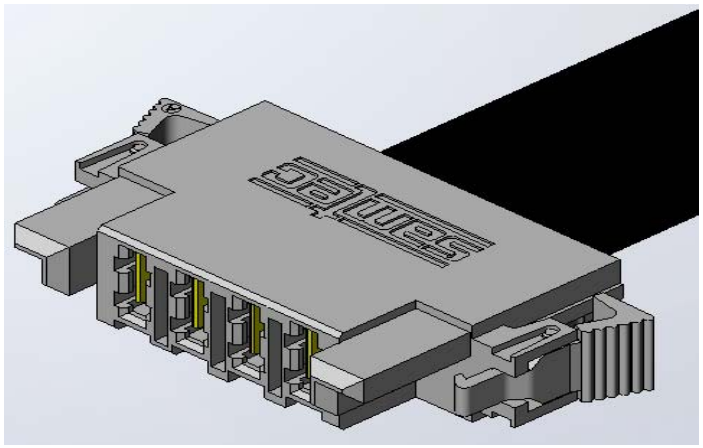
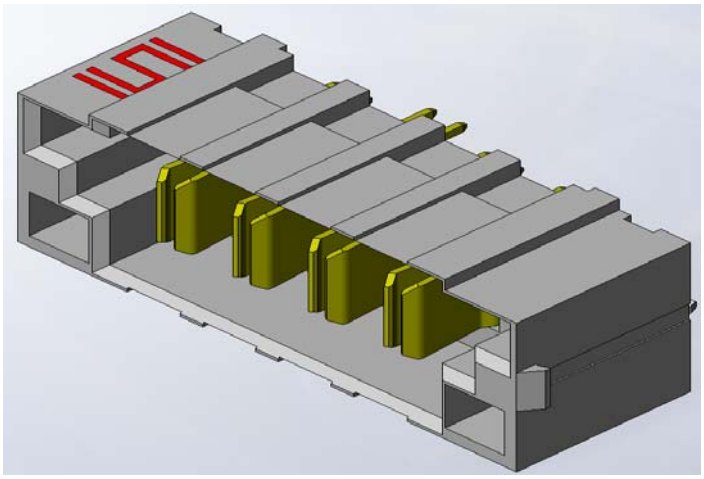
Project Number: Design Qualification Test Report	Tracking Code: 111667_Report_Rev_2		
Requested by: Neal Patterson	Date: 4/6/2011	Product Rev: 0	
Part #: PESS-08-12-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-12-T-12.00-DR-NUS\PET-08-01-T-VT PESS-02-12-L-12.00-DR-NUS-R\PET-02-01-L-VT PESS-02-12-T-12.00-DR-NUS-R\PET-02-01-T-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-T-VT	Lot #: N/A	Tech: David Lieber	Eng: Eric Ming
Part description: PESS\PET		Qty to test: 60	
Test Start: 11/24/2010	Test Completed: 12/30/2010		





Design Qualification Test Report

PESS\PET
PESS-08-12-L-12.00-DR-NUS-R\PET-08-01-L-VT
PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-L-VT
PESS-08-12-T-12.00-DR-NUS\PET-08-01-T-VT
PESS-02-12-L-12.00-DR-NUS-R\PET-02-01-L-VT
PESS-02-12-T-12.00-DR-NUS-R\PET-02-01-T-VT
PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-T-VT

Tracking Code: 111667_Report_Rev_2	Part #: PESS-08-12-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-12-T-12.00-DR-NUS\PET-08-01-T-VT PESS-02-12-L-12.00-DR-NUS-R\PET-02-01-L-VT PESS-02-12-T-12.00-DR-NUS-R\PET-02-01-T-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-T-VT
Part description: PESS\PET	

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.

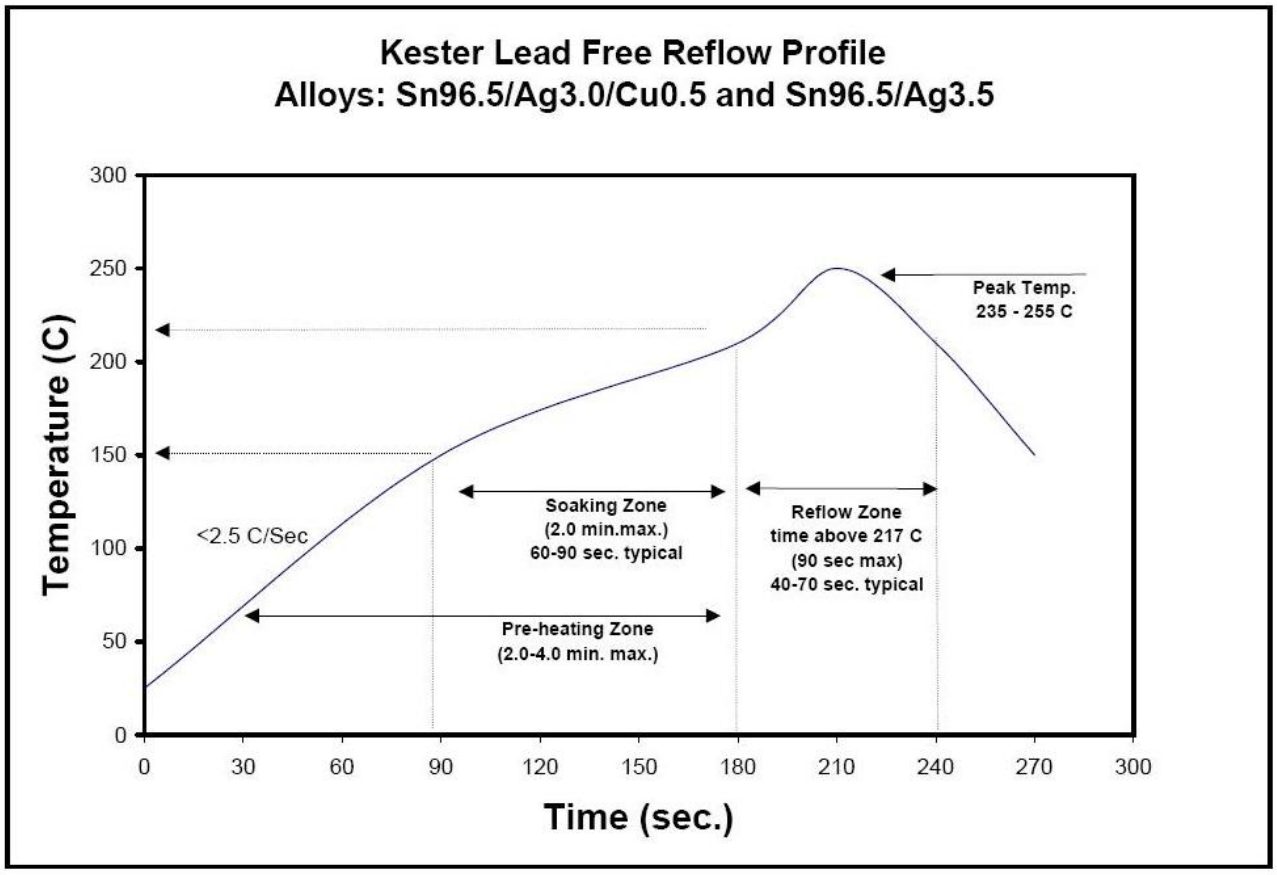
APPLICABLE DOCUMENTS

Standards: 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-102794-TST -XX

TYPICAL OVEN PROFILE (Soldering Parts to Test Boards)



FLOWCHARTS

Gas Tight

TEST STEP	GROUP A1 6 Boards (12 Connectors) 84 Points
01	LLCR-1
02	Gas Tight
03	LLCR-2

Gas Tight = EIA-364-36A

LLCR = EIA-364-23, LLCR

20 mV Max, 100 mA Max

Use Keithley 580 or 3706 in 4 wire dry circuit mode

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
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)
02				Thermal Shock (Mated and Undisturbed)
03				IR & DWV at test voltage (on both mated sets and on each connector unmated)
04				Cyclic Humidity (Mated and Undisturbed)
05				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 Groups A1, A2 or A3

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

FLOWCHARTS Continued

Thermal Aging

TEST STEP	GROUP A1 6 Boards (12 Connectors) 84 Points
	Thermal Aging (Mated)
01	Contact Gaps
02	Forces - Mating / Unmating
03	LLCR-1
04	Thermal Aging (Mated and Undisturbed)
05	LLCR-2
06	Forces - Mating / Unmating
07	Contact Gaps

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

Time Condition 'B' (250 Hours)

Mating / Unmating Forces = EIA-364-13

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

LLCR = EIA-364-23, LLCR

20 mV Max, 100 mA Max

Use Keithley 580 or 3706 in 4 wire dry circuit mode

FLOWCHARTS Continued

Durability/Mating/Unmating/Gaps

TEST STEP	GROUP A1 8 Position 6 Connectors	GROUP A2 2 Position 6 Connectors
01	Contact Gaps	Forces - Mating / Unmating
02	LLCR-1	25 Cycles
03	Forces - Mating / Unmating	Forces - Mating / Unmating
04	25 Cycles	25 Cycles (50 Total)
05	Forces - Mating / Unmating	Forces - Mating / Unmating
06	25 Cycles (50 Total)	25 Cycles (75 Total)
07	Forces - Mating / Unmating	Forces - Mating / Unmating
08	25 Cycles (75 Total)	25 Cycles (100 Total)
09	Forces - Mating / Unmating	Forces - Mating / Unmating
10	25 Cycles (100 Total)	
11	Forces - Mating / Unmating	
12	Clean w/Compressed Air	
13	Contact Gaps	
14	LLCR-2	
15	Thermal Shock (Mated and Undisturbed)	
16	LLCR-3	
17	Cyclic Humidity (Mated and Undisturbed)	
18	LLCR-4	
19	Forces - Mating / Unmating	

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

Mating / Unmating Forces = EIA-364-13

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

LLCR = EIA-364-23, LLCR

20 mV Max, 100 mA Max

Use Keithley 580 or 3706 in 4 wire dry circuit mode

FLOWCHARTS Continued

Mechanical Shock / Vibration / LLCR

TEST STEP	GROUP A1 8 Boards 64 Points
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 3 Boards (24 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

FLOWCHARTS Continued

Connector Pull

TEST STEP	GROUP A1 5 Pieces 0°	GROUP B1 5 Pieces 90°
01	Pull test, Mechanical Failure	Pull test, Mechanical Failure

Record forces at mechanical failure.

Tracking Code: 111667_Report_Rev_2	Part #: PESS-08-12-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-12-T-12.00-DR-NUS\PET-08-01-T-VT PESS-02-12-L-12.00-DR-NUS-R\PET-02-01-L-VT PESS-02-12-T-12.00-DR-NUS-R\PET-02-01-T-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-T-VT
Part description: PESS\PET	

ATTRIBUTE DEFINITIONS

The following is a brief, simplified description of attributes.

THERMAL SHOCK:

1) EIA-364-32, *Thermal Shock (Temperature Cycling) Test Procedure for Electrical Connectors.*
2) Test Condition 1: -55°C to +85°C
3) Test Time: ½ hour dwell at each temperature extreme
4) Number of Cycles: 100
5) All test samples are pre-conditioned at ambient.
6) All test samples are exposed to environmental stressing in the mated condition.

THERMAL:

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.

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 G^2 / 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

ATTRIBUTE DEFINITIONS

The following is a brief, simplified description of attributes.

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.

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. Rate of Application 500 V/Sec
        iii. 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)..

ATTRIBUTE DEFINITIONS

The following is a brief, simplified description of attributes.

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 +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. <= +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^{o} C
        ix. The final LLCR shall be conducted within 1 hour after drying.

ATTRIBUTE DEFINITIONS

The following is a brief, simplified description of attributes.

CONNECTOR PULL:

1) Secure cable near center and pull on connector
    a. At 90°, right angle to cable
    b. At 0°, in-line with cable

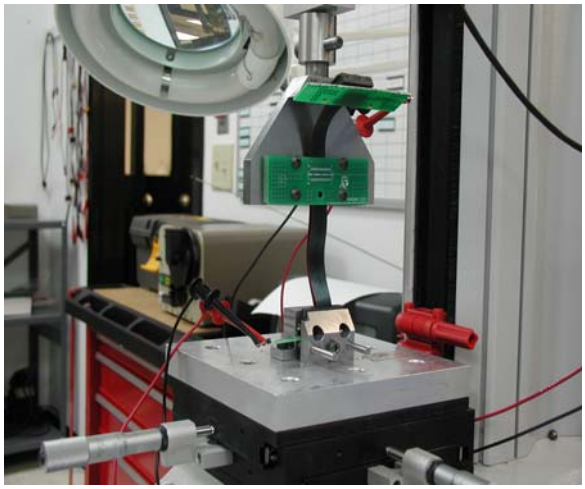


Fig. 1
(Typical set-up, actual part not depicted.)
0° Connector pull, notice the electrical continuity hook-up wires.

RESULTS

Contact Gaps
Test Request #111667
Thermal aging:
PESS-08-12-L-12.00-DR-NUS-R

- **Initial**
  - **Min ---------- 1.9430 mm**
  - **Max ---------- 2.0464 mm**
- **Thermal**
  - **Min ---------- 1.9759 mm**
  - **Max ---------- 2.0577 mm**

PET-08-01-L-VT

- **Initial**
  - **Min ---------- 2.6160 mm**
  - **Max ---------- 2.6552 mm**
- **Thermal**
  - **Min ---------- 2.4936 mm**
  - **Max ---------- 2.5446 mm**

Mating/Unmating durability:
PESS-08-12-L-12.00-DR-NUS-R

- **Initial**
  - **Min ---------- 1.9460 mm**
  - **Max ---------- 2.0411 mm**
- **After 100 Cycles**
  - **Min ---------- 1.9431 mm**
  - **Max ---------- 2.0260 mm**

PET-08-01-L-VT

- **Initial**
  - **Min ---------- 2.5838 mm**
  - **Max ---------- 2.6382 mm**
- **After 100 Cycles**
  - **Min ---------- 2.5732 mm**
  - **Max ---------- 2.6341 mm**

Test Request #112526
Thermal aging:
PESS-08-12-T-12.00-DR-NUS-R

- **Initial**
  - **Min ---------- 2.6040 mm**
  - **Max ---------- 2.8200 mm**
- **Thermal**
  - **Min ---------- 2.4609 mm**
  - **Max ---------- 2.6530 mm**

PET-08-01-T-VT

- **Initial**
  - **Min ---------- 2.4679 mm**
  - **Max ---------- 2.6530 mm**

RESULT Continued

Mating/Unmating durability:
PESS-08-12-L-12.00-DR-NUS-R

- **Initial**
  - **Min ---------- 2.6240 mm**
  - **Max ---------- 2.8550 mm**
- **After 100 Cycles**
  - **Min ---------- 2.5433 mm**
  - **Max ---------- 2.7970 mm**

PET-08-01-L-VT

- **Initial**
  - **Min ---------- 2.5344 mm**
  - **Max ---------- 2.7970 mm**

Mating – Unmating Forces
Test Request #111667
Thermal aging:
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

- **Initial**
  - **Mating**
    - **Min ----------10.25 Lbs**
    - **Max----------14.92 Lbs**
  - **Unmating**
    - **Min ---------- 7.65 Lbs**
    - **Max----------13.67 Lbs**
- **Thermal**
  - **Mating**
    - **Min ---------- 6.58 Lbs**
    - **Max----------12.29 Lbs**
  - **Unmating**
    - **Min ---------- 6.41 Lbs**
    - **Max----------11.37 Lbs**

Mating/unmating durability:
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

- **Initial**
  - **Mating**
    - **Min ---------- 9.80 Lbs**
    - **Max----------10.76 Lbs**
  - **Unmating**
    - **Min ----------12.68 Lbs**
    - **Max----------14.19 Lbs**
- **After 25 Cycles**
  - **Mating**
    - **Min ---------- 9.78 Lbs**
    - **Max----------10.77 Lbs**
  - **Unmating**
    - **Min ----------13.89 Lbs**
    - **Max----------15.66 Lbs**

RESULT Continued

- **After 50 Cycles**
  - **Mating**
    - **Min ----------10.06 Lbs**
    - **Max----------10.89 Lbs**
  - **Unmating**
    - **Min ----------13.76 Lbs**
    - **Max----------15.92 Lbs**
- **After 75 Cycles**
  - **Mating**
    - **Min ----------10.25 Lbs**
    - **Max----------11.00 Lbs**
  - **Unmating**
    - **Min ----------13.68 Lbs**
    - **Max----------15.43 Lbs**
- **After 100 Cycles**
  - **Mating**
    - **Min ----------10.25 Lbs**
    - **Max----------11.03 Lbs**
  - **Unmating**
    - **Min ----------14.11 Lbs**
    - **Max----------15.54 Lbs**
- **Humidity**
  - **Mating**
    - **Min ---------- 6.60 Lbs**
    - **Max---------- 9.77 Lbs**
  - **Unmating**
    - **Min ---------- 7.07 Lbs**
    - **Max---------- 9.23 Lbs**

Test Request #112526

Thermal aging:

PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT

- **Initial**
  - **Mating**
    - **Min ----------27.19 Lbs**
    - **Max----------16.07 Lbs**
  - **Unmating**
    - **Min ---------- 7.56 Lbs**
    - **Max----------11.60 Lbs**
- **Thermal**
  - **Mating**
    - **Min ----------28.55 Lbs**
    - **Max----------20.94 Lbs**
  - **Unmating**
    - **Min ----------16.52 Lbs**
    - **Max----------26.60 Lbs**

RESULT Continued

Mating/unmating durability:
PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT

- **Initial**
  - **Mating**
    - **Min ----------25.67 Lbs**
    - **Max----------16.51 Lbs**
  - **Unmating**
    - **Min ----------11.36 Lbs**
    - **Max----------16.62 Lbs**
- **After 25 Cycles**
  - **Mating**
    - **Min ----------25.83 Lbs**
    - **Max----------17.04 Lbs**
  - **Unmating**
    - **Min ----------13.57 Lbs**
    - **Max----------26.45 Lbs**
- **After 50 Cycles**
  - **Mating**
    - **Min ----------28.08 Lbs**
    - **Max----------19.27 Lbs**
  - **Unmating**
    - **Min ----------19.19 Lbs**
    - **Max----------29.58 Lbs**
- **After 75 Cycles**
  - **Mating**
    - **Min ----------29.08 Lbs**
    - **Max----------22.01 Lbs**
  - **Unmating**
    - **Min ----------23.15 Lbs**
    - **Max----------30.69 Lbs**
- **After 100 Cycles**
  - **Mating**
    - **Min ----------31.12 Lbs**
    - **Max----------24.51 Lbs**
  - **Unmating**
    - **Min ----------24.82 Lbs**
    - **Max----------33.53 Lbs**
- **Humidity**
  - **Mating**
    - **Min ----------29.18 Lbs**
    - **Max----------20.69 Lbs**
  - **Unmating**
    - **Min ----------18.46 Lbs**
    - **Max----------26.18 Lbs**

RESULT Continued

Test Request #115077
PESS-02-12-L-12.00-DR-NUS-R/ PET-02-01-L-VT

Mating/unmating basic:

- **Initial**
  - **Mating**
    - **Min ---------- 2.94 Lbs**
    - **Max---------- 3.30 Lbs**
  - **Unmating**
    - **Min ---------- 3.67 Lbs**
    - **Max---------- 4.90 Lbs**
- **After 25 Cycles**
  - **Mating**
    - **Min ---------- 2.85 Lbs**
    - **Max---------- 3.35 Lbs**
  - **Unmating**
    - **Min ---------- 4.25 Lbs**
    - **Max---------- 5.47 Lbs**
- **After 50 Cycles**
  - **Mating**
    - **Min ---------- 2.85 Lbs**
    - **Max---------- 3.53 Lbs**
  - **Unmating**
    - **Min ---------- 4.50 Lbs**
    - **Max---------- 5.87 Lbs**
- **After 75 Cycles**
  - **Mating**
    - **Min ---------- 2.83 Lbs**
    - **Max---------- 3.59 Lbs**
  - **Unmating**
    - **Min ---------- 4.38 Lbs**
    - **Max---------- 6.17 Lbs**
- **After 100 Cycles**
  - **Mating**
    - **Min ---------- 2.90 Lbs**
    - **Max---------- 3.94 Lbs**
  - **Unmating**
    - **Min ---------- 4.44 Lbs**
    - **Max---------- 6.27 Lbs**

RESULT Continued

Test Request #118824
PESS-02-12-T-12.00-DR-NUS-R/ PET-02-01-T-VT
Mating/unmating basic:

- **Initial**
  - **Mating**
    - **Min ---------- 5.52 Lbs**
    - **Max---------- 4.93 Lbs**
  - **Unmating**
    - **Min ---------- 2.79 Lbs**
    - **Max---------- 7.02 Lbs**
- **After 25 Cycles**
  - **Mating**
    - **Min ---------- 6.03 Lbs**
    - **Max---------- 4.76 Lbs**
  - **Unmating**
    - **Min ---------- 4.29 Lbs**
    - **Max---------- 6.88 Lbs**
- **After 50 Cycles**
  - **Mating**
    - **Min ---------- 6.80 Lbs**
    - **Max---------- 5.22 Lbs**
  - **Unmating**
    - **Min ---------- 5.60 Lbs**
    - **Max---------- 8.41 Lbs**
- **After 75 Cycles**
  - **Mating**
    - **Min ---------- 7.39 Lbs**
    - **Max---------- 6.03 Lbs**
  - **Unmating**
    - **Min ---------- 5.83 Lbs**
    - **Max---------- 8.16 Lbs**
- **After 100 Cycles**
  - **Mating**
    - **Min ---------- 7.61 Lbs**
    - **Max---------- 5.94 Lbs**
  - **Unmating**
    - **Min ---------- 6.28 Lbs**
    - **Max---------- 8.89 Lbs**

Pull force
Test Request #111667
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

0° Pull force

- **Min ----------69.50 Lbs**
- **Max----------81.50 Lbs**

90° Pull force

- **Min ----------54.50 Lbs**
- **Max----------65.50 Lbs**

RESULT Continued

Test Request #111667
Insulation Resistance minimums, IR
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

- **Initial**
  - **Mated---------- 100000Meg Ω ---------- Pass**
  - **Unmated ---------- 100000Meg Ω ---------- Pass**
- **Thermal**
  - **Mated---------- 100000Meg Ω ---------- Pass**
  - **Unmated ---------- 100000Meg Ω ---------- Pass**
- **Humidity**
  - **Mated----------25000Meg Ω ---------- Pass**
  - **Unmated ---------- 100000Meg Ω ---------- Pass**

Dielectric Withstanding Voltage minimums, DWV
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

- **Minimums**
  - **Breakdown Voltage---------- 2500VAC**
  - **Test Voltage ---------- 1875VAC**
  - **Working Voltage ----------625VAC**
- **Initial DWV ----------Passed**
- **Thermal DWV----------Passed**
- **Humidity DWV----------Passed**

Test Request #112526
Insulation Resistance minimums, IR
PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT

- **Initial**
  - **Mated---------- 100000Meg Ω ---------- Pass**
  - **Unmated ---------- 100000Meg Ω ---------- Pass**
- **Thermal**
  - **Mated---------- 100000Meg Ω ---------- Pass**
  - **Unmated ---------- 100000Meg Ω ---------- Pass**
- **Humidity**
  - **Mated----------10000Meg Ω ---------- Pass**
  - **Unmated ----------10000Meg Ω ---------- Pass**

Dielectric Withstanding Voltage minimums, DWV
PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT

- **Minimums**
  - **Breakdown Voltage---------- 2600VAC**
  - **Test Voltage ---------- 1950VAC**
  - **Working Voltage ----------650VAC**
- **Initial DWV ----------Passed**
- **Thermal DWV----------Passed**
- **Humidity DWV----------Passed**

RESULT Continued

Test Request #112528
PESS-08-10-L-12.00-DR-NUS-R/ PET-08-01-L-VT

- **Initial**
  - **Mated---------- 100000Meg Ω ---------- Pass**
  - **Unmated ---------- 100000Meg Ω ---------- Pass**
- **Thermal**
  - **Mated---------- 100000Meg Ω ---------- Pass**
  - **Unmated ---------- 100000Meg Ω ---------- Pass**
- **Humidity**
  - **Mated----------25000Meg Ω ---------- Pass**
  - **Unmated ---------- 100000Meg Ω ---------- Pass**

Dielectric Withstanding Voltage minimums, DWV
PESS-08-10-L-12.00-DR-NUS-R/ PET-08-01-L-VT

- **Minimums**
  - **Breakdown Voltage---------- 3100VAC**
  - **Test Voltage ---------- 2325VAC**
  - **Working Voltage ----------775VAC**
- **Initial DWV ----------Passed**
- **Thermal DWV----------Passed**
- **Humidity DWV----------Passed**

Test Request #112529
PESS-08-10-T-12.00-DR-NUS-R/ PET-08-01-T-VT

- **Initial**
  - **Mated---------- 100000Meg Ω ---------- Pass**
  - **Unmated ---------- 100000Meg Ω ---------- Pass**
- **Thermal**
  - **Mated---------- 100000Meg Ω ---------- Pass**
  - **Unmated ---------- 100000Meg Ω ---------- Pass**
- **Humidity**
  - **Mated---------- 100000Meg Ω ---------- Pass**
  - **Unmated ---------- 100000Meg Ω ---------- Pass**

Dielectric Withstanding Voltage minimums, DWV
PESS-08-10-T-12.00-DR-NUS-R/ PET-08-01-T-VT

- **Minimums**
  - **Breakdown Voltage---------- 2800VAC**
  - **Test Voltage ---------- 2100VAC**
  - **Working Voltage ----------700VAC**
- **Initial DWV ----------Passed**
- **Thermal DWV----------Passed**
- **Humidity DWV----------Passed**

RESULT Continued

Test Request #111667
LLCR thermal aging (84 LLCR test points)
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

- **Initial ---------- 2.1mOhms Max**
- **thermal**
  - **<= +5.0 mOhms ---------- 84 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 +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**

LLCR Durability (84 LLCR test points)
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

- **Initial ---------- 2.0mOhms Max**
- **Durability, 100 Cycles**
  - **<= +5.0 mOhms ---------- 84 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 +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**
- **Thermal**
  - **<= +5.0 mOhms ---------- 84 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 +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**
- **Humidity**
  - **<= +5.0 mOhms ---------- 84 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 +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**

LLCR Gas Tight (84 LLCR test points)

- **Initial ---------- 2.1mOhms Max**
- **Gas-Tight**
  - **<= +5.0 mOhms ---------- 84 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 +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**

RESULT Continued

LLCR shock vib (64 LLCR test points)
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

- **Initial----------2.2mOhms Max**
- **Gas-Tight**
  - **<= +5.0 mOhms ---------- 64 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 +2000 mOhms----------0 Points ---------- Unstable**
  - **>+2000 mOhms----------0 Points ---------- Open Failure**

Mechanical Shock & Random Vibration:
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

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

Test Request #112526
LLCR thermal aging (84 LLCR test points)
PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT

- **Initial----------2.0mOhms Max**
- **thermal**
  - **<= +5.0 mOhms ---------- 84 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 +2000 mOhms----------0 Points ---------- Unstable**
  - **>+2000 mOhms----------0 Points ---------- Open Failure**

LLCR Durability (84 LLCR test points)
PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT

- **Initial----------2.1mOhms Max**
- **Durability, 100 Cycles**
  - **<= +5.0 mOhms ---------- 84 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 +2000 mOhms----------0 Points ---------- Unstable**
  - **>+2000 mOhms----------0 Points ---------- Open Failure**
- **Thermal**
  - **<= +5.0 mOhms ---------- 84 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 +2000 mOhms----------0 Points ---------- Unstable**
  - **>+2000 mOhms----------0 Points ---------- Open Failure**

RESULT Continued

- **Humidity**
  - **<= +5.0 mOhms ---------- 84 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 +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**

LLCR shock vib (64 LLCR test points)
PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT

- **Initial ---------- 2.3mOhms Max**
- **Gas-Tight**
  - **<= +5.0 mOhms ---------- 64 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 +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**

Mechanical Shock & Random Vibration:
PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT

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

DATA SUMMARIES

CONTACT GAPS
Test Request #111667
Thermal aging:
PESS-08-12-L-12.00-DR-NUS-R

Initial		After Thermal	
Units:	mm	Units:	mm
Minimum	1.9430	*Minimum*	1.9759
Maximum	2.0464	*Maximum*	2.0577
Average	1.9869	*Average*	2.0218
St. Dev.	0.0299	*St. Dev.*	0.0263
Count	16	*Count*	16

PET-08-01-L-VT

Initial		After Thermal	
Units:	mm	Units:	mm
Minimum	2.6160	*Minimum*	2.4936
Maximum	2.6552	*Maximum*	2.5446
Average	2.6322	*Average*	2.5183
St. Dev.	0.0118	*St. Dev.*	0.0141
Count	16	*Count*	16

Mating/Unmating durability:
PESS-08-12-L-12.00-DR-NUS-R

Initial		After 100 Cycles	
Units:	mm	Units:	mm
Minimum	1.9460	*Minimum*	1.9431
Maximum	2.0411	*Maximum*	2.0260
Average	1.9859	*Average*	1.9821
St. Dev.	0.0294	*St. Dev.*	0.0258
Count	16	*Count*	16

PET-08-01-L-VT

Initial		After 100 Cycles	
Units:	mm	Units:	mm
Minimum	2.5838	*Minimum*	2.5732
Maximum	2.6382	*Maximum*	2.6341
Average	2.6225	*Average*	2.6045
St. Dev.	0.0142	*St. Dev.*	0.0175
Count	16	*Count*	16

DATA SUMMARIES Continued

Test Request #112526
Thermal aging:
PESS-08-12-T-12.00-DR-NUS-R

Initial		After Thermal	
Units:	mm	Units:	mm
Minimum	2.6040	*Minimum*	2.4609
Maximum	2.8200	*Maximum*	2.6530
Average	2.6609	*Average*	2.5116
St. Dev.	0.0430	*St. Dev.*	0.0407
Count	96	*Count*	96

PET-08-01-T-VT

Initial	
Units:	mm
Minimum	2.4609
Maximum	2.6530
Average	2.5116
St. Dev.	0.0407
Count	96

Mating/Unmating durability:
PESS-08-12-T-12.00-DR-NUS-R

Initial		After 100 Cycles	
Units:	mm	Units:	mm
Minimum	2.6240	*Minimum*	2.5433
Maximum	2.8550	*Maximum*	2.7970
Average	**2.6961**	*Average*	**2.6524**
St. Dev.	0.0702	*St. Dev.*	0.0599
Count	96	*Count*	96

PET-08-01-T-VT

Initial	
Units:	mm
Minimum	2.5433
Maximum	2.7970
Average	**2.6524**
St. Dev.	0.0599
Count	96

DATA SUMMARIES Continued

Test Request #111667
THERMAL AGING
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

	Initial				After Thermals			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	45.59	10.25	34.01	7.65	29.28	6.58	28.52	6.41
Maximum	66.36	14.92	60.82	13.67	54.65	12.29	50.56	11.37
Average	50.26	**11.30**	43.20	**9.71**	37.41	**8.41**	32.96	**7.41**
St Dev	8.05	1.81	9.27	2.08	9.20	2.07	8.70	1.95
Count	6	6	6	6	6	6	6	6

MATING/UNMATING Durability:
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

	Initial				25 Cycles			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	43.58	9.80	56.41	12.68	43.48	9.78	61.80	13.89
Maximum	47.87	10.76	63.10	14.19	47.89	10.77	69.64	15.66
Average	45.51	**10.23**	60.37	**13.57**	45.34	**10.19**	66.97	**15.06**
St Dev	1.53	0.34	2.39	0.54	1.58	0.36	2.68	0.60
Count	6	6	6	6	6	6	6	6
	50 Cycles				75 Cycles			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	44.73	10.06	61.22	13.76	45.61	10.25	60.86	13.68
Maximum	48.44	10.89	70.79	15.92	48.93	11.00	68.61	15.43
Average	46.27	**10.40**	66.60	**14.97**	46.63	**10.48**	66.43	**14.93**
St Dev	1.36	0.31	3.61	0.81	1.19	0.27	2.94	0.66
Count	6	6	6	6	6	6	6	6
	100 Cycles				After Humidity			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	45.58	10.25	62.77	14.11	29.37	6.60	31.45	7.07
Maximum	49.06	11.03	69.12	15.54	43.46	9.77	41.06	9.23
Average	46.46	**10.44**	66.11	**14.86**	34.71	**7.80**	35.87	**8.07**
St Dev	1.33	0.30	2.63	0.59	5.09	1.14	3.66	0.82
Count	6	6	6	6	6	6	6	6

DATA SUMMARIES Continued

Test Request #112526
MATING/UNMATING Durability:
PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT

	Initial				After Thermals			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	120.95	27.19	33.61	7.56	126.99	28.55	73.48	16.52
Maximum	71.50	16.07	51.58	11.60	93.16	20.94	118.45	26.63
Average	94.04	**21.14**	43.87	**9.86**	101.14	22.74	91.87	**20.65**
St Dev	15.77	3.54	7.55	1.70	12.83	2.88	16.17	3.64
Count	6	6	6	6	6	6	6	6

PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT

	Initial				After 25 Cycles			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	114.17	25.67	50.55	11.36	114.89	25.83	60.35	13.57
Maximum	73.45	16.51	73.95	16.62	75.81	17.04	117.65	26.45
Average	88.14	**19.82**	59.54	**13.39**	87.54	**19.68**	78.98	**17.76**
St Dev	13.78	3.10	10.42	2.34	13.85	3.11	21.20	4.77
Count	6	6	6	6	6	6	6	6
	After 50 Cycles				After 75 Cycles			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	124.90	28.08	85.35	19.19	129.34	29.08	102.95	23.15
Maximum	85.70	19.27	131.56	29.58	97.91	22.01	136.49	30.69
Average	95.78	**21.53**	100.53	**22.60**	110.35	**24.81**	117.40	**26.39**
St Dev	14.68	3.30	18.75	4.21	12.51	2.81	14.96	3.36
Count	6	6	6	6	6	6	6	6
	After 100 Cycles				After Humidity			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	138.44	31.12	110.41	24.82	129.78	29.18	82.12	18.46
Maximum	109.01	24.51	149.13	33.53	92.03	20.69	116.45	26.18
Average	120.17	**27.02**	123.28	**27.72**	108.66	**24.43**	97.14	**21.84**
St Dev	11.84	2.66	16.84	3.79	12.75	2.87	11.06	2.49
Count	6	6	6	6	6	6	6	6

DATA SUMMARIES Continued

Test Request #115077
MATING/UNMATING BASIC:
PESS-02-12-L-12.00-DR-NUS/ PET-02-01-L-VT

	Initial				25 Cycles			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	13.06	2.94	16.32	3.67	12.67	2.85	18.89	4.25
Maximum	14.68	3.30	21.78	4.90	14.90	3.35	24.33	5.47
Average	14.11	**3.17**	19.00	**4.27**	13.84	**3.11**	21.53	**4.84**
St Dev	0.60	0.13	2.04	0.46	0.85	0.19	1.89	0.43
Count	6	6	6	6	6	6	6	6

	50 Cycles				75 Cycles			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	12.69	2.85	20.00	4.50	12.57	2.83	19.47	4.38
Maximum	15.69	3.53	26.10	5.87	15.99	3.59	27.44	6.17
Average	13.93	**3.13**	23.00	**5.17**	14.26	**3.21**	23.17	**5.21**
St Dev	1.20	0.27	2.54	0.57	1.60	0.36	3.41	0.77
Count	6	6	6	6	6	6	6	6

	100 Cycles			
	Mating		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	12.88	2.90	19.73	4.44
Maximum	17.50	3.94	27.88	6.27
Average	15.21	**3.42**	24.15	**5.43**
St Dev	2.22	0.50	3.80	0.85
Count	6	6	6	6

DATA SUMMARIES Continued

Test Request #118824
MATING/UNMATING BASIC:
PESS-02-12-L-12.00-DR-NUS-R/ PET-02-01-T-VT

	Initial				After 25 Cycles			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	21.95	4.93	12.42	2.79	21.16	4.76	19.10	4.29
Maximum	24.56	5.52	31.21	7.02	26.84	6.03	30.59	6.88
Average	23.09	**5.19**	17.33	**3.90**	24.54	**5.52**	22.29	**5.01**
St Dev	0.88	0.20	6.93	1.56	2.32	0.52	4.43	1.00
Count	6	6	6	6	6	6	6	6

	After 50 Cycles				After 75 Cycles			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	23.23	5.22	24.93	5.60	26.84	6.03	25.91	5.83
Maximum	30.26	6.80	37.43	8.41	32.88	7.39	36.28	8.16
Average	26.94	**6.06**	28.80	**6.48**	29.57	**6.65**	30.07	**6.76**
St Dev	3.02	0.68	4.66	1.05	2.37	0.53	4.66	1.05
Count	6	6	6	6	6	6	6	6

	After 100 Cycles			
	Mating		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	26.42	5.94	27.91	6.28
Maximum	33.86	7.61	39.56	8.89
Average	30.61	**6.88**	32.15	**7.23**
St Dev	2.75	0.62	4.21	0.95
Count	6	6	6	6

Test Request #111667
PULL FORCE
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

0° Pull force

	Force (lbs)
Minimum	**69.50**
Maximum	81.50
Average	76.30

90° Pull force

	Force (lbs)
Minimum	**54.50**
Maximum	65.50
Average	60.10

DATA SUMMARIES Continued

Test Request #111667
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT
INSULATION RESISTANCE (IR):

	Pin to Pin		
	Mated	Unmated	Unmated
Minimum	**PESS/PET**	**PESS**	**PET**
Initial	100000	100000	100000
Thermal	100000	100000	100000
Humidity	25000	100000	100000

DIELECTRIC WITHSTANDING VOLTAGE (DWV):

Voltage Rating Summary	
Minimum	**PESS/PET**
Break Down Voltage	2500
Test Voltage	1875
Working Voltage	625

Pin to Pin	
Initial Test Voltage	Passed
After Thermal Test Voltage	Passed
After Humidity Test Voltage	Passed

Test Request #112526
PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT
INSULATION RESISTANCE (IR):

	Pin to Pin		
	Mated	Unmated	Unmated
Minimum	**PESS/PET**	**PESS**	**PET**
Initial	100000	100000	100000
Thermal	100000	100000	100000
Humidity	100000	100000	100000

DATA SUMMARIES Continued

DIELECTRIC WITHSTANDING VOLTAGE (DWV):

Voltage Rating Summary	
Minimum	**PESS/PET**
Break Down Voltage	2600
Test Voltage	1950
Working Voltage	650

Pin to Pin	
Initial Test Voltage	Passed
After Thermal Test Voltage	Passed
After Humidity Test Voltage	Passed

Test Request #112528
PESS-08-10-L-12.00-DR-NUS-R/ PET-08-01-L-VT
INSULATION RESISTANCE (IR):

	Pin to Pin		
	Mated	Unmated	Unmated
Minimum	**PESS/PET**	**PESS**	**PET**
Initial	100000	100000	100000
Thermal	100000	100000	100000
Humidity	25000	100000	100000

DIELECTRIC WITHSTANDING VOLTAGE (DWV):
PESS-08-10-L-12.00-DR-NUS-R/ PET-08-01-L-VT

Voltage Rating Summary	
Minimum	**PESS/PET**
Break Down Voltage	3100
Test Voltage	2325
Working Voltage	775

Pin to Pin	
Initial Test Voltage	Passed
After Thermal Test Voltage	Passed
After Humidity Test Voltage	Passed

DATA SUMMARIES Continued

Test Request #112529
PESS-08-10-T-12.00-DR-NUS-R/ PET-08-01-T-VT
INSULATION RESISTANCE (IR):

	Pin to Pin		
	Mated	Unmated	Unmated
Minimum	**PESS/PET**	**PESS**	**PET**
Initial	100000	100000	100000
Thermal	100000	100000	100000
Humidity	100000	100000	100000

DIELECTRIC WITHSTANDING VOLTAGE (DWV):
PESS-08-10-L-12.00-DR-NUS-R/ PET-08-01-L-VT

Voltage Rating Summary	
Minimum	**PESS/PET**
Break Down Voltage	2800
Test Voltage	2100
Working Voltage	700

Pin to Pin	
Initial Test Voltage	Passed
After Thermal Test Voltage	Passed
After Humidity Test Voltage	Passed

DATA SUMMARIES Continued

Test Request #111667
LLCR Thermal aging:
PESS-08-12-L-12.00-DR-NUS-R\PET-08-01-L-VT

1) A total of 84 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 +2000 mOhms ---------- Unstable
   f. >+2000 mOhms:---------- Open Failure

Date	12/9/2010	12/20/2010
Room Temp C	23	23
RH	27%	27%
Name	Aaron McKim	Aaron McKim
mOhm values	**Actual Initial**	**Delta Thermal Age**
Average	2.0	0.1
St. Dev.	0.0	0.1
Min	1.9	-0.1
Max	2.1	0.2
Count	84	84

How many samples are being tested?	6
How many contacts are on each board?	14

	Stable	Minor	Acceptable	Marginal	Unstable	Open
Thermal Age	84	0	0	0	0	0

DATA SUMMARIES Continued

LLCR Durabiltiy:

PESS-08-12-L-12.00-DR-NUS-R\PET-08-01-L-VT

5) A total of 84 points were measured.
6) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets.*
7) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
8) 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 +2000 mOhms ---------- Unstable
   f. >+2000 mOhms:---------- Open Failure

Date	12/2/2010	12/13/2010	12/20/2010	1/4/2011
Room Temp C	23	23	23	22
RH	28%	26%	27%	27%
Name	Aaron McKim	Aaron McKim	Aaron McKim	Aaron McKim
mOhm values	**Actual Initial**	**Delta 100 Cycles**	**Delta Thermal**	**Delta Humidity**
Average	2.0	0.0	0.0	0.1
St. Dev.	0.0	0.0	0.0	0.1
Min	1.9	-0.1	0.0	0.0
Max	2.0	0.2	0.2	0.3
Count	84	84	84	84

How many samples are being tested?	6
How many contacts are on each board?	14

	Stable	Minor	Acceptable	Marginal	Unstable	Open
100 Cycles	84	0	0	0	0	0
Thermal	84	0	0	0	0	0
Humidity	84	0	0	0	0	0

DATA SUMMARIES Continued

GAS TIGHT:

PESS-08-12-L-12.00-DR-NUS-R\PET-08-01-L-VT

1) A total of 84 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 +2000 mOhms: ---------- Unstable
   f. >+2000 mOhms:---------- Open Failure

Date	12/2/2010	12/3/2010
Room Temp C	23	23
RH	27%	27%
Name	Aaron McKim	Aaron McKim
mOhm values	**Actual Initial**	**Delta Gas Tight**
Average	2.0	0.1
St. Dev.	0.0	0.0
Min	1.9	-0.1
Max	2.1	0.1
Count	84	84

How many samples are being tested?	6
How many contacts are on each board?	14

	Stable	Minor	Acceptable	Marginal	Unstable	Open
Gas Tight	84	0	0	0	0	0

DATA SUMMARIES Continued

Tracking Code: 111667_Report_Rev_2	Part #: PESS-08-12-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-12-T-12.00-DR-NUS\PET-08-01-T-VT PESS-02-12-L-12.00-DR-NUS-R\PET-02-01-L-VT PESS-02-12-T-12.00-DR-NUS-R\PET-02-01-T-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-T-VT
Part description: PESS\PET	

LLCR Shock Vib:
PESS-08-12-L-12.00-DR-NUS-R\PET-08-01-L-VT

9) A total of 64 points were measured.
10) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets.*
11) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
12) 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 +2000 mOhms ---------- Unstable
    f. >+2000 mOhms:---------- Open Failure

Date	12/6/2010	12/9/2010
Room Temp C	23	23
RH	28%	28%
Name	Aaron McKim	Aaron McKim
mOhm values	**Actual Initial**	**Delta Sh/Vib**
Average	2.1	0.0
St. Dev.	0.0	0.1
Min	2.1	0.0
Max	2.2	0.3
Count	64	64

How many samples are being tested?	8
How many contacts are on each board?	8

	Stable	Minor	Acceptable	Marginal	Unstable	Open
Shock & Vibe	64	0	0	0	0	0

DATA SUMMARIES Continued

Test Request #112526
LLCR Thermal aging:
PESS-08-12-T-12.00-DR-NUS-R\PET-08-01-T-VT

13) A total of 84 points were measured.
14) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets.*
15) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
16) 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 +2000 mOhms ---------- Unstable
    f. >+2000 mOhms:---------- Open Failure

1/7/2011	1/27/2011	1/7/2011
23	23	23
30%	28%	30%
Troy Cook	Troy Cook	Troy Cook
Actual Initial	**Delta Thermal Age**	**Actual Initial**
1.9	0.0	1.9
0.0	0.0	0.0
1.8	0.0	1.8
2.0	0.1	2.0
84	84	84

How many samples are being tested?	6
How many contacts are on each board?	14

	Stable	Minor	Acceptable	Marginal	Unstable	Open
Thermal Age	84	0	0	0	0	0

DATA SUMMARIES Continued

LLCR Durabiltiy:

PESS-08-12-T-12.00-DR-NUS-R\PET-08-01-T-VT

17) A total of 84 points were measured.
18) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets.*
19) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
20) 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 +2000 mOhms ---------- Unstable
    f. >+2000 mOhms:---------- Open Failure

1/3/2011	1/7/2011	1/17/2011	1/31/2011	1/3/2011
23	23	23	23	23
31%	31%	28%	27%	31%
Troy Cook	Troy Cook	Troy Cook	Troy Cook	Troy Cook
Actual Initial	**Delta 100 Cycles**	**Delta Thermal Shock**	**Delta Humidity**	**Actual Initial**
1.9	0.0	0.1	0.2	1.9
0.0	0.1	0.1	0.1	0.0
1.8	-0.2	-0.2	-0.1	1.8
2.1	0.2	0.4	0.5	2.1
84	84	84	84	84

How many samples are being tested?	6
How many contacts are on each board?	14

	Stable	Minor	Acceptable	Marginal	Unstable	Open
100 Cycles	84	0	0	0	0	0
Thermal Shock	84	0	0	0	0	0
Humidity	84	0	0	0	0	0

DATA SUMMARIES Continued

LLCR Shock Vib:

PESS-08-12-T-12.00-DR-NUS-R\PET-08-01-T-VT

21) A total of 64 points were measured.
22) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets.*
23) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
24) 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 +2000 mOhms ---------- Unstable
    f. >+2000 mOhms:---------- Open Failure

Date	1/20/2011	1/24/2011
Room Temp C	23	23
RH	26%	24%
Name	Aaron McKim	Aaron Mckim
mOhm values	**Actual Initial**	**Delta Shock / Vibe**
Average	2.1	0.0
St. Dev.	0.1	0.0
Min	2.0	0.0
Max	2.3	0.2
Count	64	64

How many samples are being tested?	8
How many contacts are on each board?	8

	Stable	Minor	Acceptable	Marginal	Unstable	Open
Shock & Vibe	64	0	0	0	0	0

DATA

Test Request #111667
CONTACT GAPS
Thermal aging:
PESS-08-12-L-12.00-DR-NUS-R

Initial		
	Units:	mm
Pos.#	**B1**	**B2**
1	1.9490	1.9430
2	1.9778	2.0009
3	2.0187	1.9828
4	1.9916	1.9967
5	2.0155	1.9636
6	1.9725	1.9635
7	2.0174	1.9455
8	1.9490	1.9430
After Thermal		
	Units:	mm
Pos.#	**B1**	**B2**
1	2.0169	2.0133
2	2.0258	2.0042
3	2.0577	2.0041
4	2.0346	1.9970
5	2.0515	1.9759
6	2.0494	1.9768
7	2.0463	2.0217
8	2.0172	2.0565

PET-08-01-L-VT

Initial		
	Units:	mm
Pos.#	**B1**	**B2**
1	2.6273	2.6239
2	2.6552	2.6287
3	2.6491	2.6225
4	2.6221	2.6263
5	2.6340	2.6531
6	2.6420	2.6240
7	2.6360	2.6288
8	2.6160	2.6267
After Thermal		
	Units:	mm
Pos.#	**B1**	**B2**
1	2.4936	2.4970
2	2.5168	2.5379
3	2.5109	2.5369
4	2.5201	2.5219

5	2.5142	2.5279
6	2.5033	2.5140
7	2.5245	2.5150
8	2.5446	2.5141

Mating/Unmating durability
PESS-08-12-L-12.00-DR-NUS-R

Initial		
Units:	mm	
Pos.#	**B1**	**B2**
1	1.9536	1.9687
2	1.9597	1.9605
3	1.9995	1.9873
4	2.0273	1.9792
5	2.0411	1.9460
6	2.0000	1.9599
7	2.0078	1.9607
8	1.9957	2.0266
After 100 cycles		
Units:	mm	
Pos.#	**B1**	**B2**
1	1.9720	1.9840
2	1.9820	1.9900
3	2.0260	2.0200
4	2.0200	2.0070
5	1.9820	1.9590
6	1.9441	1.9720
7	1.9771	1.9811
8	1.9541	1.9431

PET-08-01-L-VT

Initial		
Units:	mm	
Pos.#	**B1**	**B2**
1	2.6382	2.5838
2	2.6332	2.6216
3	2.6311	2.6344
4	2.6210	2.6232
5	2.6220	2.6361
6	2.6300	2.6139
7	2.6100	2.6378
8	2.6150	2.6086
After 100 cycles		
Units:	mm	
Pos.#	**B1**	**B2**
1	2.5800	2.5732
2	2.5890	2.5972

3	2.6240	2.5952
4	2.6249	2.6102
5	2.6139	2.6341
6	2.6089	2.6181
7	2.5929	2.6221
8	2.5928	2.5961

Test Request #112526
CONTACT GAPS
Thermal aging:
PESS-08-12-T-12.00-DR-NUS-R

Initial						
Units: mm						
Pos.#	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**
1	2.6480	2.6480	2.6520	2.6470	2.8090	2.6170
2	2.6690	2.6550	2.6590	2.6510	2.7840	2.6480
3	2.6620	2.6610	2.6570	2.6280	2.7710	2.6360
4	2.6640	2.6040	2.6220	2.6310	2.7400	2.6310
5	2.6850	2.6800	2.6700	2.6450	2.7840	2.6420
6	2.6750	2.6470	2.6500	2.6390	2.8140	2.6300
7	2.6680	2.6650	2.6530	2.6490	2.8200	2.6390
8	2.6690	2.6540	2.6350	2.6470	2.8010	2.6310
9	2.6620	2.6480	2.6440	2.6470	2.6560	2.6250
10	2.6720	2.6460	2.6600	2.6590	2.6570	2.6390
11	2.6630	2.6360	2.6300	2.6390	2.6490	2.6430
12	2.6890	2.6590	2.6390	2.6280	2.6450	2.6300
13	2.6840	2.6420	2.6410	2.6530	2.6340	2.6510
14	2.6800	2.6290	2.6450	2.6290	2.6410	2.6350
15	2.6750	2.6670	2.6380	2.6320	2.6450	2.6800
16	2.6840	2.6400	2.6370	2.6470	2.6380	2.6470

After Thermal						
Units: mm						
Pos.#	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**
1	2.4710	2.4700	2.6421	2.4830	2.6000	2.5101
2	2.5041	2.4791	2.4901	2.4890	2.6530	2.5031
3	2.5131	2.4981	2.5091	2.5041	2.6271	2.5231
4	2.5201	2.4811	2.5021	2.4981	2.6041	2.5121
5	2.5231	2.4981	2.4751	2.5241	2.6421	2.5131
6	2.5181	2.4841	2.5342	2.4731	2.6231	2.5112
7	2.4962	2.4872	2.4802	2.4891	2.6051	2.5242
8	2.5172	2.4732	2.4992	2.4742	2.6112	2.5082
9	2.5098	2.4988	2.4768	2.4898	2.5208	2.4848
10	2.5248	2.4918	2.4919	2.5178	2.4958	2.5148
11	2.5358	2.5038	2.4919	2.5038	2.4778	2.4909
12	2.5239	2.4849	2.5019	2.4809	2.4908	2.4989
13	2.5399	2.5079	2.4679	2.5019	2.5289	2.4969

14	2.5259	2.4939	2.4879	2.4929	2.5699	2.4889
15	2.5149	2.4989	2.4860	2.4819	2.5109	2.4999
16	2.5029	2.5090	2.5080	2.4909	2.4609	2.4750

PET-08-01-T-VT

Initial							
Units: mm							
Pos.#	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**B8**
1	2.4710	2.5041	2.5131	2.5201	2.5231	2.5181	2.4962	2.5172
2	2.5098	2.5248	2.5358	2.5239	2.5399	2.5259	2.5149	2.5029
3	2.4700	2.4791	2.4981	2.4811	2.4981	2.4841	2.4872	2.4732
4	2.4988	2.4918	2.5038	2.4849	2.5079	2.4939	2.4989	2.5090
5	2.6421	2.4901	2.5091	2.5021	2.4751	2.5342	2.4802	2.4992
6	2.4768	2.4919	2.4919	2.5019	2.4679	2.4879	2.4860	2.5080
7	2.4830	2.4890	2.5041	2.4981	2.5241	2.4731	2.4891	2.4742
8	2.4898	2.5178	2.5038	2.4809	2.5019	2.4929	2.4819	2.4909
9	2.6000	2.6530	2.6271	2.6041	2.6421	2.6231	2.6051	2.6112
10	2.5208	2.4958	2.4778	2.4908	2.5289	2.5699	2.5109	2.4609
11	2.5101	2.5031	2.5231	2.5121	2.5131	2.5112	2.5242	2.5082
12	2.4848	2.5148	2.4909	2.4989	2.4969	2.4889	2.4999	2.4750

Mating/Unmating durability:
PESS-08-12-T-12.00-DR-NUS-R

Initial						
Units: mm						
Pos.#	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**
1	2.6340	2.6660	2.6440	2.6670	2.6380	2.8240
2	2.6290	2.6640	2.6400	2.6670	2.6550	2.8390
3	2.6470	2.6280	2.6580	2.6650	2.6640	2.8190
4	2.6470	2.6520	2.6540	2.6790	2.6580	2.8550
5	2.6520	2.6710	2.6400	2.6830	2.6460	2.8020
6	2.6260	2.6570	2.6330	2.6560	2.6240	2.8100
7	2.6600	2.6720	2.6250	2.6760	2.6600	2.8420
8	2.6320	2.6660	2.6520	2.6650	2.6560	2.8320
9	2.6790	2.6580	2.8120	2.6710	2.6600	2.7890
10	2.6610	2.6610	2.8140	2.6890	2.6470	2.7930
11	2.6700	2.6390	2.8170	2.6850	2.6500	2.7990
12	2.6650	2.6490	2.8240	2.6830	2.6430	2.7910
13	2.6600	2.6540	2.8170	2.6600	2.6420	2.7770
14	2.6500	2.6540	2.8170	2.6730	2.6540	2.8060
15	2.6650	2.6670	2.7980	2.6870	2.6550	2.8490
16	2.6760	2.6560	2.7860	2.7030	2.6320	2.8060
After 100 Cycles						
Units: mm						
Pos.#	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**

1	2.6401	2.6139	2.5451	2.5611	2.5441	2.7280
2	2.6299	2.6629	2.6579	2.5959	2.6109	2.7681
3	2.6149	2.6340	2.6480	2.6319	2.6231	2.7000
4	2.5839	2.6210	2.6388	2.6309	2.6241	2.7280
5	2.6459	2.6350	2.6449	2.6360	2.6340	2.7399
6	2.6040	2.6238	2.6510	2.6058	2.6289	2.7338
7	2.6528	2.6629	2.6469	2.6469	2.6020	2.7419
8	2.5768	2.6269	2.6518	2.6078	2.6119	2.7338
9	2.5433	2.6833	2.7092	2.5903	2.5903	2.7132
10	2.5982	2.6452	2.7333	2.6353	2.5941	2.7221
11	2.5601	2.6543	2.7432	2.6502	2.5852	2.7462
12	2.6071	2.6373	2.7541	2.6721	2.6132	2.7282
13	2.6462	2.6622	2.7970	2.6812	2.6002	2.7562
14	2.6121	2.6322	2.7932	2.5720	2.6012	2.7452
15	2.6370	2.6520	2.7031	2.6162	2.6292	2.7661
16	2.5710	2.6551	2.7381	2.6680	2.6322	2.7691

PET-08-01-T-VT

Initial						
Units: mm						
Pos.#	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**
1	2.6401	2.6139	2.5451	2.5611	2.5441	2.7280
2	2.6299	2.6629	2.6579	2.5959	2.6109	2.7681
3	2.6149	2.6340	2.6480	2.6319	2.6231	2.7000
4	2.5839	2.6210	2.6388	2.6309	2.6241	2.7280
5	2.6459	2.6350	2.6449	2.6360	2.6340	2.7399
6	2.6040	2.6238	2.6510	2.6058	2.6289	2.7338
7	2.6528	2.6629	2.6469	2.6469	2.6020	2.7419
8	2.5768	2.6269	2.6518	2.6078	2.6119	2.7338
9	2.5433	2.6833	2.7092	2.5903	2.5903	2.7132
10	2.5982	2.6452	2.7333	2.6353	2.5941	2.7221
11	2.5601	2.6543	2.7432	2.6502	2.5852	2.7462
12	2.6071	2.6373	2.7541	2.6721	2.6132	2.7282
13	2.6462	2.6622	2.7970	2.6812	2.6002	2.7562
14	2.6121	2.6322	2.7932	2.5720	2.6012	2.7452
15	2.6370	2.6520	2.7031	2.6162	2.6292	2.7661
16	2.5710	2.6551	2.7381	2.6680	2.6322	2.7691

DATA Continued

Test Request #111667
THERMAL AGING:
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

	Initial		After Thermals	
Sample#	Mating	Unmating	Mating	Unmating
1	10.32	9.08	8.55	7.09
2	14.92	13.67	12.29	11.37
3	10.70	8.62	8.30	6.41
4	11.24	9.34	6.73	6.48
5	10.25	7.65	6.58	6.46
6	10.37	9.92	8.01	6.65

MATING/UNMATING Durability:
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

	Initial		After 25 Cycles		After 50 Cycles		After 75 Cycles	
Sample#	Mating	Unmating	Mating	Unmating	Mating	Unmating	Mating	Unmating
1	9.80	12.68	9.78	15.15	10.06	15.92	10.25	15.38
2	10.01	14.04	9.99	15.13	10.12	14.69	10.32	14.82
3	10.08	13.68	9.98	13.89	10.32	13.76	10.41	13.68
4	10.76	14.19	10.77	15.66	10.89	15.47	11.00	15.43
5	10.45	13.40	10.36	15.34	10.46	15.55	10.41	15.34
6	10.30	13.45	10.30	15.17	10.56	14.44	10.51	14.96

	After 100 Cycles		After Humidity	
Sample#	Mating	Unmating	Mating	Unmating
1	10.26	15.19	8.15	7.24
2	10.25	14.93	8.12	7.07
3	10.35	14.17	9.77	9.23
4	11.03	15.54	7.03	8.65
5	10.30	15.24	6.60	7.99
6	10.48	14.11	7.16	8.21

DATA Continued

Tracking Code: 111667_Report_Rev_2	Part #: PESS-08-12-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-12-T-12.00-DR-NUS\PET-08-01-T-VT PESS-02-12-L-12.00-DR-NUS-R\PET-02-01-L-VT PESS-02-12-T-12.00-DR-NUS-R\PET-02-01-T-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-T-VT
Part description: PESS\PET	

Test Request #111667
THERMAL AGING:
PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT

	Initial		After Thermals	
Sample#	Mating	Unmating	Mating	Unmating
1	20.51	9.28	22.31	18.70
2	16.07	11.56	21.40	20.37
3	21.10	7.56	21.39	16.52
4	20.78	11.60	20.94	18.69
5	27.19	10.76	28.55	26.63
6	21.20	8.43	21.83	23.01

MATING/UNMATING Durability:
PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT

	Initial		After 25 Cycles		After 50 Cycles		After 75 Cycles	
Sample#	Mating	Unmating	Mating	Unmating	Mating	Unmating	Mating	Unmating
1	19.47	11.82	19.16	14.73	20.08	20.96	23.53	26.01
2	19.52	11.69	17.04	13.57	19.27	19.19	23.43	24.11
3	16.51	12.76	18.43	17.93	19.61	20.41	23.26	23.15
4	18.24	11.36	19.21	14.70	20.73	19.50	22.01	23.97
5	19.48	16.06	18.41	19.15	21.43	25.97	27.55	30.44
6	25.67	16.62	25.83	26.45	28.08	29.58	29.08	30.69

	After 100 Cycles		After Humidity	
Sample#	Mating	Unmating	Mating	Unmating
1	26.93	26.55	24.69	21.48
2	25.26	24.85	24.28	22.07
3	24.51	25.17	22.48	21.17
4	25.01	24.82	20.69	18.46
5	31.12	33.53	25.26	21.67
6	29.28	31.38	29.18	26.18

DATA Continued

Test Request #115077

MATING/UNMATING Basic:
PESS-02-12-L-12.00-DR-NUS/ PET-02-01-L-VT

	Initial		After 25 Cycles		After 50 Cycles		After 75 Cycles	
Sample#	Mating	Unmating	Mating	Unmating	Mating	Unmating	Mating	Unmating
1	3.24	4.90	3.09	4.90	3.16	5.72	3.52	5.84
2	3.28	4.67	3.35	5.47	3.53	5.87	3.59	6.17
3	3.30	4.36	3.30	5.09	3.35	5.36	3.47	5.65
4	3.16	3.67	3.13	4.25	3.04	4.50	2.97	4.38
5	3.12	4.08	2.95	4.54	2.87	4.61	2.85	4.53
6	2.94	3.96	2.85	4.80	2.85	4.97	2.83	4.69

	After 100 Cycles	
Sample#	Mating	Unmating
1	3.89	6.27
2	3.94	6.23
3	3.79	6.10
4	3.01	4.44
5	3.00	4.85
6	2.90	4.69

Test Request #118824
MATING/UNMATING BASIC:
PESS-02-12-T-12.00-DR-NUS-R/ PET-02-01-T-VT

	Initial		After 25 Cycles		After 50 Cycles		After 75 Cycles	
Sample#	Mating	Unmating	Mating	Unmating	Mating	Unmating	Mating	Unmating
1	5.25	2.79	6.01	4.29	6.54	6.02	6.80	5.83
2	5.22	3.26	5.18	4.41	5.53	5.76	6.19	6.65
3	5.16	3.75	5.85	5.39	6.64	6.88	7.39	7.96
4	5.52	7.02	6.03	6.88	6.80	8.41	7.08	8.16
5	4.93	3.36	4.76	4.47	5.22	5.60	6.03	5.89
6	5.06	3.19	5.27	4.62	5.60	6.17	6.38	6.09

	After 100 Cycles	
Sample#	Mating	Unmating
1	7.61	7.11
2	5.94	6.60
3	7.52	7.68
4	6.87	8.89
5	6.65	6.28
6	6.70	6.79

DATA Continued

Test Request #111667

PULL FORCE
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

0° Pull force

Sample #	Force (lbs)
1	81.5
2	79
3	69.5
4	71
5	80.5

90° Pull force

Sample #	Force (lbs)
1	54.5
2	55
3	65.5
4	62.5
5	63

Test Request #111667
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT
INSULATION RESISTANCE (IR):

Thermal Insulation Resistance
Measured In Meg Ohms

	Pin to Pin		
	Mated	A Unmated B	
	X	X	X
Sample#	PESS/PET	PESS	PET
111667-023	100000	100000	100000
111667-024	100000	100000	100000

Thermal Insulation Resistance
Measured In Meg Ohms

	Pin to Pin		
	Mated	A Unmated B	
	X	X	X
Sample#	PESS/PET	PESS	PET
111667-023	100000	100000	100000
111667-024	100000	100000	100000

DATA Continued

Humidity Insulation Resistance
Measured In Meg Ohms

	Pin to Pin		
	Mated	A Unmated B	
	X	X	X
Sample#	PESS/PET	PESS	PET
111667-023	25000	100000	100000
111667-024	25000	100000	100000

DIELECTRIC WITHSTANDING VOLTAGE (DWV):
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

Initial Breakdown Voltage
Test Voltage *Until Breakdown Occurs*

	Pin to Pin		
	Mated	A Unmated B	
	x		
Sample#	PESS/PET	PESS	PET
111667-019	3100	6000	3100
111667-020	2500	5500	3000

Initial DWV
Test Voltage= 1875

	Pin to Pin		
	Mated	A Unmated B	
Sample#	PESS/PET	PESS	PET
111667-023	1875	1875	1875
111667-024	1875	1875	1875

Thermal Test Voltage
Test Voltage= 1875

	Pin to Pin		
	Mated	A Unmated B	
Sample#	PESS/PET	PESS	PET
111667-023	1875	1875	1875
111667-024	1875	1875	1875

DATA Continued

Humidity Test Voltage
Test Voltage= 1875

	Pin to Pin		
	Mated	A Unmated B	
Sample#	PESS/PET	PESS	PET
111667-023	1875	1875	1875
111667-024	1875	1875	1875

Test Request #112526
PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT
INSULATION RESISTANCE (IR):

Initial Insulation Resistance
Measured In Meg Ohms

	Pin to Pin		
	Mated	A Unmated B	
	X	X	X
Sample#	PESS/PET	PESS	PET
126974-001	100000	100000	100000
126974-002	100000	100000	100000

Thermal Insulation Resistance
Measured In Meg Ohms

	Pin to Pin		
	Mated	A Unmated B	
	X	X	X
Sample#	PESS/PET	PESS	PET
126974-001	100000	100000	100000
126974-002	100000	100000	100000

Humidity Insulation Resistance
Measured In Meg Ohms

	Pin to Pin		
	Mated	A Unmated B	
	X	X	X
Sample#	PESS/PET	PESS	PET
126974-001	100000	100000	100000
126974-002	100000	100000	100000

DATA Continued

DIELECTRIC WITHSTANDING VOLTAGE (DWV):
PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT

Initial Breakdown Voltage
Test Voltage *Until Breakdown Occurs*

	Pin to Pin		
	Mated	A Unmated B	
	X		
Sample#	PESS/PET	PESS	PET
112526-013	2600	6000	3200
112526-014	2700	5500	3600

Initial DWV
Test Voltage= 1950

	Pin to Pin		
	Mated	A Unmated B	
Sample#	PESS/PET	PESS	PET
112526-017	1950	1950	1950
112526-018	1950	1950	1950

Thermal Test Voltage
Test Voltage= 1950

	Pin to Pin		
	Mated	A Unmated B	
Sample#	PESS/PET	PESS	PET
112526-017	1950	1950	1950
112526-018	1950	1950	1950

Humidity Test Voltage
Test Voltage= 1950

	Pin to Pin		
	Mated	A Unmated B	
Sample#	PESS/PET	PESS	PET
112526-017	1950	1950	1950
112526-018	1950	1950	1950

DATA Continued

Test Request #112528

PESS-08-10-L-12.00-DR-NUS-R/ PET-08-01-L-VT

INSULATION RESISTANCE (IR):

Initial Insulation Resistance
Measured In Meg Ohms

	Pin to Pin		
	Mated	A Unmated	B
	X	X	X
Sample#	PESS/PET	PESS	PET
112528-005	100000	100000	100000
112528-006	100000	100000	100000

Thermal Insulation Resistance
Measured In Meg Ohms

	Pin to Pin		
	Mated	A Unmated	B
	X	X	X
Sample#	PESS/PET	PESS	PET
112528-005	100000	100000	100000
112528-006	100000	100000	100000

Humidity Insulation Resistance
Measured In Meg Ohms

	Pin to Pin		
	Mated	A Unmated	B
	X	X	X
Sample#	PESS/PET	PESS	PET
112528-005	25000	100000	100000
112528-006	25000	100000	100000

DATA Continued

DIELECTRIC WITHSTANDING VOLTAGE (DWV):

Tracking Code: 111667_Report_Rev_2	Part #: PESS-08-12-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-12-T-12.00-DR-NUS\PET-08-01-T-VT PESS-02-12-L-12.00-DR-NUS-R\PET-02-01-L-VT PESS-02-12-T-12.00-DR-NUS-R\PET-02-01-T-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-T-VT
Part description: PESS\PET	

PESS-08-10-L-12.00-DR-NUS-R/ PET-08-01-L-VT

Initial Breakdown Voltage
Test Voltage *Until Breakdown Occurs*

	Pin to Pin		
	Mated	A Unmated B	
	X		
Sample#	PESS/PET	PESS	PET
112528-001	3100	5600	3100
112528-002	3100	5600	3100

Initial DWV
Test Voltage= 2325

	Pin to Pin		
	Mated	A Unmated B	
Sample#	PESS/PET	PESS	PET
112528-005	2325	2325	2325
112528-006	2325	2325	2325

Thermal Test Voltage
Test Voltage= 2325

	Pin to Pin		
	Mated	A Unmated B	
Sample#	PESS/PET	PESS	PET
112528-005	2325	2325	2325
112528-006	2325	2325	2325

Humidity Test Voltage
Test Voltage= 2325

	Pin to Pin		
	Mated	A Unmated B	
Sample#	PESS/PET	PESS	PET
112528-005	2325	2325	2325
112528-006	2325	2325	2325

DATA Continued

Test Request #112529

PESS-08-10-T-12.00-DR-NUS-R/ PET-08-01-T-VT

INSULATION RESISTANCE (IR):

Initial Insulation Resistance
Measured In Meg Ohms

	Pin to Pin		
	Mated	A Unmated	B
	X	X	X
Sample#	PESS/PET	PESS	PET
126974-001	100000	100000	100000
126974-002	100000	100000	100000

Thermal Insulation Resistance
Measured In Meg Ohms

	Pin to Pin		
	Mated	A Unmated	B
	X	X	X
Sample#	PESS/PET	PESS	PET
126974-001	100000	100000	100000
126974-002	100000	100000	100000

Humidity Insulation Resistance
Measured In Meg Ohms

	Pin to Pin		
	Mated	A Unmated	B
	X	X	X
Sample#	PESS/PET	PESS	PET
126974-001	100000	100000	100000
126974-002	100000	100000	100000

DATA Continued

DIELECTRIC WITHSTANDING VOLTAGE (DWV):

PESS-08-10-T-12.00-DR-NUS-R/ PET-08-01-T-VT

Initial Breakdown Voltage
Test Voltage *Until Breakdown Occurs*

	Pin to Pin		
	Mated	A Unmated B	
	x		
Sample#	PESS/PET	PESS	PET
112529-030	3400	3100	3000
112529-031	3200	2800	3000

Initial DWV
Test Voltage= 2100

	Pin to Pin		
	Mated	A Unmated B	
Sample#	PESS/PET	PESS	PET
112529-034	2100	2100	2100
112529-035	2100	2100	2100

Thermal Test Voltage
Test Voltage= 2100

	Pin to Pin		
	Mated	A Unmated B	
Sample#	PESS/PET	PESS	PET
112529-034	2100	2100	2100
112529-035	2100	2100	2100

Humidity Test Voltage
Test Voltage= 2100

	Pin to Pin		
	Mated	A Unmated B	
Sample#	PESS/PET	PESS	PET
112529-034	2100	2100	2100
112529-035	2100	2100	2100

DATA Continued

DATA Continued

LLCR Thermal aging:
PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

	mOhm values	Actual	Delta
Board	Position	Initial	Thermal Age
1	P1	2.0	0.1
1	P2	2.0	0.1
1	P3	2.0	0.1
1	P4	2.0	0.2
1	P5	2.0	0.2
1	P6	2.0	0.2
1	P7	1.9	0.1
1	P8	2.0	0.1
1	P9	2.0	0.0
1	P10	2.0	0.0
1	P11	2.0	0.0
1	P12	2.0	0.0
1	P13	2.0	0.0
1	P14	2.0	0.0
2	P1	2.0	0.1
2	P2	1.9	0.1
2	P3	2.0	0.1
2	P4	2.0	0.0
2	P5	2.0	0.1
2	P6	2.0	0.1
2	P7	2.0	0.0
2	P8	2.0	0.0
2	P9	2.0	0.1
2	P10	2.0	0.1
2	P11	2.1	0.1
2	P12	2.0	0.1
2	P13	2.0	0.0
2	P14	2.0	0.1
3	P1	1.9	0.1
3	P2	2.0	0.1
3	P3	2.0	0.1
3	P4	2.0	0.1
3	P5	2.0	0.1
3	P6	2.0	0.1
3	P7	2.0	0.0
3	P8	2.0	0.1
3	P9	2.0	0.1
3	P10	2.0	0.1
3	P11	2.0	0.1
3	P12	2.0	0.1

3	P13	2.0	0.1
3	P14	2.0	0.1
4	P1	2.0	0.1
4	P2	1.9	0.2
4	P3	2.0	0.1
4	P4	1.9	0.2
4	P5	2.0	0.2
4	P6	1.9	0.2
4	P7	1.9	0.2
4	P8	1.9	0.1
4	P9	2.0	0.1
4	P10	1.9	0.1
4	P11	2.0	0.1
4	P12	2.0	0.2
4	P13	2.0	0.2
4	P14	2.0	0.1
5	P1	2.1	0.1
5	P2	2.0	0.1
5	P3	2.0	0.2
5	P4	2.1	0.2
5	P5	2.0	0.2
5	P6	2.0	0.1
5	P7	2.0	0.2
5	P8	2.0	0.2
5	P9	2.0	0.1
5	P10	2.0	0.1
5	P11	2.1	0.1
5	P12	2.1	0.2
5	P13	2.1	0.1
5	P14	2.0	0.1
6	P1	2.0	0.0
6	P2	1.9	0.1
6	P3	2.0	0.0
6	P4	2.0	-0.1
6	P5	2.0	0.0
6	P6	2.0	0.0
6	P7	2.0	0.0
6	P8	2.0	0.0
6	P9	2.0	0.0
6	P10	2.0	0.0
6	P11	2.0	0.0
6	P12	2.0	0.0
6	P13	2.0	0.0
6	P14	2.0	0.1

DATA Continued

LLCR Durability:

Tracking Code: 111667_Report_Rev_2	Part #: PESS-08-12-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-12-T-12.00-DR-NUS\PET-08-01-T-VT PESS-02-12-L-12.00-DR-NUS-R\PET-02-01-L-VT PESS-02-12-T-12.00-DR-NUS-R\PET-02-01-T-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-T-VT
Part description: PESS\PET	

PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

	mOhm values	Actual	Delta	Delta	Delta
Board	Position	Initial	100 Cycles	Thermal	Humidity
1	P1	2.0	-0.1	0.0	0.0
1	P2	1.9	0.0	0.1	0.1
1	P3	2.0	0.0	0.0	0.0
1	P4	2.0	0.0	0.0	0.0
1	P5	2.0	0.0	0.1	0.0
1	P6	2.0	-0.1	0.0	0.0
1	P7	2.0	0.0	0.1	0.1
1	P8	2.0	0.0	0.1	0.1
1	P9	1.9	0.0	0.0	0.1
1	P10	2.0	0.2	0.2	0.2
1	P11	2.0	0.0	0.0	0.0
1	P12	2.0	0.1	0.1	0.0
1	P13	2.0	0.0	0.1	0.0
1	P14	2.0	0.0	0.0	0.0
2	P1	2.0	0.0	0.1	0.2
2	P2	2.0	0.0	0.0	0.0
2	P3	1.9	0.1	0.1	0.1
2	P4	2.0	0.0	0.0	0.0
2	P5	2.0	0.0	0.0	0.0
2	P6	2.0	0.0	0.0	0.0
2	P7	2.0	0.0	0.1	0.1
2	P8	1.9	0.0	0.0	0.1
2	P9	2.0	0.0	0.0	0.0
2	P10	2.0	0.0	0.0	0.1
2	P11	2.0	0.0	0.0	0.0
2	P12	2.0	0.0	0.0	0.0
2	P13	2.0	0.1	0.2	0.2
2	P14	2.0	0.0	0.0	0.1
3	P1	2.0	0.0	0.0	0.1
3	P2	1.9	0.0	0.1	0.2
3	P3	1.9	0.0	0.0	0.1
3	P4	2.0	0.0	0.0	0.0
3	P5	2.0	0.0	0.0	0.0
3	P6	2.0	0.0	0.0	0.0
3	P7	2.0	0.0	0.0	0.1
3	P8	2.0	0.0	0.1	0.1
3	P9	2.0	0.0	0.0	0.1
3	P10	2.0	0.0	0.0	0.1
3	P11	2.0	0.0	0.0	0.0
3	P12	2.0	0.0	0.0	0.0
3	P13	2.0	0.0	0.1	0.1
3	P14	2.0	0.0	0.0	0.1

4	P1	2.0	0.1	0.2	0.3
4	P2	2.0	0.0	0.1	0.2
4	P3	2.0	0.0	0.1	0.1
4	P4	2.0	0.0	0.0	0.0
4	P5	1.9	0.0	0.0	0.1
4	P6	2.0	0.0	0.0	0.1
4	P7	2.0	0.0	0.1	0.1
4	P8	2.0	0.0	0.0	0.1
4	P9	2.0	0.0	0.0	0.0
4	P10	2.0	0.0	0.0	0.0
4	P11	2.0	0.0	0.0	0.0
4	P12	2.0	0.0	0.0	0.1
4	P13	2.0	0.0	0.0	0.0
4	P14	2.0	0.0	0.0	0.0
5	P1	2.0	0.0	0.0	0.1
5	P2	2.0	0.0	0.1	0.2
5	P3	2.0	0.0	0.1	0.1
5	P4	2.0	0.0	0.1	0.2
5	P5	2.0	0.0	0.1	0.1
5	P6	2.0	0.0	0.0	0.1
5	P7	1.9	0.1	0.1	0.2
5	P8	2.0	0.0	0.1	0.3
5	P9	1.9	0.0	0.0	0.1
5	P10	2.0	0.0	0.0	0.1
5	P11	2.0	0.0	0.0	0.0
5	P12	1.9	0.0	0.1	0.1
5	P13	1.9	0.0	0.0	0.0
5	P14	1.9	0.0	0.1	0.1
6	P1	2.0	0.0	0.0	0.1
6	P2	2.0	0.0	0.0	0.1
6	P3	2.0	0.0	0.0	0.1
6	P4	2.0	0.0	0.0	0.1
6	P5	2.0	0.0	0.0	0.1
6	P6	2.0	0.0	0.0	0.1
6	P7	1.9	0.1	0.1	0.3
6	P8	2.0	0.0	0.1	0.2
6	P9	2.0	0.0	0.1	0.1
6	P10	1.9	0.1	0.1	0.1
6	P11	2.0	0.0	0.0	0.0
6	P12	2.0	0.0	0.0	0.0
6	P13	2.0	0.0	0.0	0.0
6	P14	2.0	0.0	0.0	0.0

DATA Continued

LLCR Gas Tight

Tracking Code: 111667_Report_Rev_2	Part #: PESS-08-12-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-12-T-12.00-DR-NUS\PET-08-01-T-VT PESS-02-12-L-12.00-DR-NUS-R\PET-02-01-L-VT PESS-02-12-T-12.00-DR-NUS-R\PET-02-01-T-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-T-VT
Part description: PESS\PET	

PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

	mOhm values	Actual	Delta
Board	Position	Initial	Gas Tight
1	P1	2.0	0.0
1	P2	2.0	0.0
1	P3	1.9	0.1
1	P4	2.0	0.1
1	P5	2.0	0.1
1	P6	2.0	0.1
1	P7	2.0	0.1
1	P8	2.0	0.0
1	P9	2.0	0.0
1	P10	2.0	0.0
1	P11	2.0	0.1
1	P12	2.0	0.0
1	P13	2.0	0.0
1	P14	2.0	0.0
2	P1	2.0	0.0
2	P2	2.0	0.1
2	P3	2.0	0.1
2	P4	2.0	0.1
2	P5	2.0	0.1
2	P6	2.0	0.1
2	P7	2.0	0.0
2	P8	2.0	0.1
2	P9	2.0	0.0
2	P10	2.0	0.1
2	P11	2.0	0.1
2	P12	2.0	0.1
2	P13	2.0	0.0
2	P14	2.0	0.0
3	P1	2.0	0.1
3	P2	2.0	0.1
3	P3	2.0	0.1
3	P4	1.9	0.1
3	P5	2.0	0.1
3	P6	2.0	0.1
3	P7	2.0	0.1
3	P8	1.9	0.1
3	P9	2.0	0.0
3	P10	2.0	0.1
3	P11	2.0	0.0
3	P12	2.0	0.1
3	P13	2.0	0.1

3	P14	2.0	0.1
4	P1	2.0	0.1
4	P2	2.0	0.1
4	P3	2.1	0.1
4	P4	2.0	0.1
4	P5	2.0	0.0
4	P6	2.1	0.0
4	P7	2.0	0.1
4	P8	2.0	0.0
4	P9	2.0	0.1
4	P10	2.0	0.1
4	P11	2.0	0.1
4	P12	2.0	0.1
4	P13	2.0	0.0
4	P14	2.0	0.1
5	P1	2.0	0.1
5	P2	2.0	0.0
5	P3	2.0	0.0
5	P4	2.0	0.1
5	P5	2.0	0.1
5	P6	2.0	0.0
5	P7	2.0	0.1
5	P8	2.0	0.0
5	P9	2.0	0.0
5	P10	2.0	0.1
5	P11	2.0	0.0
5	P12	2.0	0.1
5	P13	2.0	0.1
5	P14	2.0	0.0
6	P1	2.0	0.0
6	P2	2.0	0.1
6	P3	2.0	0.1
6	P4	2.0	0.1
6	P5	2.0	0.1
6	P6	2.0	0.1
6	P7	2.0	0.1
6	P8	2.0	0.1
6	P9	2.0	0.0
6	P10	2.0	-0.1
6	P11	2.0	0.0
6	P12	2.0	0.0
6	P13	2.0	0.0
6	P14	2.0	0.0

DATA Continued

LLCR Shock/Vibration:

Tracking Code: 111667_Report_Rev_2	Part #: PESS-08-12-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-12-T-12.00-DR-NUS\PET-08-01-T-VT PESS-02-12-L-12.00-DR-NUS-R\PET-02-01-L-VT PESS-02-12-T-12.00-DR-NUS-R\PET-02-01-T-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-T-VT
Part description: PESS\PET	

PESS-08-12-L-12.00-DR-NUS-R/ PET-08-01-L-VT

	mOhm values	Actual	Delta
Board	Position	Initial	Shock/Vib
1	P1	2.1	0.0
1	P2	2.1	0.0
1	P3	2.1	0.0
1	P4	2.1	0.1
1	P5	2.1	0.0
1	P6	2.1	0.1
1	P7	2.1	0.1
1	P8	2.2	0.3
2	P1	2.2	0.0
2	P2	2.1	0.0
2	P3	2.1	0.0
2	P4	2.1	0.1
2	P5	2.1	0.0
2	P6	2.1	0.0
2	P7	2.1	0.0
2	P8	2.2	0.1
3	P1	2.1	0.0
3	P2	2.1	0.0
3	P3	2.1	0.0
3	P4	2.1	0.0
3	P5	2.1	0.0
3	P6	2.2	0.0
3	P7	2.1	0.0
3	P8	2.1	0.3
4	P1	2.1	0.0
4	P2	2.1	0.0
4	P3	2.1	0.0
4	P4	2.1	0.1
4	P5	2.2	0.0
4	P6	2.2	0.0
4	P7	2.2	0.0
4	P8	2.1	0.2
5	P1	2.2	0.1
5	P2	2.1	0.0
5	P3	2.1	0.0
5	P4	2.1	0.0
5	P5	2.1	0.0
5	P6	2.1	0.0
5	P7	2.1	0.0
5	P8	2.1	0.0
6	P1	2.1	0.0
6	P2	2.1	0.0

6	P3	2.1	0.0
6	P4	2.1	0.0
6	P5	2.1	0.0
6	P6	2.2	0.1
6	P7	2.1	0.1
6	P8	2.1	0.1
7	P1	2.1	0.0
7	P2	2.1	0.0
7	P3	2.2	0.0
7	P4	2.2	0.1
7	P5	2.2	0.0
7	P6	2.2	0.1
7	P7	2.2	0.1
7	P8	2.1	0.2
8	P1	2.1	0.0
8	P2	2.1	0.0
8	P3	2.1	0.0
8	P4	2.1	0.0
8	P5	2.1	0.0
8	P6	2.1	0.0
8	P7	2.1	0.0
8	P8	2.2	0.1

Data Contunued

Test Request #1112526

LLCR Thermal aging:
PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT

	mOhm values	Actual	Delta
Board	Position	Initial	Thermal Age
1	P1	1.9	0.0
1	P2	1.9	0.0
1	P3	1.9	0.0
1	P4	1.9	0.0
1	P5	1.9	0.0
1	P6	1.9	0.0
1	P7	1.9	0.0
1	P8	1.9	0.0
1	P9	1.9	0.0
1	P10	1.9	0.0
1	P11	1.9	0.0
1	P12	1.9	0.0
1	P13	1.9	0.0
1	P14	1.9	0.0
2	P1	1.9	0.0
2	P2	1.9	0.0
2	P3	1.9	0.0
2	P4	1.9	0.0
2	P5	1.9	0.0
2	P6	1.9	0.0
2	P7	1.9	0.0
2	P8	1.9	0.0
2	P9	2.0	0.0
2	P10	1.9	0.0
2	P11	1.9	0.0
2	P12	1.9	0.0
2	P13	1.9	0.0
2	P14	1.9	0.0
3	P1	1.9	0.0
3	P2	1.9	0.1
3	P3	1.9	0.0
3	P4	1.9	0.0
3	P5	1.9	0.0
3	P6	1.9	0.0
3	P7	1.9	0.0
3	P8	1.9	0.0
3	P9	1.9	0.1
3	P10	1.9	0.0
3	P11	1.9	0.0
3	P12	1.9	0.0

3	P13	1.9	0.0
3	P14	1.9	0.0
4	P1	1.9	0.0
4	P2	1.9	0.0
4	P3	1.9	0.0
4	P4	1.9	0.0
4	P5	1.9	0.0
4	P6	1.9	0.0
4	P7	1.9	0.0
4	P8	1.9	0.0
4	P9	1.9	0.0
4	P10	1.9	0.0
4	P11	1.9	0.0
4	P12	1.8	0.0
4	P13	1.9	0.0
4	P14	1.9	0.0
5	P1	2.0	0.0
5	P2	1.9	0.0
5	P3	1.9	0.0
5	P4	1.9	0.0
5	P5	1.9	0.0
5	P6	1.9	0.0
5	P7	1.9	0.0
5	P8	1.9	0.0
5	P9	1.9	0.0
5	P10	1.9	0.0
5	P11	1.9	0.0
5	P12	1.9	0.0
5	P13	1.9	0.0
5	P14	1.9	0.0
6	P1	1.9	0.0
6	P2	1.9	0.0
6	P3	1.9	0.0
6	P4	1.9	0.0
6	P5	1.9	0.0
6	P6	1.9	0.0
6	P7	1.9	0.0
6	P8	1.9	0.0
6	P9	1.9	0.0
6	P10	1.9	0.0
6	P11	2.0	0.0
6	P12	1.9	0.0
6	P13	1.9	0.0
6	P14	1.9	0.0

DATA Continued

LLCR Durability:

PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT

	mOhm values	Actual	Delta	Delta	Delta
Board	Position	Initial	100 Cycles	Thermal	Humidity
1	P1	1.9	0.1	0.1	0.1
1	P2	1.9	0.0	0.1	0.2
1	P3	1.9	0.0	0.1	0.1
1	P4	1.9	0.1	0.1	0.2
1	P5	1.9	0.0	0.0	0.1
1	P6	1.9	0.0	0.0	0.1
1	P7	1.9	0.0	0.2	0.2
1	P8	1.9	0.1	0.3	0.4
1	P9	1.9	0.2	0.2	0.3
1	P10	1.9	0.0	0.1	0.2
1	P11	1.9	0.0	0.1	0.2
1	P12	1.9	0.0	0.1	0.2
1	P13	1.9	0.0	0.0	0.1
1	P14	1.9	0.0	0.0	0.1
2	P1	1.9	0.1	0.1	0.5
2	P2	1.9	0.0	0.1	0.2
2	P3	1.8	0.1	0.2	0.2
2	P4	1.9	0.0	0.1	0.1
2	P5	1.8	0.1	0.1	0.2
2	P6	1.9	0.0	0.1	0.1
2	P7	1.9	0.0	0.0	0.1
2	P8	1.9	0.1	0.2	0.2
2	P9	1.9	0.0	0.1	0.1
2	P10	1.9	0.1	0.1	0.1
2	P11	1.9	0.0	0.1	0.1
2	P12	1.9	0.0	0.0	0.1
2	P13	1.9	0.0	0.0	0.1
2	P14	1.9	0.0	0.1	0.1
3	P1	1.9	0.0	0.1	0.2
3	P2	1.9	0.0	0.1	0.1
3	P3	1.9	0.0	0.1	0.1
3	P4	1.9	0.0	0.0	0.1
3	P5	2.0	0.0	0.0	0.0
3	P6	1.9	0.0	0.0	0.0
3	P7	1.8	0.1	0.2	0.2
3	P8	1.9	0.0	0.0	0.2
3	P9	1.8	0.2	0.2	0.3
3	P10	1.8	0.1	0.1	0.2
3	P11	2.1	-0.2	-0.2	-0.1
3	P12	1.9	0.1	0.0	0.1
3	P13	1.9	0.1	0.1	0.2

3	P14	1.9	0.0	0.0	0.1
4	P1	1.9	0.1	0.4	0.4
4	P2	1.9	0.1	0.3	0.5
4	P3	1.9	0.0	0.1	0.2
4	P4	1.9	0.1	0.1	0.2
4	P5	1.9	0.1	0.2	0.4
4	P6	1.9	0.1	0.4	0.2
4	P7	1.9	0.0	0.1	0.3
4	P8	1.9	0.1	0.3	0.2
4	P9	1.9	0.1	0.1	0.2
4	P10	1.9	0.1	0.0	0.1
4	P11	1.9	0.1	0.0	0.1
4	P12	1.9	0.0	0.0	0.1
4	P13	1.9	0.1	0.1	0.2
4	P14	1.9	0.1	0.0	0.1
5	P1	2.0	0.1	0.1	0.4
5	P2	2.0	0.0	0.1	0.2
5	P3	2.0	0.0	0.1	0.2
5	P4	2.0	0.0	0.0	0.2
5	P5	2.0	0.1	0.1	0.1
5	P6	2.0	0.0	0.1	0.3
5	P7	2.0	0.1	0.2	0.3
5	P8	2.0	0.0	0.1	0.4
5	P9	2.0	0.0	0.0	0.2
5	P10	1.9	0.0	0.0	0.2
5	P11	2.0	0.0	0.0	0.2
5	P12	2.0	0.0	0.0	0.1
5	P13	1.9	0.0	0.0	0.2
5	P14	2.0	0.0	0.0	0.1
6	P1	2.0	0.0	0.1	0.2
6	P2	1.9	0.0	0.1	0.2
6	P3	1.9	0.0	0.1	0.2
6	P4	1.9	0.0	0.0	0.1
6	P5	1.9	0.0	0.0	0.1
6	P6	2.0	0.0	0.0	0.1
6	P7	1.9	0.0	0.1	0.1
6	P8	1.8	0.2	0.2	0.3
6	P9	2.0	0.0	0.0	0.1
6	P10	2.0	0.0	0.0	0.1
6	P11	1.9	0.1	0.1	0.2
6	P12	1.9	0.0	0.0	0.1
6	P13	1.9	0.0	-0.1	0.0
6	P14	1.9	0.0	0.0	0.1

DATA Continued

LLCR Shock/Vibration:

Tracking Code: 111667_Report_Rev_2	Part #: PESS-08-12-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-L-VT PESS-08-12-T-12.00-DR-NUS\PET-08-01-T-VT PESS-02-12-L-12.00-DR-NUS-R\PET-02-01-L-VT PESS-02-12-T-12.00-DR-NUS-R\PET-02-01-T-VT PESS-08-10-L-12.00-DR-NUS-R\PET-08-01-T-VT
Part description: PESS\PET	

PESS-08-12-T-12.00-DR-NUS-R/ PET-08-01-T-VT

	mOhm values	Actual	Delta
Board	Position	Initial	Shock/Vib
1	P1	2.0	0.0
1	P2	2.0	0.0
1	P3	2.1	0.0
1	P4	2.1	0.0
1	P5	2.0	0.0
1	P6	2.1	0.0
1	P7	2.2	0.0
1	P8	2.0	0.0
2	P1	2.1	0.0
2	P2	2.1	0.2
2	P3	2.1	0.0
2	P4	2.1	0.0
2	P5	2.0	0.0
2	P6	2.2	0.0
2	P7	2.0	0.0
2	P8	2.0	0.1
3	P1	2.1	0.0
3	P2	2.2	0.0
3	P3	2.1	0.1
3	P4	2.1	0.0
3	P5	2.1	0.0
3	P6	2.1	0.0
3	P7	2.2	0.0
3	P8	2.1	0.1
4	P1	2.1	0.0
4	P2	2.1	0.0
4	P3	2.1	0.0
4	P4	2.1	0.0
4	P5	2.1	0.0
4	P6	2.1	0.0
4	P7	2.1	0.0
4	P8	2.0	0.0
5	P1	2.2	0.0
5	P2	2.2	0.0
5	P3	2.3	0.0
5	P4	2.1	0.0
5	P5	2.2	0.0
5	P6	2.1	0.0
5	P7	2.2	0.0
5	P8	2.2	0.1
6	P1	2.1	0.0
6	P2	2.3	0.0

6	P3	2.1	0.0
6	P4	2.1	0.0
6	P5	2.1	0.0
6	P6	2.1	0.0
6	P7	2.1	0.0
6	P8	2.1	0.0
7	P1	2.1	0.0
7	P2	2.1	0.0
7	P3	2.1	0.0
7	P4	2.0	0.0
7	P5	2.0	0.0
7	P6	2.1	0.0
7	P7	2.0	0.0
7	P8	2.0	0.0
8	P1	2.2	0.0
8	P2	2.1	0.0
8	P3	2.2	0.0
8	P4	2.0	0.0
8	P5	2.1	0.0
8	P6	2.0	0.0
8	P7	2.0	0.0
8	P8	2.1	0.2

EQUIPMENT AND CALIBRATION SCHEDULES

Equipment #: TSC-01
Description: Vertical Thermal Shock Chamber
Manufacturer: Cincinnatti Sub Zero
Model: VTS-3-6-6-SC/AC
Serial #: 10-VT14993
Accuracy: See Manual
… Last Cal: 05/18/2010, Next Cal: 05/18/2011

Equipment #: MO-01
Description: Micro-ohmmeter
Manufacturer: Keithley
Model: 580
Serial #: 0772740
Accuracy: Last Cal: 04/30/2010, Next Cal: 4/30/2011

Equipment #: MO-03
Description: Multimeter /Data Acquisition System
Manufacturer: Keithley
Model: 2700
Serial #: 0791975
Accuracy: See Manual
… Last Cal: 06/16/2010, Next Cal: 06/16/2011

Equipment #: MO-04
Description: Multimeter /Data Acquisition System
Manufacturer: Keithley
Model: 2700
Serial #: 0798688
Accuracy: See Manual
… Last Cal: 4/30/2010, Next Cal: 4/30/2011

Equipment #: THC-01
Description: Temperature/Humidity Chamber
Manufacturer: Thermotron
Model: SM-8-7800
Serial #: 30676
Accuracy: See Manual
… Last Cal: 08/16/2010, Next Cal: 02/16/2011

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: 06/16/2010, Next Cal: 206/16/2011

Equipment #: TCT-01
Description: Normal force analyzer
Manufacturer: Mecmesin Multitester
Model: Mecmesin Multitester 2.5-i
Serial #: 04-1041-04
Accuracy: Last Cal: 05/21/2010, Next Cal: 05/21/2011

Equipment #: SVC-01
Description: Shock & Vibration Table
Manufacturer: Data Physics
Model: LE-DSA-10-20K
Serial #: 10037
Accuracy: See Manual
… Last Cal: 11/31/2010, Next Cal: 11/31/2011

Equipment #: TCT-07
Description: Automated Test Stand
Manufacturer: Chatillon/Lloyd
Model: LF Plus
Serial #: LF1310
Accuracy: See Manual
… Last Cal: 07/15/2010, Next Cal: 07/15/2011

Equipment #: ACLM-01
Description: Accelerometer
Manufacturer: PCB Piezotronics
Model: 352C03
Serial #: 115819
Accuracy: See Manual
… Last Cal: 07/09/2010, Next Cal: 07/09/2011

Equipment #: ED-03
Description: Event Detector
Manufacturer: Analysis Tech
Model: 32EHD
Serial #: 1100604
Accuracy: See Manual
… Last Cal: 06/04/2010, Next Cal: 06/04/2011