75	0.3880	0.3940
76	0.3860	0.3980
77	0.3860	0.3840
78	0.3680	0.3920
79	0.3940	0.4100
80	0.3880	0.4040
81	0.3900	0.4260
82	0.4000	0.4160
83	0.3860	0.3940
84	0.4020	0.4220
85	0.3940	0.4160
86	0.4120	0.4080
87	0.3940	0.4040
88	0.3800	0.4020
89	0.4060	0.4180
90	0.4100	0.4320
After Thermal		
Units: mm		
Pos.#	B1	B2
1	0.4440	0.4580

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

2	0.4520	0.4300
3	0.4280	0.4340
4	0.4460	0.4420
5	0.4480	0.4400
6	0.4300	0.4400
7	0.4400	0.4420
8	0.4120	0.4120
9	0.4240	0.4260
10	0.4140	0.4240
11	0.4300	0.4420
12	0.4240	0.4200
13	0.3920	0.4300
14	0.4220	0.4280
15	0.4300	0.4240
16	0.4220	0.4220
17	0.4260	0.4140
18	0.3980	0.4040
19	0.4100	0.4380
20	0.4200	0.4260
21	0.4280	0.4320
22	0.4060	0.4200
23	0.3920	0.4200
24	0.4180	0.4300
25	0.4240	0.4240
26	0.4040	0.4240
27	0.4340	0.4480
28	0.4060	0.4100
29	0.4400	0.4540
30	0.4440	0.4520
31	0.4300	0.4440
32	0.4480	0.4580
33	0.4060	0.4160
34	0.4320	0.4400
35	0.4200	0.4320
36	0.4220	0.4200
37	0.4060	0.4120
38	0.3820	0.4160
39	0.4080	0.4380
40	0.4160	0.4340
41	0.3940	0.4060
42	0.4160	0.4240
43	0.3720	0.4080
44	0.4120	0.4280
45	0.4240	0.4320
46	0.4260	0.4260
47	0.4160	0.4400
48	0.4060	0.4220
49	0.4300	0.4360
50	0.4320	0.4440

Tracking Code: TC1021—3406_Report_Rev_5	Part #: SEAF8-30-05.0-L-06-2-TR/ SEAM8-30-S05.0-L-06-2-TR
Part description: SEAx8	

51	0.4100	0.4180
52	0.4240	0.4340
53	0.3920	0.4060
54	0.4300	0.4340
55	0.4340	0.4200
56	0.4280	0.4300
57	0.4260	0.4200
58	0.4160	0.4200
59	0.4260	0.4440
60	0.4380	0.4480
61	0.4420	0.4340
62	0.4400	0.4380
63	0.4160	0.4240
64	0.4260	0.4480
65	0.4020	0.4220
66	0.4340	0.4300
67	0.4080	0.4280
68	0.4040	0.4200
69	0.4140	0.4280
70	0.4100	0.4420
71	0.3800	0.4360
72	0.4200	0.4420
73	0.4100	0.4260
74	0.4260	0.4400
75	0.4120	0.4240
76	0.4140	0.4260
77	0.4160	0.4220
78	0.4000	0.4340
79	0.4100	0.4360
80	0.4180	0.4340
81	0.4120	0.4480
82	0.4240	0.4420
83	0.4080	0.4180
84	0.4140	0.4480
85	0.4140	0.4420
86	0.4320	0.4340
87	0.4080	0.4320
88	0.4040	0.4260
89	0.4340	0.4280
90	0.4420	0.4640

CONTACT GAPS:

Group A1- SEAM8

Initial		
Units: mm		
Pos.#	B1	B2
1	0.9639	0.9440
2	0.9519	0.9579

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

3	0.9440	0.9460
4	0.9440	0.9340
5	0.9280	0.9280
6	0.9160	0.9000
7	0.9020	0.9040
8	0.9120	0.9000
9	0.8900	0.8920
10	0.8940	0.8780
11	0.8640	0.8540
12	0.8380	0.8480
13	0.8400	0.8340
14	0.8320	0.8480
15	0.8340	0.8560
16	0.8360	0.8880
17	0.8240	0.8320
18	0.7940	0.8300
19	0.8420	0.8520
20	0.8520	0.8460
21	0.8200	0.8180
22	0.8200	0.8400
23	0.8520	0.8440
24	0.8640	0.8320
25	0.8420	0.8260
26	0.8380	0.8540
27	0.8680	0.8740
28	0.8800	0.8940
29	0.8640	0.8960
30	0.9220	0.9400
31	0.8760	0.8580
32	0.8740	0.8600
33	0.8420	0.8380
34	0.8520	0.8420
35	0.8640	0.8360
36	0.8480	0.8420
37	0.8360	0.8240
38	0.8420	0.8420
39	0.8480	0.8500
40	0.8440	0.8420
41	0.8380	0.8420
42	0.8620	0.8460
43	0.8460	0.8600
44	0.8540	0.8380
45	0.8720	0.8460
46	0.8620	0.8460
47	0.8540	0.8400
48	0.8520	0.8480
49	0.8420	0.8500
50	0.8420	0.8500
51	0.8620	0.8740

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

52	0.8460	0.8440
53	0.8400	0.8560
54	0.8500	0.8820
55	0.8680	0.8920
56	0.8720	0.8700
57	0.8860	0.8680
58	0.9060	0.9120
59	0.9380	0.9499
60	0.9480	0.9979
61	0.9060	0.9160
62	0.9120	0.9140
63	0.9320	0.9040
64	0.9300	0.9400
65	0.9260	0.9000
66	0.9240	0.9100
67	0.9060	0.9300
68	0.9140	0.8880
69	0.8960	0.8800
70	0.9160	0.8880
71	0.8740	0.8940
72	0.8780	0.8840
73	0.9300	0.8820
74	0.8880	0.8860
75	0.8640	0.8640
76	0.8720	0.8660
77	0.8820	0.8780
78	0.9100	0.8740
79	0.8740	0.8400
80	0.8520	0.8420
81	0.8980	0.8540
82	0.8840	0.8640
83	0.8480	0.8340
84	0.8460	0.8320
85	0.8520	0.8600
86	0.8740	0.8660
87	0.8620	0.8540
88	0.8560	0.8700
89	0.9140	0.9140
90	0.9160	0.9240
After 25 Cycles		
Units: mm		
Pos.#	B1	B2
1	0.9539	0.9360
2	0.9340	0.8520
3	0.9100	0.9080
4	0.9400	0.9360
5	0.8960	0.9000
6	0.9060	0.8800
7	0.8860	0.8840

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

8	0.8900	0.8760
9	0.8700	0.8680
10	0.8760	0.8640
11	0.8440	0.8420
12	0.8300	0.8380
13	0.8320	0.8260
14	0.8180	0.8420
15	0.8200	0.8480
16	0.8180	0.8800
17	0.8020	0.8340
18	0.7900	0.8140
19	0.8360	0.8400
20	0.8400	0.8420
21	0.8140	0.8080
22	0.8060	0.8340
23	0.8320	0.8300
24	0.8420	0.8300
25	0.8300	0.8160
26	0.8240	0.8400
27	0.8480	0.8640
28	0.8680	0.8840
29	0.8580	0.8520
30	0.9140	0.9220
31	0.8740	0.9060
32	0.8920	0.8620
33	0.8820	0.8940
34	0.8660	0.8620
35	0.8700	0.8580
36	0.8460	0.8440
37	0.8280	0.8660
38	0.8340	0.8560
39	0.8240	0.8380
40	0.8220	0.8440
41	0.8220	0.8380
42	0.8340	0.8440
43	0.8260	0.8360
44	0.8400	0.8220
45	0.8480	0.8260
46	0.8560	0.8360
47	0.8340	0.8180
48	0.8200	0.8440
49	0.8520	0.8320
50	0.8300	0.8360
51	0.8280	0.8220
52	0.8360	0.8340
53	0.8220	0.8100
54	0.8020	0.8120
55	0.8320	0.8340
56	0.8460	0.8300

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

57	0.8380	0.8220
58	0.8220	0.8260
59	0.8180	0.8300
60	0.8700	0.8360
61	0.8920	0.9060
62	0.8960	0.8900
63	0.9200	0.8600
64	0.9200	0.9120
65	0.9100	0.9000
66	0.9200	0.8980
67	0.8940	0.9220
68	0.8840	0.8800
69	0.8760	0.8700
70	0.8860	0.8700
71	0.8580	0.8620
72	0.8600	0.8680
73	0.9040	0.8740
74	0.8640	0.8620
75	0.8380	0.8440
76	0.8540	0.8580
77	0.8600	0.8600
78	0.8940	0.8500
79	0.8580	0.8380
80	0.8440	0.8380
81	0.8760	0.8500
82	0.8720	0.8480
83	0.8280	0.8160
84	0.8160	0.8280
85	0.8360	0.8320
86	0.8480	0.8560
87	0.8300	0.8320
88	0.8240	0.8320
89	0.9040	0.9100
90	0.9020	0.9140
After Thermal		
Units: mm		
Pos.#	B1	B2
1	0.9480	0.9480
2	0.9540	0.9580
3	0.9240	0.9200
4	0.9200	0.9460
5	0.9160	0.9140
6	0.8840	0.8920
7	0.8980	0.8880
8	0.9080	0.8900
9	0.8740	0.8820
10	0.8760	0.8740
11	0.8520	0.8440
12	0.8460	0.8500

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

13	0.8440	0.8280
14	0.8240	0.8400
15	0.8280	0.8540
16	0.8400	0.8800
17	0.8180	0.8420
18	0.8040	0.8260
19	0.8400	0.8460
20	0.8540	0.8340
21	0.8260	0.8140
22	0.8180	0.8360
23	0.8480	0.8480
24	0.8580	0.8420
25	0.8220	0.8260
26	0.8300	0.8500
27	0.8680	0.8780
28	0.8800	0.8960
29	0.8760	0.9060
30	0.9160	0.9280
31	0.8660	0.8760
32	0.8700	0.8800
33	0.8340	0.8480
34	0.8400	0.8340
35	0.8520	0.8460
36	0.8400	0.8440
37	0.8320	0.8400
38	0.8320	0.8260
39	0.8480	0.8340
40	0.8480	0.8360
41	0.8480	0.8460
42	0.8660	0.8440
43	0.8380	0.8460
44	0.8460	0.8320
45	0.8560	0.8360
46	0.8600	0.8280
47	0.8540	0.8360
48	0.8440	0.8400
49	0.8460	0.8360
50	0.8440	0.8340
51	0.8600	0.8460
52	0.8440	0.8380
53	0.8480	0.8480
54	0.8600	0.8740
55	0.8540	0.8660
56	0.8800	0.8600
57	0.8820	0.8640
58	0.8860	0.8980
59	0.9240	0.9000
60	0.9420	0.9960
61	0.9120	0.9180

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

62	0.9160	0.9160
63	0.9360	0.9060
64	0.9500	0.9280
65	0.9300	0.9080
66	0.9360	0.9180
67	0.9120	0.9280
68	0.8940	0.8860
69	0.8880	0.8780
70	0.8980	0.8820
71	0.8720	0.8640
72	0.8760	0.8700
73	0.8960	0.8820
74	0.8820	0.8760
75	0.8440	0.8460
76	0.8620	0.8540
77	0.8620	0.8600
78	0.8880	0.8620
79	0.8680	0.8320
80	0.8520	0.8280
81	0.8800	0.8500
82	0.8760	0.8560
83	0.8460	0.8240
84	0.8280	0.8340
85	0.8560	0.8300
86	0.8500	0.8640
87	0.8380	0.8540
88	0.8340	0.8680
89	0.9120	0.9100
90	0.9240	0.9220

CONTACT GAPS:**SEAF8**

Initial		
Units: mm		
Pos.#	B1	B2
1	0.3920	0.3960
2	0.3920	0.4020
3	0.3700	0.3560
4	0.4260	0.3940
5	0.3960	0.3800
6	0.4020	0.3680
7	0.3840	0.3740
8	0.3780	0.3560
9	0.3620	0.3660
10	0.3700	0.3680
11	0.3820	0.3640
12	0.3860	0.3560
13	0.3740	0.3400

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

14	0.3820	0.3640
15	0.3880	0.3740
16	0.3820	0.3900
17	0.3600	0.3800
18	0.3620	0.3580
19	0.3820	0.3780
20	0.3840	0.3820
21	0.3760	0.3500
22	0.3800	0.3700
23	0.3620	0.3620
24	0.3820	0.3740
25	0.3640	0.3880
26	0.3720	0.3840
27	0.3700	0.4020
28	0.3640	0.3800
29	0.4080	0.4000
30	0.4080	0.3960
31	0.4040	0.4020
32	0.4140	0.3800
33	0.4180	0.3660
34	0.4180	0.3740
35	0.4220	0.3880
36	0.4120	0.3860
37	0.4220	0.3860
38	0.3740	0.3500
39	0.4180	0.3740
40	0.4040	0.3740
41	0.3780	0.3920
42	0.3860	0.3940
43	0.3880	0.3760
44	0.3940	0.3880
45	0.4080	0.3940
46	0.3960	0.3820
47	0.4160	0.3860
48	0.3840	0.3500
49	0.4160	0.3660
50	0.4060	0.3600
51	0.3980	0.3920
52	0.3960	0.3880
53	0.3740	0.3540
54	0.4040	0.3840
55	0.4000	0.3800
56	0.3980	0.3980
57	0.4200	0.3860
58	0.4020	0.3820
59	0.4100	0.3860
60	0.4160	0.3940
61	0.3800	0.4000
62	0.3800	0.3700

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

63	0.3620	0.3680
64	0.3660	0.3780
65	0.3700	0.3700
66	0.3720	0.3740
67	0.3600	0.3760
68	0.3520	0.3580
69	0.3600	0.3700
70	0.3680	0.3660
71	0.3620	0.3880
72	0.3740	0.3680
73	0.3740	0.3560
74	0.3840	0.3660
75	0.3840	0.3820
76	0.3840	0.3660
77	0.3760	0.3700
78	0.3760	0.3540
79	0.3960	0.3680
80	0.3880	0.3560
81	0.3820	0.3740
82	0.3860	0.3700
83	0.3840	0.3580
84	0.3920	0.3700
85	0.3900	0.3800
86	0.3820	0.3660
87	0.3860	0.3780
88	0.3720	0.3540
89	0.3880	0.3980
90	0.4100	0.3920

After thermal age

Units: mm

Pos.#	B1	B2
1	0.4260	0.3960
2	0.4020	0.3980
3	0.3740	0.3840
4	0.3960	0.3960
5	0.3880	0.3840
6	0.3920	0.3900
7	0.3900	0.3880
8	0.3540	0.3600
9	0.3920	0.3620
10	0.3760	0.3620
11	0.3900	0.3840
12	0.3960	0.3960
13	0.3600	0.3480
14	0.3820	0.3840
15	0.3780	0.3700
16	0.3820	0.3820

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

17	0.3840	0.3680
18	0.3660	0.3480
19	0.3840	0.3780
20	0.3940	0.3760
21	0.3620	0.3620
22	0.3660	0.3720
23	0.3680	0.3340
24	0.3840	0.3820
25	0.3840	0.3540
26	0.3880	0.3820
27	0.3980	0.3720
28	0.3700	0.3540
29	0.3840	0.3900
30	0.3840	0.3900
31	0.4020	0.3920
32	0.3920	0.3800
33	0.3700	0.3660
34	0.3880	0.3760
35	0.3960	0.3820
36	0.4060	0.3740
37	0.3960	0.3840
38	0.3660	0.3340
39	0.3980	0.3860
40	0.3960	0.3840
41	0.4040	0.3540
42	0.4060	0.3660
43	0.3600	0.3460
44	0.4000	0.3780
45	0.3980	0.3920
46	0.4020	0.3840
47	0.3780	0.3820
48	0.3640	0.3640
49	0.3860	0.3920
50	0.3620	0.4040
51	0.3920	0.3900
52	0.4060	0.3900
53	0.3600	0.3700
54	0.3920	0.3920
55	0.3940	0.3880
56	0.3980	0.3940
57	0.3900	0.3980
58	0.3780	0.3680
59	0.3920	0.3860
60	0.3960	0.3980
61	0.4120	0.3940
62	0.3960	0.4020
63	0.3820	0.3740
64	0.3780	0.3800
65	0.3760	0.3720

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

66	0.3860	0.3740
67	0.3880	0.3660
68	0.3880	0.3480
69	0.3820	0.3600
70	0.3960	0.3640
71	0.3800	0.3660
72	0.3900	0.3760
73	0.3640	0.3580
74	0.3720	0.3740
75	0.3700	0.3720
76	0.3840	0.3720
77	0.3760	0.3700
78	0.3840	0.3520
79	0.3600	0.3640
80	0.3720	0.3720
81	0.3620	0.3760
82	0.3760	0.3700
83	0.3560	0.3620
84	0.3740	0.3660
85	0.3680	0.3700
86	0.3660	0.3760
87	0.3660	0.3740
88	0.3720	0.3460
89	0.3800	0.3840
90	0.3880	0.3840

SEAM8

Initial		
Units: mm		
Pos.#	B1	B2
1	0.9539	0.9659
2	0.9480	0.9440
3	0.9519	0.9460
4	0.9340	0.9599
5	0.9200	0.9460
6	0.9100	0.9200
7	0.9120	0.9380
8	0.9020	0.9300
9	0.8840	0.9300
10	0.8560	0.9120
11	0.8560	0.8720
12	0.8560	0.8880
13	0.8260	0.8640
14	0.8260	0.8540
15	0.8520	0.8740
16	0.8620	0.8940
17	0.8060	0.8480
18	0.8060	0.8160

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

19	0.8240	0.8380
20	0.8600	0.8440
21	0.8340	0.8260
22	0.8260	0.8360
23	0.8400	0.8340
24	0.8340	0.8560
25	0.8280	0.8420
26	0.8280	0.8440
27	0.8620	0.8700
28	0.8660	0.8720
29	0.8940	0.8980
30	0.9340	0.9140
31	0.8840	0.8760
32	0.8780	0.8600
33	0.8440	0.8520
34	0.8480	0.8500
35	0.8500	0.8580
36	0.8440	0.8520
37	0.8380	0.8360
38	0.8480	0.8480
39	0.8660	0.8500
40	0.8560	0.8460
41	0.8600	0.8340
42	0.8640	0.8600
43	0.8560	0.8640
44	0.8500	0.8560
45	0.8560	0.8440
46	0.8600	0.8580
47	0.8540	0.8640
48	0.8580	0.8600
49	0.8540	0.8720
50	0.8700	0.8700
51	0.8680	0.8680
52	0.8460	0.8720
53	0.8580	0.8620
54	0.8680	0.8860
55	0.8600	0.8840
56	0.8500	0.8720
57	0.8620	0.8960
58	0.8920	0.9140
59	0.9160	0.9899
60	0.9579	0.9599
61	0.9100	0.9120
62	0.9020	0.8800
63	0.9060	0.9240
64	0.9320	0.9120
65	0.9420	0.9360
66	0.9300	0.9140
67	0.9200	0.9160

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

68	0.9360	0.9100
69	0.9140	0.9000
70	0.9320	0.8760
71	0.9020	0.8840
72	0.9000	0.8660
73	0.8980	0.9140
74	0.9080	0.8980
75	0.8580	0.8640
76	0.8820	0.8640
77	0.8860	0.8940
78	0.9120	0.8620
79	0.8580	0.8560
80	0.9000	0.8580
81	0.9120	0.8980
82	0.9020	0.8760
83	0.8600	0.8420
84	0.8820	0.8500
85	0.9080	0.8920
86	0.8860	0.8520
87	0.8780	0.8620
88	0.8760	0.8440
89	0.9240	0.9200
90	0.9340	0.9120
After thermal ageing		
Units: mm		
Pos.#	B1	B2
1	0.9659	0.9679
2	0.9200	0.9280
3	0.9499	0.9400
4	0.9100	0.9460
5	0.9200	0.9539
6	0.9180	0.9440
7	0.9200	0.9140
8	0.9000	0.9000
9	0.9040	0.9120
10	0.8800	0.8980
11	0.8720	0.8800
12	0.8480	0.8540
13	0.8320	0.8780
14	0.8360	0.8680
15	0.8640	0.8400
16	0.8820	0.8420
17	0.8360	0.8520
18	0.8160	0.8340
19	0.8360	0.8320
20	0.8500	0.8280
21	0.8240	0.8360
22	0.8380	0.8480
23	0.8580	0.8340

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

24	0.8340	0.8420
25	0.8500	0.8800
26	0.8400	0.8560
27	0.8620	0.8680
28	0.8780	0.8940
29	0.8640	0.9260
30	0.9180	0.9280
31	0.8500	0.8640
32	0.8640	0.8620
33	0.8560	0.8520
34	0.8520	0.8520
35	0.8580	0.8340
36	0.8420	0.8460
37	0.8460	0.8360
38	0.8360	0.8220
39	0.8400	0.8340
40	0.8360	0.8500
41	0.8480	0.8400
42	0.8440	0.8420
43	0.8380	0.8520
44	0.8560	0.8500
45	0.8700	0.8580
46	0.8460	0.8260
47	0.8400	0.8180
48	0.8580	0.8500
49	0.8520	0.8580
50	0.8580	0.8500
51	0.8680	0.8400
52	0.8760	0.8860
53	0.8860	0.8820
54	0.8540	0.8580
55	0.8720	0.8720
56	0.8880	0.8640
57	0.8840	0.9020
58	0.8860	0.9380
59	0.9240	0.9140
60	0.9539	0.9719
61	0.9160	0.9200
62	0.9260	0.9659
63	0.8940	0.9380
64	0.9460	0.9579
65	0.9300	0.9380
66	0.9220	0.9360
67	0.9360	0.9360
68	0.8900	0.9240
69	0.9080	0.9060
70	0.9180	0.8980
71	0.8880	0.9380
72	0.8860	0.9260

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

73	0.8940	0.9160
74	0.8960	0.8880
75	0.9100	0.8960
76	0.8940	0.8900
77	0.9000	0.8340
78	0.9020	0.8520
79	0.8760	0.8920
80	0.8420	0.8800
81	0.8700	0.8480
82	0.8800	0.8360
83	0.8340	0.8480
84	0.8580	0.8680
85	0.8680	0.8340
86	0.8480	0.8480
87	0.8440	0.8840
88	0.8820	0.9040
89	0.9180	0.9000
90	0.9300	0.9060

MATING/UNMATING:

<u>Sample#</u>	Initial		After 25 Cycles		After Thermals		After Humidity	
	Mating	Unmating	Mating	Unmating	Mating	Unmating	Mating	Unmating
1	7.72	4.54	9.90	5.33	6.09	2.81	7.03	3.66
2	7.16	4.63	9.04	4.73	5.49	2.76	6.15	3.34
3	10.48	6.65	11.70	6.40	5.81	3.08	6.96	3.83
4	7.99	6.32	9.84	4.60	6.28	3.37	7.38	3.93
5	8.20	5.46	8.91	4.59	6.10	3.18	7.05	3.91
6	9.04	6.21	10.99	4.84	6.48	3.19	7.27	3.91
7	7.06	4.66	9.37	5.07	5.72	2.73	6.40	3.34
8	8.65	7.11	11.08	5.21	5.84	3.38	6.99	3.62
9	8.31	6.72	10.48	5.02	6.11	3.16	7.08	3.79
10	8.08	4.18	10.99	4.96	5.62	2.56	6.50	3.33

NORMAL FORCE (FOR CONTACTS TESTED IN THE HOUSING):

Initial	Deflections in inches, Forces in Grams										
Sample #	0.0009	0.0018	0.0027	0.0036	0.0045	0.0054	0.0063	0.0072	0.0081	0.0090	SET
1	5.4	10.6	15.8	21.0	26.3	31.5	36.7	41.8	46.6	51.3	0.0002
2	4.8	9.7	14.8	19.9	24.9	29.8	34.9	39.8	44.5	49.2	0.0001
4	5.0	9.9	14.9	19.7	24.6	29.5	34.3	38.8	43.4	47.8	0.0002
5	4.8	9.7	14.5	19.2	23.8	28.3	33.0	37.6	42.2	46.5	0.0001
6	4.8	9.6	14.5	19.2	23.7	28.4	32.8	37.4	41.9	46.3	0.0002
7	4.9	10.1	15.1	19.9	24.8	29.4	34.0	38.7	43.3	47.9	0.0001
8	5.1	10.0	15.3	20.2	25.2	30.5	35.4	40.4	45.0	49.9	0.0002
9	5.1	10.4	15.5	20.7	25.5	30.6	35.3	40.3	45.2	49.8	0.0002
10	4.8	9.8	14.6	19.7	24.7	29.5	34.2	38.9	43.4	47.5	0.0002

After Thermals	Deflections in inches, Forces in Grams										
Sample #	0.0009	0.0018	0.0027	0.0036	0.0045	0.0054	0.0063	0.0072	0.0081	0.0090	SET
1	4.9	8.7	13.6	18.3	23.4	28.9	35.3	41.3	47.1	53.1	0.0002
2	5.4	9.9	15.2	20.1	25.5	31.3	37.1	42.9	49.7	55.7	0.0000
3	4.9	9.3	14.3	19.7	24.9	30.0	36.3	41.9	47.7	54.5	0.0000
4	4.5	9.3	14.0	19.1	24.6	30.0	35.1	40.8	47.3	53.0	0.0001
5	4.4	9.2	13.9	19.5	24.7	30.0	36.2	42.1	47.7	45.1	0.0001
6	4.6	9.6	14.5	19.7	24.8	30.5	36.3	42.0	47.5	45.3	0.0000
7	4.5	9.5	14.2	19.3	25.1	30.5	36.1	42.5	48.2	53.2	0.0001
8	4.3	9.1	13.9	18.7	23.6	28.8	34.1	39.3	45.2	41.5	0.0000
9	4.3	9.2	14.4	19.5	25.2	30.9	36.3	42.1	47.5	39.7	0.0001
10	4.2	8.5	13.2	18.1	23.3	28.7	34.7	40.2	46.1	48.5	0.0000
11	4.3	9.0	13.7	19.2	24.5	30.0	35.9	41.4	47.2	48.8	0.0000
12	3.9	8.7	13.5	18.5	23.3	28.6	34.3	39.7	45.6	51.8	0.0001

INSULATION RESISTANCE (IR):**Group B1, D1**

Initial Insulation Resistance			
Measured In Meg Ohms			
Pin to Pin			
	Mated	Unmated	
	x	x	x
Sample#	SEAF8/SEAM8	SEAF8	SEAM8
1	100000	100000	100000
2	100000	100000	100000
3	100000		
4	100000		
Row to Row			
	Mated	A Unmated	B
	x	x	x
Sample#	SEAF8/SEAM8	SEAF8	SEAM8
087020-040	100000	100000	100000
087020-041	100000	100000	100000

Thermal Insulation Resistance			
Measured In Meg Ohms			
Pin to Pin			
Mated		Unmated	
X		X	X
Sample#	SEAF8/SEAM8	SEAF8	SEAM8
1	100000	100000	100000
2	100000	100000	100000
Row to Row			
Mated		A Unmated	B
X		X	X
Sample#	SEAF8/SEAM8	SEAF8	SEAM8
087020-040	100000	100000	100000
087020-041	100000	100000	100000
Humidity Insulation Resistance			
Measured In Meg Ohms			
Pin to Pin			
Mated		Unmated	
X		X	X
Sample#	SEAF8/SEAM8	SEAF8	SEAM8
1	100000	100000	100000
2	100000	100000	100000
Row to Row			
Mated		A Unmated	B
X		X	X
Sample#	SEAF8/SEAM8	SEAF8	SEAM8
087020-040	100000	100000	100000
087020-041	100000	100000	100000

**INSULATION RESISTANCE (IR):
Group B2,D2**

Initial Insulation Resistance		
Measured In Meg Ohms		

Pin to Pin			
	Mated	A	Unmated B
	x	x	x
Sample#	SEAF8/SEAM8	SEAF8	SEAM8
087020-034	100000	100000	100000
087020-035	100000	100000	100000
Row to Row			
	Mated	A	Unmated B
	x	x	x
Sample#	SEAF8/SEAM8	SEAF8	SEAM8
087020-042	100000	100000	100000
087020-043	100000	100000	100000

Thermal Shock Insulation Resistance		
Measured In Meg Ohms		

Pin to Pin			
	Mated	A	Unmated B
	x	x	x
Sample#	SEAF8/SEAM8	SEAF8	SEAM8
087020-034	25000	100000	25000
087020-035	25000	50000	20000
Row to Row			
	Mated	A	Unmated B
	x	x	x
Sample#	SEAF8/SEAM8	SEAF8	SEAM8
087020-042	100000	100000	100000
087020-043	100000	100000	100000

Humidity Insulation Resistance			
Measured In Meg Ohms			
Pin to Pin			
Mated		A	Unmated B
x		x	x
Sample#	SEAF8/SEAM8	SEAF8	SEAM8
087020-034	15000	15000	15000
087020-035	15000	15000	15000
Row to Row			
Mated		A	Unmated B
x		x	x
Sample#	SEAF8/SEAM8	SEAF8	SEAM8
087020-042	15000	15000	15000
087020-043	15000	15000	15000

DIELECTRIC WITHSTANDING VOLTAGE (DWV):

Initial Breakdown Voltage			
Test Voltage <i>Until Breakdown Occurs</i>			
Pin to Pin			
Mated		Unmated	
X			
Sample#	SEAF8/SEAM8	SEAF8	SEAM8
1	940	880	980
2	960	880	940
3	960		
4	960		

Initial DWV			
Test Voltage= 660			
Pin to Pin			
Mated		Unmated	
Sample#	SEAF8/SEAM8	SEAF8	SEAM8
1	660	660	660
2	660	660	660
3	660		
4	660		
Row to Row			
Mated		A	Unmated B
Sample#	SEAF8/SEAM8	SEAF8	SEAM8
087020-040	660	660	660
087020-041	660	660	660

Thermal Test Voltage			
Test Voltage= 660			
Pin to Pin			
Mated		Unmated	
Sample#	SEAF8/SEAM8	SEAF8	SEAM8
1	660	660	660
2	660	660	660
Row to Row			
Mated		A	Unmated B
Sample#	SEAF8/SEAM8	SEAF8	SEAM8
087020-040	660	660	660
087020-041	660	660	660

Humidity Test Voltage			
Test Voltage= 660			
Pin to Pin			
Sample#	Mated	Unmated	
	SEAF8/SEAM8	SEAF8	SEAM8
1	660	660	660
2	660	660	660
Row to Row			
Sample#	Mated	A Unmated	B
	SEAF8/SEAM8	SEAF8	SEAM8
087020-040	660	660	660
087020-041	660	660	660

LLCR:**Group A1**

	mOhm values	Actual	Delta	Delta	Delta
Board	Position	Initial	25 Cycles	Thermal Age	Humidity
1	P1	17.4	-1.1	-0.6	-0.6
1	P2	16.6	-0.6	-0.7	-0.6
1	P3	17.0	0.0	0.8	-0.3
1	P4	16.7	0.1	0.1	-0.5
1	P5	16.8	0.0	0.3	0.2
1	P6	17.0	-0.1	-0.1	-0.4
1	P7	16.8	0.1	0.2	-0.4
1	P8	16.6	0.5	0.6	0.3
1	P9	16.8	1.6	1.2	0.8
1	P10	16.8	-0.6	-1.0	-1.0
1	P11	16.9	-0.2	-0.6	-0.8
1	P12	17.0	0.1	-0.1	-0.1
1	P13	16.7	-2.1	-2.2	-2.2
1	P14	17.3	-1.3	-1.5	-1.6
1	P15	16.9	-0.3	-0.6	-0.9
1	P16	16.8	0.0	1.6	-0.4
1	P17	17.3	-2.3	-2.3	-2.2
1	P18	16.7	-0.5	-0.6	-0.6
1	P19	16.9	-2.4	-2.0	-2.0
1	P20	17.4	-1.1	-1.1	-1.7
1	P21	16.9	-0.9	-1.1	-1.3
1	P22	16.8	-0.1	0.7	0.1
1	P23	16.9	-1.1	-1.3	-1.2
1	P24	17.4	1.7	1.4	1.3
2	P1	16.9	-0.5	-1.1	-1.1

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

2	P2	16.8	-0.5	-0.4	-0.2
2	P3	17.1	1.8	1.8	0.3
2	P4	17.0	-0.2	-0.4	-0.9
2	P5	16.8	-0.5	-0.4	-0.6
2	P6	16.5	0.0	0.6	-0.2
2	P7	16.4	1.0	0.7	0.6
2	P8	17.0	-0.4	-0.3	-0.5
2	P9	17.5	-0.2	-0.1	-0.1
2	P10	16.9	-0.5	-0.2	-0.3
2	P11	16.8	-0.9	-0.3	-0.3
2	P12	17.1	-0.6	-0.5	-0.7
2	P13	16.5	0.2	0.2	0.2
2	P14	16.7	-0.1	-0.2	-0.3
2	P15	17.3	-0.6	-0.5	-1.0
2	P16	17.2	-0.9	-0.5	-1.0
2	P17	16.6	0.0	-0.4	-0.1
2	P18	16.9	0.5	-0.5	-0.7
2	P19	16.7	-0.5	-0.4	-0.8
2	P20	16.8	38.6	7.1	6.0
2	P21	16.7	-0.1	0.0	-0.2
2	P22	17.0	0.5	0.7	0.1
2	P23	16.6	-0.6	-1.0	-0.8
2	P24	17.2	-0.4	-0.4	-0.3
3	P1	17.0	-1.0	-0.3	-0.8
3	P2	16.7	-0.3	-0.2	-0.5
3	P3	16.7	-0.4	0.3	-0.4
3	P4	16.7	-0.5	-0.3	-0.8
3	P5	16.8	-0.6	0.3	-0.4
3	P6	17.1	-0.6	-0.3	-0.9
3	P7	16.9	-0.8	-0.3	-0.6
3	P8	17.3	-1.0	-0.9	-1.3
3	P9	17.8	-1.4	-1.1	-1.5
3	P10	16.8	-0.7	-0.6	-0.9
3	P11	16.7	-0.5	0.0	-0.4
3	P12	16.6	-0.6	0.1	-0.6
3	P13	16.4	-0.4	-0.3	-0.5
3	P14	17.4	-1.4	-0.8	-0.9
3	P15	16.7	-0.8	-0.3	-0.7
3	P16	17.0	0.2	0.2	-1.0
3	P17	16.9	-1.0	-0.6	-1.2
3	P18	16.9	0.3	0.3	-0.1
3	P19	16.5	-0.9	-0.7	-1.1
3	P20	17.2	-0.4	0.3	-0.8
3	P21	17.0	-1.2	-1.1	-1.4
3	P22	16.6	-0.3	-0.2	-0.5
3	P23	16.9	-1.0	-0.9	-1.1
3	P24	17.0	0.7	1.8	0.7
4	P1	16.9	-1.2	-0.4	-1.1
4	P2	17.0	-0.9	-0.5	-0.9

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

4	P3	17.0	0.5	1.0	-0.4
4	P4	17.0	-0.8	-0.4	-1.1
4	P5	16.6	-0.4	0.2	-0.5
4	P6	16.9	-0.3	-0.2	-0.7
4	P7	16.9	0.3	0.1	-0.1
4	P8	16.9	0.2	0.2	-0.2
4	P9	16.8	-0.3	0.2	-0.3
4	P10	16.8	-0.4	0.8	-0.6
4	P11	16.8	-0.4	-0.1	-0.4
4	P12	16.5	-0.3	0.3	-0.9
4	P13	16.2	-0.1	0.6	0.1
4	P14	16.9	-0.8	-0.1	-0.6
4	P15	16.8	-0.5	0.1	-0.3
4	P16	17.3	-0.8	-0.5	-1.0
4	P17	16.6	0.5	0.7	0.2
4	P18	17.4	-1.2	-1.0	-1.4
4	P19	16.7	-0.4	-0.1	-0.7
4	P20	16.8	0.3	1.3	-0.7
4	P21	17.0	-1.2	-0.9	-1.2
4	P22	17.0	-0.4	0.2	0.1
4	P23	16.4	0.3	0.1	-0.4
4	P24	16.7	0.1	0.4	-0.3
5	P1	16.8	-0.5	-0.2	-1.0
5	P2	17.6	-0.8	-0.4	-0.8
5	P3	16.7	0.3	0.7	0.2
5	P4	16.9	-0.5	-0.3	-0.9
5	P5	16.7	-0.1	0.3	-0.1
5	P6	16.8	0.5	0.7	0.2
5	P7	17.4	-1.1	-0.6	-0.8
5	P8	16.5	1.9	1.5	0.7
5	P9	17.0	0.4	0.3	-0.3
5	P10	18.2	-1.4	-1.5	-1.7
5	P11	16.7	0.3	-0.1	-0.4
5	P12	16.8	0.2	0.2	-0.2
5	P13	16.9	0.5	0.2	-0.2
5	P14	17.4	-0.9	-0.8	-1.1
5	P15	16.6	-0.4	-0.3	-0.8
5	P16	17.3	-0.2	0.3	-0.9
5	P17	16.9	-2.1	-2.1	-2.0
5	P18	16.7	-0.6	-0.7	-0.8
5	P19	16.9	-0.8	-0.5	-0.8
5	P20	17.9	-1.1	-0.1	-1.6
5	P21	17.0	-0.6	-0.4	-0.7
5	P22	17.0	0.5	0.6	0.4
5	P23	16.8	-0.7	-0.8	-0.9
5	P24	17.0	0.4	1.0	0.4
6	P1	17.3	-0.6	-0.8	-1.1
6	P2	16.9	-0.7	-0.5	-0.5
6	P3	17.0	-0.7	-0.5	-1.0

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

6	P4	17.2	-0.3	-0.4	-1.1
6	P5	16.3	-0.3	0.1	-0.1
6	P6	17.0	0.3	0.2	-0.6
6	P7	16.7	0.3	0.1	0.0
6	P8	16.7	-0.5	0.1	0.3
6	P9	17.1	2.2	1.4	-0.1
6	P10	16.4	-0.6	0.0	-0.3
6	P11	16.3	-0.7	-0.2	-0.2
6	P12	16.8	-0.8	-1.0	-1.2
6	P13	16.6	-0.6	-0.5	-0.7
6	P14	17.3	-1.2	-1.4	-1.6
6	P15	16.6	-0.4	-0.5	-0.7
6	P16	17.8	-0.4	0.6	-1.0
6	P17	16.6	-0.1	-0.5	-0.6
6	P18	17.0	-0.8	-0.9	-0.8
6	P19	16.7	-0.6	-0.5	-1.1
6	P20	17.6	0.5	0.4	-0.4
6	P21	16.4	0.0	0.0	-0.1
6	P22	16.6	-0.3	0.2	-0.2
6	P23	16.5	-0.4	-0.5	-0.6
6	P24	16.8	-0.4	-0.6	-0.7
7	P1	16.9	-0.9	-0.6	-0.9
7	P2	17.0	-0.3	-0.6	-0.9
7	P3	17.1	-0.3	-0.1	-0.9
7	P4	17.4	-1.0	-0.8	-1.1
7	P5	17.1	-0.6	-0.6	-1.1
7	P6	17.4	-0.2	1.9	-0.2
7	P7	16.9	0.2	0.0	-0.3
7	P8	17.4	-1.0	-0.6	-1.1
7	P9	17.5	-0.2	0.2	-0.2
7	P10	17.7	-1.8	-1.2	-1.6
7	P11	16.9	-0.6	-0.8	-0.9
7	P12	17.1	-0.5	-0.7	-1.2
7	P13	16.5	-0.5	-0.2	-0.3
7	P14	17.0	-0.8	-0.9	-1.1
7	P15	16.9	-0.3	-0.4	-1.1
7	P16	17.2	-0.6	0.1	-0.4
7	P17	17.0	-0.1	-0.4	-0.7
7	P18	16.9	-0.2	-0.3	-0.3
7	P19	16.5	-0.3	-0.4	-0.8
7	P20	17.2	0.1	-0.1	-0.7
7	P21	16.3	-0.4	-0.1	-0.4
7	P22	17.0	0.5	0.6	0.2
7	P23	16.6	-0.4	-0.6	-0.8
7	P24	17.2	0.8	2.0	1.2
8	P1	16.9	-0.8	-0.5	-1.0
8	P2	16.8	-0.5	0.3	-0.1
8	P3	17.1	0.3	0.3	-0.7
8	P4	16.9	-0.6	0.2	-0.7

8	P5	16.6	-0.2	-0.2	-0.8
8	P6	16.8	0.1	0.0	-0.5
8	P7	16.8	0.0	0.5	0.2
8	P8	16.7	-0.8	-0.2	-0.7
8	P9	17.3	-0.8	0.0	-0.6
8	P10	16.9	-0.7	-0.3	-0.9
8	P11	16.9	-0.6	-0.6	-1.2
8	P12	17.1	-0.8	-0.8	-1.5
8	P13	16.5	-0.5	0.0	-0.3
8	P14	17.0	-0.7	-0.1	-0.3
8	P15	16.6	-0.6	-0.5	-0.5
8	P16	17.3	0.3	-0.1	-0.8
8	P17	16.3	0.0	-0.2	0.0
8	P18	17.4	-1.0	-0.8	-0.5
8	P19	16.6	-0.6	-0.7	-0.9
8	P20	17.1	0.5	0.3	-0.4
8	P21	16.9	-0.9	-0.4	-0.4
8	P22	16.5	-0.2	0.5	0.3
8	P23	16.9	-0.9	-1.1	-1.0
8	P24	17.0	0.1	0.2	-0.5

LLCR:**Group A2**

	mOhm values	Actual	Delta	Delta	Delta
Board	Position	Initial	25 Cycles	Thermal Shock	Humidity
1	P1	16.8	-0.2	-0.3	-0.1
1	P2	17.1	-0.2	-0.5	-0.5
1	P3	17.4	-0.7	-1.1	-1.0
1	P4	17.6	-0.1	-0.6	-0.6
1	P5	17.7	-0.8	-0.9	-0.7
1	P6	16.4	0.3	0.8	1.3
1	P7	16.9	0.2	-0.1	-0.1
1	P8	17.6	-0.7	-0.6	-0.4
1	P9	17.0	0.1	-0.3	-0.2
1	P10	17.1	-0.1	-0.4	-0.2
1	P11	17.1	-0.8	-0.9	-0.8
1	P12	16.9	-0.5	-0.6	-0.6
1	P13	16.9	0.0	0.4	0.2
1	P14	17.0	-0.1	-0.2	-0.2
1	P15	17.6	-0.8	-0.6	-0.5
1	P16	16.6	0.2	0.2	0.1
1	P17	16.7	0.1	-0.5	0.0
1	P18	16.6	0.1	0.3	0.4
1	P19	16.5	0.6	0.1	0.1
1	P20	16.6	0.1	0.1	0.4
1	P21	16.6	0.3	-0.2	0.0

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Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

1	P22	16.9	-0.1	-0.2	0.0
1	P23	17.1	-0.2	-0.3	-0.5
1	P24	17.6	-0.4	-0.6	-0.8
2	P1	16.4	0.0	-0.2	-0.3
2	P2	16.7	-0.3	-0.5	-0.7
2	P3	17.1	-0.4	-0.8	-0.8
2	P4	17.3	-0.9	-1.0	-1.1
2	P5	16.6	0.4	-0.1	-0.2
2	P6	16.9	-0.2	-0.4	-0.7
2	P7	16.8	-0.1	-0.1	0.4
2	P8	16.9	-0.2	-0.1	-0.2
2	P9	16.7	-0.2	-0.4	0.0
2	P10	16.6	0.1	-0.1	-0.3
2	P11	16.5	0.2	-0.1	-0.2
2	P12	16.9	0.1	-0.7	-0.8
2	P13	16.6	0.1	-0.4	-0.5
2	P14	16.7	0.1	0.0	-0.2
2	P15	16.6	-0.3	-0.3	-0.3
2	P16	16.5	0.0	-0.2	2.5
2	P17	17.2	-0.7	-1.0	-1.1
2	P18	16.6	0.0	-0.1	-0.2
2	P19	16.5	-0.3	-0.4	-0.4
2	P20	16.8	0.4	-0.1	-0.1
2	P21	16.8	-0.1	-0.6	-0.6
2	P22	17.3	0.5	-0.2	0.1
2	P23	16.6	0.3	0.1	-0.1
2	P24	16.9	-0.1	-0.3	-0.1
3	P1	16.9	0.0	-0.6	-0.6
3	P2	16.3	0.4	0.0	0.0
3	P3	17.2	-0.3	-0.7	-0.6
3	P4	16.2	0.2	-0.1	0.1
3	P5	16.4	0.3	0.2	-0.2
3	P6	16.4	0.1	-0.3	-0.2
3	P7	16.3	0.3	0.2	1.0
3	P8	18.0	-0.4	-1.1	-1.2
3	P9	16.2	0.2	0.4	0.7
3	P10	16.2	0.0	-0.1	-0.3
3	P11	16.7	0.0	-0.4	-0.4
3	P12	16.4	0.8	0.0	-0.3
3	P13	16.4	0.2	-0.2	-0.3
3	P14	16.6	0.4	-0.4	-0.4
3	P15	16.6	0.1	-0.7	-0.8
3	P16	16.5	0.1	0.0	-0.1
3	P17	17.2	-0.4	-0.9	-1.0
3	P18	16.2	0.2	0.0	-0.1
3	P19	16.4	0.0	-0.4	-0.4
3	P20	16.6	0.0	-0.1	-0.3
3	P21	16.2	0.2	0.1	0.2
3	P22	16.3	0.0	0.0	0.5

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Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

3	P23	16.4	0.0	0.0	0.0
3	P24	16.8	-0.2	-0.5	0.4
4	P1	16.7	0.2	-0.2	-0.3
4	P2	17.1	0.0	-0.3	-0.4
4	P3	18.0	0.6	-0.6	-0.5
4	P4	16.4	0.4	0.3	0.1
4	P5	17.3	-0.1	-0.1	-0.2
4	P6	17.2	0.0	-0.2	-0.2
4	P7	16.7	-0.3	0.5	0.3
4	P8	17.4	-0.1	-0.1	0.1
4	P9	16.5	-0.2	-0.2	-0.3
4	P10	16.6	-0.1	-0.2	-0.3
4	P11	16.8	0.4	-0.3	-0.3
4	P12	17.0	-0.1	-0.4	-0.4
4	P13	16.6	0.3	-0.1	-0.1
4	P14	16.9	-0.3	-0.7	-0.8
4	P15	19.0	-0.4	-3.1	-3.1
4	P16	17.6	-0.8	-0.9	-0.8
4	P17	18.0	-0.8	-0.9	-1.1
4	P18	16.7	-0.2	-0.6	-0.7
4	P19	17.2	-0.4	-0.8	-0.8
4	P20	17.1	-0.4	-0.4	-0.3
4	P21	16.8	-0.4	-0.6	-0.5
4	P22	16.9	-0.4	-0.6	0.2
4	P23	16.6	0.0	-0.3	-0.3
4	P24	17.0	-0.1	-0.3	0.1
5	P1	16.8	-0.1	-0.8	-0.8
5	P2	16.7	-0.2	-0.4	-0.5
5	P3	16.7	-0.2	-0.5	-0.3
5	P4	16.8	0.3	-0.3	-0.2
5	P5	17.0	-0.5	-0.9	-0.7
5	P6	16.9	0.0	-0.4	0.0
5	P7	17.0	0.6	-0.5	-0.1
5	P8	16.4	0.6	0.1	0.0
5	P9	16.8	0.3	-0.7	-0.4
5	P10	17.0	-0.6	-1.1	-1.2
5	P11	17.2	-0.7	-1.3	-1.3
5	P12	16.9	-0.1	-0.9	-1.0
5	P13	16.7	-0.2	-0.6	-0.7
5	P14	16.9	-0.3	-1.0	-1.0
5	P15	17.2	-0.2	-1.0	-1.0
5	P16	16.8	-0.2	-0.9	-0.3
5	P17	16.6	0.3	-0.3	-0.3
5	P18	16.9	0.0	-1.0	-0.8
5	P19	17.6	-1.0	-1.5	-1.5
5	P20	17.1	-0.1	-0.8	-0.8
5	P21	16.7	-0.3	-0.5	-0.5
5	P22	18.1	-0.2	-1.5	0.2
5	P23	16.4	0.0	-0.3	-0.1

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

5	P24	17.0	-0.4	-0.7	1.1
6	P1	16.8	0.3	-0.5	-0.5
6	P2	16.4	0.5	0.2	0.6
6	P3	17.1	0.4	0.2	0.1
6	P4	17.0	0.8	0.1	0.1
6	P5	17.0	0.9	-0.1	-0.1
6	P6	16.7	0.5	0.2	0.3
6	P7	17.4	0.7	-0.4	0.2
6	P8	17.4	0.5	-0.3	0.0
6	P9	17.2	0.2	0.0	0.9
6	P10	16.8	0.6	-0.3	-0.6
6	P11	16.7	0.4	-0.1	-0.1
6	P12	17.0	0.7	-0.4	-0.3
6	P13	16.8	0.4	-0.2	-0.3
6	P14	16.7	0.1	0.0	0.3
6	P15	16.7	0.1	-0.5	-0.2
6	P16	17.0	-0.1	-0.5	-0.2
6	P17	17.0	-0.3	-1.0	-0.8
6	P18	16.5	0.2	-0.4	-0.1
6	P19	16.4	0.4	-0.1	0.0
6	P20	16.8	0.2	-0.1	0.5
6	P21	16.5	0.4	0.2	0.4
6	P22	16.9	0.6	0.0	1.0
6	P23	16.9	0.2	-0.4	-0.2
6	P24	16.9	0.3	0.0	0.3
7	P1	16.7	0.1	-0.4	-0.3
7	P2	16.6	0.7	0.1	0.1
7	P3	16.9	0.7	0.3	0.4
7	P4	16.1	0.4	0.3	0.5
7	P5	16.7	1.6	-0.4	-0.2
7	P6	16.8	0.5	-0.4	-0.1
7	P7	16.9	0.5	0.1	0.8
7	P8	17.4	0.0	-0.9	-0.7
7	P9	16.4	0.6	0.2	0.3
7	P10	16.5	0.8	-0.4	-0.4
7	P11	16.4	1.1	0.4	0.4
7	P12	16.5	0.5	-0.4	-0.4
7	P13	16.1	0.4	0.1	0.2
7	P14	16.3	0.5	0.2	0.3
7	P15	16.8	0.3	-0.6	-0.5
7	P16	17.0	-0.4	-0.6	-0.3
7	P17	16.8	0.3	-0.5	-0.6
7	P18	16.5	0.3	-0.3	-0.1
7	P19	16.8	-0.5	-1.1	-0.9
7	P20	16.5	0.3	-0.2	0.2
7	P21	16.2	0.6	0.1	0.3
7	P22	16.7	0.6	-0.2	0.2
7	P23	16.2	0.1	0.0	0.0
7	P24	16.7	0.6	0.1	0.1

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

8	P1	16.7	-0.6	-0.9	-0.9
8	P2	16.2	0.0	-0.3	-0.4
8	P3	16.3	0.0	-0.3	-0.3
8	P4	16.8	-0.4	-0.6	-0.5
8	P5	16.0	0.0	-0.3	0.1
8	P6	16.5	0.2	-0.3	0.0
8	P7	16.6	-0.2	-0.6	-0.1
8	P8	16.2	0.1	-0.2	0.4
8	P9	16.4	0.2	-0.5	0
8	P10	16.2	-0.1	-0.6	-0.6
8	P11	16.6	0.2	-0.6	-0.5
8	P12	16.5	0.0	-0.6	-0.5
8	P13	16.6	-0.3	-0.6	-0.6
8	P14	16.7	-0.3	-0.8	-0.8
8	P15	16.4	-0.3	-0.7	-0.6
8	P16	16.9	0.2	-0.6	-0.5
8	P17	16.8	-0.2	-0.9	-0.9
8	P18	16.5	-0.5	-0.5	-0.4
8	P19	17.6	-0.1	-1.6	-1.6
8	P20	16.9	0.1	-0.5	-0.5
8	P21	16.1	0.2	-0.3	-0.3
8	P22	16.5	0.8	0.4	0.8
8	P23	16.3	-0.3	-0.5	-0.4
8	P24	17.0	0.0	-0.2	-0.1

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

GAS TIGHT:

	mOhm values	Actual	Delta
Board	Position	Initial	Gas Tight
1	P1	17.1	0.0
1	P2	16.6	0.3
1	P3	16.5	0.5
1	P4	16.9	0.2
1	P5	16.3	0.0
1	P6	16.7	0.1
1	P7	16.0	0.2
1	P8	16.6	0.0
1	P9	16.7	0.1
1	P10	16.3	0.0
1	P11	16.4	0.1
1	P12	16.6	0.0
1	P13	16.2	0.2
1	P14	16.6	0.1
1	P15	16.5	0.2
1	P16	16.9	0.7
1	P17	16.3	0.0
1	P18	16.9	0.4
1	P19	16.4	0.3
1	P20	16.5	0.2
1	P21	16.3	0.5
1	P22	16.4	0.5
1	P23	16.5	0.2
1	P24	16.3	0.3
2	P1	16.7	0.0
2	P2	17.0	-0.1
2	P3	17.0	0.1
2	P4	16.7	0.1
2	P5	16.7	0.1
2	P6	16.5	0.1
2	P7	16.6	0.1
2	P8	16.6	0.1
2	P9	17.1	0.1
2	P10	16.9	-0.1
2	P11	16.5	0.0
2	P12	16.4	0.1
2	P13	16.9	0.0
2	P14	17.0	0.0
2	P15	16.2	0.0
2	P16	17.1	0.1
2	P17	17.4	0.1
2	P18	16.7	0.0
2	P19	16.6	0.1
2	P20	17.1	0.1
2	P21	16.8	0.2

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

2	P22	17.2	0.1
2	P23	17.0	-0.1
2	P24	17.9	0.1
3	P1	16.8	0.0
3	P2	17.3	0.1
3	P3	17.2	0.2
3	P4	17.0	0.1
3	P5	16.6	0.1
3	P6	16.8	0.2
3	P7	17.1	0.4
3	P8	16.7	0.0
3	P9	17.1	0.3
3	P10	17.2	0.1
3	P11	16.9	0.0
3	P12	17.2	0.1
3	P13	16.7	0.0
3	P14	17.4	0.0
3	P15	16.6	0.1
3	P16	16.9	0.3
3	P17	16.9	0.0
3	P18	17.2	0.1
3	P19	16.9	0.0
3	P20	17.3	0.2
3	P21	16.9	0.2
3	P22	17.0	0.1
3	P23	16.9	0.0
3	P24	16.9	0.2
4	P1	17.0	0.0
4	P2	16.7	0.1
4	P3	16.7	0.4
4	P4	17.0	0.1
4	P5	16.7	0.0
4	P6	16.7	0.1
4	P7	17.0	0.0
4	P8	17.3	0.0
4	P9	17.2	0.0
4	P10	16.4	0.0
4	P11	16.7	0.0
4	P12	16.9	0.0
4	P13	16.7	0.0
4	P14	16.8	-0.1
4	P15	16.9	0.0
4	P16	16.9	0.1
4	P17	17.1	0.0
4	P18	16.7	-0.1
4	P19	16.7	0.1
4	P20	17.0	0.1
4	P21	16.9	0.1
4	P22	16.5	0.0

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

4	P23	16.6	-0.1
4	P24	16.8	-0.1
5	P1	17.8	0.3
5	P2	17.2	0.1
5	P3	17.2	0.1
5	P4	16.7	0.0
5	P5	17.5	-0.1
5	P6	16.6	0.1
5	P7	17.3	-0.1
5	P8	17.1	0.0
5	P9	17.1	-0.1
5	P10	17.0	0.0
5	P11	17.4	0.1
5	P12	17.5	0.1
5	P13	17.1	0.1
5	P14	17.2	0.3
5	P15	17.1	0.0
5	P16	17.2	0.0
5	P17	17.4	0.1
5	P18	17.0	0.0
5	P19	17.5	0.0
5	P20	16.7	0.1
5	P21	16.6	0.1
5	P22	17.1	0.0
5	P23	16.8	0.0
5	P24	18.2	-0.1
6	P1	16.9	0.1
6	P2	17.0	0.1
6	P3	17.3	0.2
6	P4	16.8	0.2
6	P5	17.5	0.1
6	P6	16.9	0.3
6	P7	16.8	0.3
6	P8	17.2	0.3
6	P9	16.9	0.3
6	P10	16.8	0.3
6	P11	16.6	0.2
6	P12	17.4	-0.2
6	P13	16.8	0.2
6	P14	17.1	-0.1
6	P15	17.4	0.1
6	P16	17.3	-0.1
6	P17	17.2	-0.1
6	P18	16.7	0.3
6	P19	16.8	0.3
6	P20	16.8	0.3
6	P21	16.8	0.5
6	P22	16.9	0.4
6	P23	17.1	0.1

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

6	P24	17.3	0.5
7	P1	16.9	0.2
7	P2	17.1	-0.1
7	P3	16.8	0.2
7	P4	17.2	0.1
7	P5	16.6	0.3
7	P6	17.1	0.0
7	P7	17.4	0.1
7	P8	16.8	0.1
7	P9	17.9	0.0
7	P10	16.6	0.0
7	P11	16.3	0.1
7	P12	16.7	0.0
7	P13	16.5	0.1
7	P14	17.6	0.3
7	P15	16.7	0.0
7	P16	17.5	0.0
7	P17	16.6	0.0
7	P18	17.4	-0.3
7	P19	16.3	0.1
7	P20	16.9	0.2
7	P21	16.6	0.1
7	P22	16.8	0.0
7	P23	16.8	0.0
7	P24	16.9	0.1
8	P1	17.0	-0.1
8	P2	16.9	-0.1
8	P3	16.6	0.0
8	P4	16.9	0.1
8	P5	16.7	0.0
8	P6	16.8	0.1
8	P7	16.9	0.3
8	P8	16.8	0.1
8	P9	17.3	0.3
8	P10	16.3	0.1
8	P11	16.5	0.0
8	P12	16.4	0.1
8	P13	16.1	0.0
8	P14	16.9	0.1
8	P15	16.4	0.0
8	P16	17.6	0.4
8	P17	16.8	0.0
8	P18	16.7	0.0
8	P19	16.6	0.1
8	P20	17.3	0.4
8	P21	16.5	0.1
8	P22	16.7	0.1
8	P23	16.8	-0.1
8	P24	17.4	0.0

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

Shock & Vibration

		mOhm values		
Samp#	Pin Type	Position	Actual Initial	Delta Shock-Vib
009	Signal	P01	16.79	0.38
009	Signal	P02	16.94	0.41
009	Signal	P03	17.19	0.1
009	Signal	P04	16.57	0.16
009	Signal	P05	17.08	0.64
009	Signal	P06	16.6	0.32
009	Signal	P07	16.02	0.02
009	Signal	P08	16.46	0.36
009	Signal	P09	16.81	0.15
009	Signal	P10	16	0.07
009	Signal	P11	16.48	0.29
009	Signal	P12	16.42	0.35
009	Signal	P13	16.15	0.21
009	Signal	P14	16.22	0.32
009	Signal	P15	16.73	0.12
009	Signal	P16	17.29	0.26
009	Signal	P17	16.32	0.24
009	Signal	P18	17.28	0.06
009	Signal	P19	16.26	0
009	Signal	P20	17.98	0.6
009	Signal	P21	17.16	0.21
009	Signal	P22	16.85	0.36
009	Signal	P23	16.69	0.07
009	Signal	P24	17.13	0.57
010	Signal	P01	17.41	0.32
010	Signal	P02	17.17	0.08
010	Signal	P03	16.72	0.09
010	Signal	P04	17.37	0.65
010	Signal	P05	16.87	0.84
010	Signal	P06	16.83	0.38
010	Signal	P07	17.56	0.5
010	Signal	P08	16.78	0.32
010	Signal	P09	17.94	0.55
010	Signal	P10	17.05	0.52
010	Signal	P11	18.44	0.09
010	Signal	P12	17.07	0.09
010	Signal	P13	18.07	2.64
010	Signal	P14	19.27	1.61
010	Signal	P15	17.34	0.35
010	Signal	P16	18.67	0.57
010	Signal	P17	17.53	2.29
010	Signal	P18	20.68	0.72
010	Signal	P19	16.62	0.06
010	Signal	P20	19.84	2.2

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

010	Signal	P21	17.01	0.12
010	Signal	P22	17.66	0.88
010	Signal	P23	17.34	0.05
010	Signal	P24	17.24	0.18
011	Signal	P01	16.64	1.75
011	Signal	P02	16.44	0.37
011	Signal	P03	17.88	0.78
011	Signal	P04	16.05	0.59
011	Signal	P05	16.94	0.08
011	Signal	P06	16.38	0.28
011	Signal	P07	16.45	0.36
011	Signal	P08	17.82	0.03
011	Signal	P09	16.69	0.2
011	Signal	P10	16.57	0.15
011	Signal	P11	17.79	4.07
011	Signal	P12	16.56	0.05
011	Signal	P13	17.17	7.58
011	Signal	P14	16.53	0.21
011	Signal	P15	16.28	0.35
011	Signal	P16	16.79	0.12
011	Signal	P17	16.24	0.3
011	Signal	P18	18.66	0.35
011	Signal	P19	16.67	0.56
011	Signal	P20	17.66	0.65
011	Signal	P21	17.03	0.2
011	Signal	P22	16.82	0.03
011	Signal	P23	18.01	0.37
011	Signal	P24	17.07	0.6
012	Signal	P01	16.91	0.64
012	Signal	P02	16.95	0.21
012	Signal	P03	16.89	0.53
012	Signal	P04	16.76	0.09
012	Signal	P05	16.71	0.11
012	Signal	P06	17.21	0.05
012	Signal	P07	16.66	0.05
012	Signal	P08	17.37	0.04
012	Signal	P09	18.09	0.46
012	Signal	P10	16.19	0.02
012	Signal	P11	16.74	0.07
012	Signal	P12	17.56	0.35
012	Signal	P13	16.71	0.26
012	Signal	P14	17.54	0.11
012	Signal	P15	16.77	0.66
012	Signal	P16	19	0.31
012	Signal	P17	19.05	1.42
012	Signal	P18	20.05	1.25
012	Signal	P19	15.97	1.07
012	Signal	P20	20.32	1.81

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

012	Signal	P21	16.67	0.09
012	Signal	P22	17.1	0.7
012	Signal	P23	17.19	0.26
012	Signal	P24	16.89	0.04
013	Signal	P01	16.76	0.22
013	Signal	P02	16.46	0.43
013	Signal	P03	16.55	0.21
013	Signal	P04	16.95	0.92
013	Signal	P05	16.21	0.45
013	Signal	P06	16.68	0.03
013	Signal	P07	16.19	0.3
013	Signal	P08	16.83	0.16
013	Signal	P09	16.88	0.03
013	Signal	P10	16.45	0.08
013	Signal	P11	16.22	0.41
013	Signal	P12	16.1	0.06
013	Signal	P13	16.5	0.24
013	Signal	P14	17.24	0.15
013	Signal	P15	16.13	0.19
013	Signal	P16	18.13	0.2
013	Signal	P17	16.56	0.13
013	Signal	P18	17.17	0.2
013	Signal	P19	16.7	0.02
013	Signal	P20	18.86	0.62
013	Signal	P21	16.52	0.61
013	Signal	P22	16.51	0.02
013	Signal	P23	17.02	0.05
013	Signal	P24	16.79	0.32
014	Signal	P01	16.88	0.43
014	Signal	P02	16.59	1.63
014	Signal	P03	17.17	0.63
014	Signal	P04	16.38	0.95
014	Signal	P05	17.6	0.15
014	Signal	P06	16.87	1.24
014	Signal	P07	16.7	0.14
014	Signal	P08	16.62	1.75
014	Signal	P09	17	0.42
014	Signal	P10	16.34	0.66
014	Signal	P11	17.25	0.99
014	Signal	P12	16.66	0.55
014	Signal	P13	17.02	0.14
014	Signal	P14	17.17	0.13
014	Signal	P15	17.09	0.67
014	Signal	P16	17.33	0.75
014	Signal	P17	18.47	0.25
014	Signal	P18	17.28	1.26
014	Signal	P19	17.1	0.38
014	Signal	P20	17.15	4.23

Tracking Code: TC1021—3406_Report_Rev_5

Part #: SEAF8-30-05.0-L-06-2-TR/
SEAM8-30-S05.0-L-06-2-TR

Part description: SEAx8

014	Signal	P21	16.72	1.13
014	Signal	P22	17.04	0.65
014	Signal	P23	17.08	0.3
014	Signal	P24	16.58	0.23
015	Signal	P01	17.37	1.15
015	Signal	P02	16.17	0.39
015	Signal	P03	17.24	1.28
015	Signal	P04	16.5	0.21
015	Signal	P05	16.36	0
015	Signal	P06	17.29	0.32
015	Signal	P07	16.94	0
015	Signal	P08	16.99	0.25
015	Signal	P09	17.69	0.98
015	Signal	P10	16.32	0.09
015	Signal	P11	16.41	0.66
015	Signal	P12	16.28	0.49
015	Signal	P13	16.9	0.1
015	Signal	P14	17.63	0.21
015	Signal	P15	16.43	1.02
015	Signal	P16	17.47	0.21
015	Signal	P17	16.74	0.52
015	Signal	P18	16.37	0.03
015	Signal	P19	16.14	0.09
015	Signal	P20	18.24	1.54
015	Signal	P21	17.14	0.04
015	Signal	P22	17.15	0.71
015	Signal	P23	17.14	0.04
015	Signal	P24	17.33	0.88
016	Signal	P01	16.83	0.44
016	Signal	P02	16.14	0.69
016	Signal	P03	16.31	0.18
016	Signal	P04	16.34	0.81
016	Signal	P05	16.23	0.45
016	Signal	P06	16.36	0.23
016	Signal	P07	16.36	0.33
016	Signal	P08	16.32	1.89
016	Signal	P09	16.41	0.02
016	Signal	P10	16.48	0.13
016	Signal	P11	16.59	0.46
016	Signal	P12	16.56	0.47
016	Signal	P13	17.88	0.21
016	Signal	P14	16.29	1.54
016	Signal	P15	16.3	0.72
016	Signal	P16	17.01	0.52
016	Signal	P17	16.37	0.16
016	Signal	P18	16.67	0.49
016	Signal	P19	16.66	0.16
016	Signal	P20	19.17	2.35

Tracking Code: TC1021—3406_Report_Rev_5	Part #: SEAF8-30-05.0-L-06-2-TR/ SEAM8-30-S05.0-L-06-2-TR
Part description: SEAx8	

016	Signal	P21	15.82	1
016	Signal	P22	16.49	0.31
016	Signal	P23	15.88	0.45
016	Signal	P24	17.27	0.34

EQUIPMENT AND CALIBRATION SCHEDULES**Equipment #:** MO-01**Description:** Micro-Ohmmeter**Manufacturer:** Keithley**Model:** 580**Serial #:** 0772740**Accuracy:** See Manual

... Last Cal: 04/30/2010, Next Cal: 04/30/2011

Equipment #: MO-03**Description:** Multimeter /Data Acquisition System**Manufacturer:** Keithley**Model:** 2700**Serial #:** 0791975**Accuracy:** See Manual

... Last Cal: 06/16/09, Next Cal: 06/16/2010

Equipment #: MO-11**Description:** Switch/Multimeter**Manufacturer:** Keithley**Model:** 3706**Serial #:** 120169**Accuracy:** See Manual See Manual

... Last Cal: 08/21/2009, Next Cal: 08/21/2010

Equipment #: OV-03**Description:** Cascade Tek Forced Air Oven**Manufacturer:** Cascade Tek**Model:** TFO-5**Serial #:** 0500100**Accuracy:** Temp. Stability: +/- .1C/C change in ambient

... Last Cal: 06/16/2009, Next Cal: 06/16/2010

Equipment #: OV-5**Description:** Forced Air Oven, 5 Cu. Ft., 120 V**Manufacturer:** Sheldon Mfg.**Model:** CE5F**Serial #:** 02008008**Accuracy:** +/- 5 deg. C

... Last Cal: 02/16/2010, Next Cal: 02/16/2011

Equipment #: TCT-03**Description:** Dillon Quantrol TC2 Test Stand**Manufacturer:** Dillon Quantrol**Model:** TC2**Serial #:** 02-1033-03**Accuracy:** Speed Accuracy: +/- 5% of indicated speed; Displacement: +/- 5 micrometers.

... Last Cal: 05/07/2009, Next Cal: 05/07/2010

Equipment #: TCT-06**Description:** Test Resources test stand**Manufacturer:** Test Resources**Model:****Serial #:****Accuracy:** Speed Accuracy: +/- 5% of indicated speed; Speed Accuracy: +/- 5% of indicated speed;
... Last Cal: 05/07/2009, Next Cal: 05/07/2010**Equipment #:** THC-01**Description:** Temperature/Humidity Chamber**Manufacturer:** Thermotron**Model:** SM-8-7800**Serial #:** 30676**Accuracy:** See Manual

... Last Cal: 02/16/2010, Next Cal: 08/16/2010

Equipment #: THC-04**Description:** Temperature/Humidity Chamber**Manufacturer:** Thermotron**Model:** SM-8-3800**Serial #:** 37782**Accuracy:** See Manual

... Last Cal: 02/16/2010, Next Cal: 08/16/2010

Equipment #: HPM-01**Description:** Hipot Megommeter**Manufacturer:** Hipotronics**Model:** H306B-A**Serial #:** M9905004**Accuracy:** 2 % Full Scale Accuracy

... Last Cal: 11/30/2009, Next Cal: 11/30/2010

Equipment #: SVC-01**Description:** Shock & Vibration Table**Manufacturer:** Data Physics**Model:** LE-DSA-10-20K**Serial #:** 10037**Accuracy:** See Manual

... Last Cal: 04/22/2012, Next Cal: 04/22/2013

Equipment #: ACLM-01**Description:** Accelerometer**Manufacturer:** PCB Piezotronics**Model:** 352C03**Serial #:** 115819**Accuracy:** See Manual

... Last Cal: 07/18/2012, Next Cal: 07/18/2013

Tracking Code: TC1021—3406_Report_Rev_5	Part #: SEAF8-30-05.0-L-06-2-TR/ SEAM8-30-S05.0-L-06-2-TR
Part description: SEAx8	

Equipment #: ED-03

Description: Event Detector

Manufacturer: Analysis Tech

Model: 32EHD

Serial #: 1100604

Accuracy: See Manual

... Last Cal: 10/31/2011, Next Cal: 10/31/2012