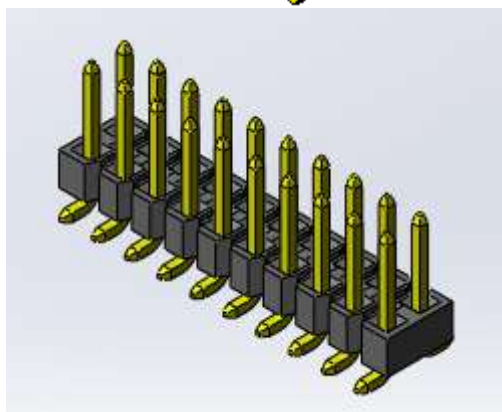
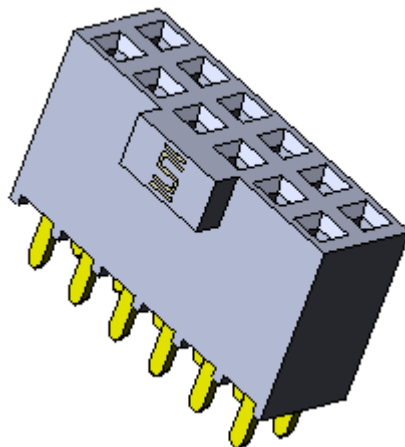




Project Number:		Tracking Code: TC0817--1680	
Requested by: Mark Shireman		Date: 6/20/2008	Product Rev: current
Part #: SSW-125-02-S-D/TSM-125-01-S-DV		Lot #: 2037462	Tech: Rodney Riley, Eric Fox, Gary Lomax
Part description: SSW/TSM			Qty to test: 25
Test Start: 04/21/2008	Test Completed: 6/9/2008		



ELP Testing

PART DESCRIPTION
(Actual Parts Not Depicted)
SSW-125-02-S-D/TSM-125-01-S-DV

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

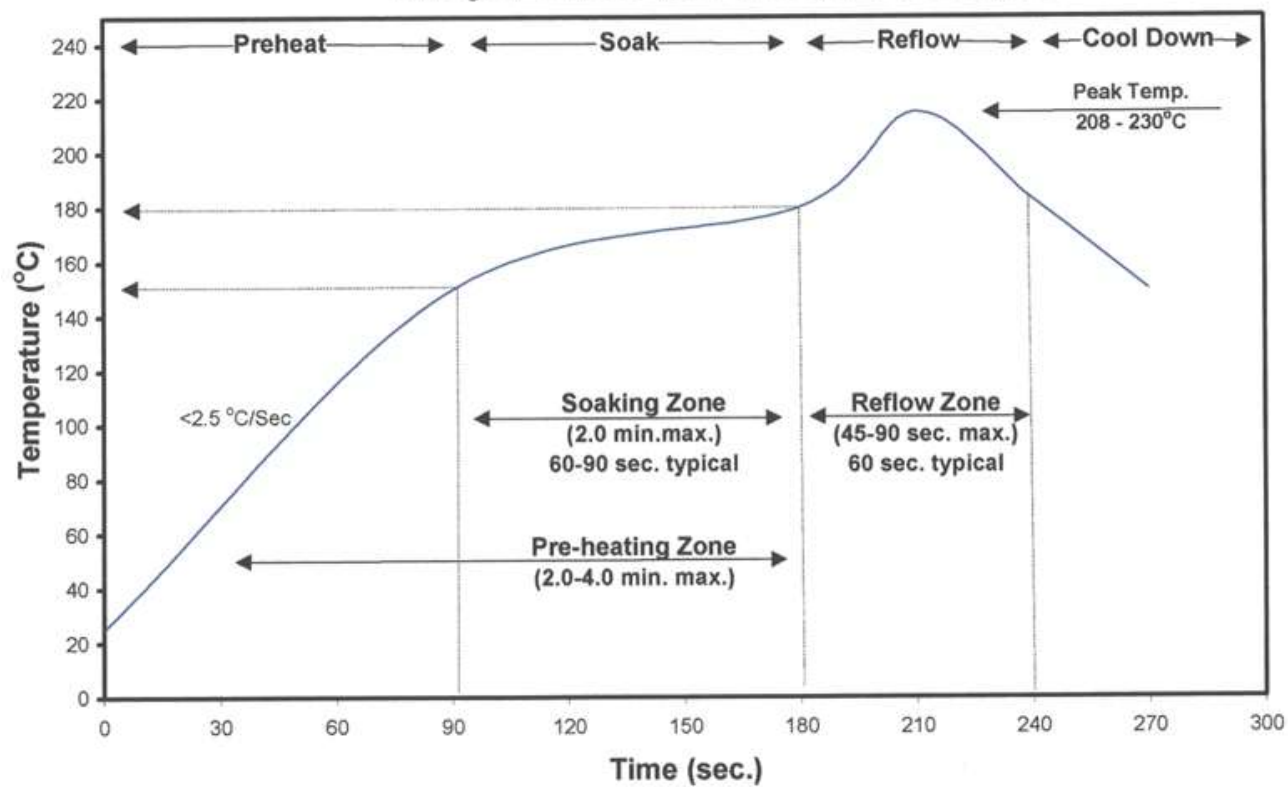
To perform the following tests: ELP Testing

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:
- 9) Re-Flow Time/Temp: See accompanying profile.
- 10) Samtec Test PCBs used:

TYPICAL OVEN PROFILE (Soldering Parts to Test Boards)**Standard Solder Paste Reflow Profile
for Kester Paste Containing
Alloys: Sn63Pb37 or Sn62Pb36Ag02**

FLOWCHARTS**Plating Thickness**

TEST	GROUP A (FEMALE)
STEP	20 Points Minimum - 5 Sample
01	Measure & Verify Plating Thickness
02	Document Plating Thickness
03	Initial SEM analysis of contact point

TEST	GROUP B (MALE)
STEP	20 Points Minimum - 5 Sample
01	Measure & Verify Plating Thickness
02	Document Plating Thickness
03	Initial SEM analysis of contact point

Durability

TEST STEP	GROUP A 125 Points - 5 Samples 100 Cycles
01	LLCR-1
02	100 Cycles
03	LLCR-2
04	Data Review
05	Thermals
06	LLCR-3
07	Data Review
08	Humidity
09	LLCR-4
10	SEM Analysis (Cross section required)

LLCR = EIA-364-23, LLCR

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

Cycling Rate = 500 +/- 50 per hour

Pass Criteria for LLCR = Less than 15 m-Ohm change in resistance.

Thermal Aging = EIA-364-17, Test Condition 4, 105 deg 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

Tracking Code: TC0817--1680	Part #: SSW-125-02-S-D/TSM-125-01-S-DV
Part description: SSW/TSM	

FLOWCHARTS Continued

Durability

TEST STEP	GROUP A 125 Points - 5 Samples 500 Cycles
01	LLCR-1
02	500 Cycles
03	LLCR-2
04	Data Review
05	Thermals
06	LLCR-3
07	Data Review
08	Humidity
09	LLCR-4
10	SEM Analysis (Cross section required)

LLCR = EIA-364-23, LLCR

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

Cycling Rate = 500 +/- 50 per hour

Pass Criteria for LLCR = Less than 15 m-Ohm change in resistance.

Thermal Aging = EIA-364-17, Test Condition 4, 105 deg 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

FLOWCHARTS Continued**Durability**

TEST STEP	GROUP A 125 Points - 5 Samples 1000 Cycles
01	LLCR-1
02	1000 Cycles
03	LLCR-2
04	Data Review
05	Thermals
06	LLCR-3
07	Data Review
08	Humidity
09	LLCR-4
10	SEM Analysis (Cross section required)

LLCR = EIA-364-23, LLCR

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

Cycling Rate = 500 +/- 50 per hour

Pass Criteria for LLCR = Less than 15 m-Ohm change in resistance.

Thermal Aging = EIA-364-17, Test Condition 4, 105 deg 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

Photo Documentation of Contact Area

TEST STEP	GROUP A 2-3 Photos of 1 sample 1 Sample 100 Cycle Group	GROUP B 2-3 Photos of 1 sample 1 Sample 250 Cycle Group	GROUP C 2-3 Photos of 1 sample 1 Sample 500 Cycle Group	GROUP D 2-3 Photos of 1 sample 1 Sample 1000 Cycle Group
01	Photos of Contact Area	Photos of Contact Area	Photos of Contact Area	Photos of Contact Area
02	Save Photos in Project Folder	Save Photos in Project Folder	Save Photos in Project Folder	Save Photos in Project Folder

ATTRIBUTE DEFINITIONS

The following is a brief, simplified description of attributes.

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.

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

RESULTS

LLCR Durability (100 LLCR test points)

- **Initial** -----4.6 mOhms Max
- **Durability, 100 Cycles**
 - <= +5.0 mOhms ----- 100 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 ----- 100 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 ----- 100 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 (100 LLCR test points)

- **Initial** -----5.2 mOhms Max
- **Durability, 250 Cycles**
 - <= +5.0 mOhms ----- 100 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 ----- 100 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 ----- 100 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 (100 LLCR test points)

- **Initial** -----5.8 mOhms Max
- **Durability, 500 Cycles**
 - <= +5.0 mOhms ----- 100 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 ----- 100 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 ----- 100 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 (100 LLCR test points)

- **Initial** -----5.2 mOhms Max
- **Durability, 1000 Cycles**
 - <= +5.0 mOhms ----- 100 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 ----- 100 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 ----- 100 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

DATA SUMMARIES**LLCR:**

- 1) A total of 200 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

mOhm values	Actual Initial	Delta 100 Cycles	Delta Thermal	Delta Humidity
Average	3.9	-0.1	-0.1	0.1
St. Dev.	0.2	0.2	0.2	0.4
Min	3.5	-0.7	-0.7	-0.6
Max	4.6	0.7	0.6	1.7
Count	100	100	100	100

mOhm values	Actual Initial	Delta 250 Cycles	Delta Thermal	Delta Humidity
Average	3.9	-0.1	0.0	0.4
St. Dev.	0.3	0.2	0.3	0.5
Min	3.4	-1.0	-0.7	-0.5
Max	5.2	0.2	0.7	2.0
Count	100	100	100	100

mOhm values	Actual Initial	Delta 500 Cycles	Delta Thermal	Delta Humidity
Average	4.2	-0.5	-0.4	-0.2
St. Dev.	0.4	0.4	0.5	0.6
Min	3.6	-2.2	-2.0	-1.7
Max	5.8	0.2	1.0	2.5
Count	100	100	100	100

mOhm values	Actual Initial	Delta 1000 Cycles	Delta Thermal	Delta Humidity
Average	4.1	-0.5	-0.3	0.1
St. Dev.	0.3	0.3	0.4	0.7
Min	3.5	-1.2	-1.1	-1.0
Max	5.2	0.4	1.5	3.9
Count	100	100	100	100

DATA**LLCR:**

	mOhm values	Actual	Delta	Delta	Delta
Board	Position	Initial	100 Cycles	Thermal	Humidity
1	P1	4.0	-0.5	-0.4	-0.4
1	P2	3.8	0.0	-0.1	-0.1
1	P3	3.9	-0.3	-0.3	-0.3
1	P4	3.7	0.0	0.0	0.0
1	P5	3.8	0.0	-0.1	0.0
1	P6	3.7	-0.1	-0.1	0.0
1	P7	3.5	0.5	0.6	0.4
1	P8	3.9	-0.3	-0.3	-0.3
1	P9	4.0	-0.2	-0.1	-0.2
1	P10	3.7	-0.1	-0.1	-0.1
1	P11	4.1	-0.4	-0.6	-0.5
1	P12	3.9	-0.2	-0.3	-0.1
1	P13	3.7	-0.1	-0.2	0.0
1	P14	4.0	-0.5	-0.5	-0.3
1	P15	4.1	-0.6	-0.6	-0.3
1	P16	3.8	-0.1	0.0	0.0
1	P17	4.6	-0.7	-0.7	-0.6
1	P18	3.7	0.0	0.1	0.0
1	P19	3.7	0.1	0.5	0.4
1	P20	3.8	0.0	0.1	0.0
1	P21	3.6	-0.1	0.0	0.0
1	P22	3.9	-0.2	-0.2	-0.1
1	P23	3.9	-0.1	-0.2	-0.2
1	P24	3.8	-0.2	-0.1	-0.1
1	P25	3.9	-0.2	0.0	-0.2
2	P1	3.6	-0.1	0.0	0.2
2	P2	3.7	-0.1	0.0	0.1
2	P3	3.5	-0.1	0.0	0.2
2	P4	3.6	0.0	0.0	0.3
2	P5	3.6	-0.1	-0.2	0.1
2	P6	3.6	-0.1	-0.2	0.3
2	P7	3.6	0.0	0.0	0.0
2	P8	3.7	-0.1	0.0	0.1
2	P9	3.9	-0.2	0.0	-0.1
2	P10	3.8	-0.2	-0.2	0.1
2	P11	3.7	-0.1	-0.2	0.1
2	P12	3.8	-0.1	-0.2	0.1
2	P13	3.7	-0.1	-0.1	0.1
2	P14	3.8	-0.2	-0.3	0.0
2	P15	4.0	-0.3	-0.3	-0.1
2	P16	3.7	-0.1	-0.1	0.3
2	P17	3.7	-0.1	-0.1	0.1
2	P18	3.7	-0.3	0.0	0.1

Tracking Code: TC0817--1680

Part #: SSW-125-02-S-D/TSM-125-01-S-DV

Part description: SSW/TSM

2	P19	3.6	-0.5	-0.4	-0.3
2	P20	3.8	-0.3	-0.3	0.4
2	P21	4.0	-0.2	0.0	0.7
2	P22	3.5	0.0	0.0	0.3
2	P23	3.8	0.3	0.0	0.8
2	P24	3.5	0.1	0.3	0.7
2	P25	3.6	-0.4	-0.3	-0.3
4	P1	3.9	0.0	-0.1	-0.1
4	P2	4.0	0.0	0.2	0.2
4	P3	3.9	0.0	-0.1	0.0
4	P4	4.1	-0.1	0.0	0.0
4	P5	4.0	0.1	-0.1	0.2
4	P6	4.0	-0.1	-0.2	-0.1
4	P7	3.8	-0.5	-0.4	-0.3
4	P8	4.0	0.0	0.1	0.1
4	P9	3.8	-0.1	0.0	0.5
4	P10	3.8	-0.2	-0.1	1.6
4	P11	3.8	-0.2	-0.1	0.1
4	P12	4.0	0.0	-0.1	0.1
4	P13	3.8	0.7	0.3	1.5
4	P14	4.0	-0.4	-0.4	-0.3
4	P15	4.1	-0.2	-0.3	-0.2
4	P16	4.0	-0.5	-0.4	-0.4
4	P17	3.9	-0.2	-0.1	-0.1
4	P18	4.0	-0.2	-0.1	-0.2
4	P19	3.7	-0.1	0.1	0.0
4	P20	4.1	0.0	-0.2	-0.2
4	P21	4.1	-0.4	-0.3	-0.3
4	P22	4.0	-0.3	-0.3	-0.3
4	P23	4.1	-0.3	-0.3	-0.3
4	P24	4.1	-0.2	-0.1	-0.2
4	P25	3.9	-0.2	-0.1	-0.2
5	P1	3.8	-0.3	-0.1	0.0
5	P2	4.1	-0.1	0.3	0.2
5	P3	3.9	-0.1	0.1	0.3
5	P4	4.2	-0.4	-0.4	0.2
5	P5	4.0	-0.1	-0.1	0.1
5	P6	4.0	0.3	0.1	0.5
5	P7	3.8	-0.1	0.1	0.0
5	P8	3.8	-0.1	0.4	0.2
5	P9	3.7	-0.2	-0.1	0.1
5	P10	3.9	-0.3	-0.1	0.0
5	P11	4.3	0.0	0.0	0.1
5	P12	4.0	-0.2	-0.2	0.2
5	P13	4.2	-0.4	-0.5	-0.2
5	P14	4.0	-0.2	-0.2	0.5
5	P15	3.9	0.0	0.0	1.2
5	P16	3.8	-0.1	0.0	0.5
5	P17	3.8	-0.2	0.2	1.3
5	P18	3.7	-0.1	0.1	1.6

Tracking Code: TC0817--1680

Part #: SSW-125-02-S-D/TSM-125-01-S-DV

Part description: SSW/TSM

5	P19	3.8	-0.1	-0.1	0.2
5	P20	3.7	0.0	-0.1	0.5
5	P21	3.9	0.0	0.0	0.7
5	P22	3.9	-0.2	-0.1	1.0
5	P23	4.1	-0.3	-0.2	0.7
5	P24	3.7	0.0	0.4	1.7
5	P25	3.7	-0.1	0.1	0.8

	mOhm values	Actual	Delta	Delta	Delta
Board	Position	Initial	250 Cycles	Thermal	Humidity
1	P1	3.9	-0.1	0.0	0.0
1	P2	4.3	-0.3	-0.1	0.0
1	P3	4.3	-0.7	-0.6	-0.5
1	P4	3.8	-0.1	0.1	0.3
1	P5	4.0	-0.3	-0.3	-0.2
1	P6	3.8	-0.3	-0.3	-0.1
1	P7	3.4	0.0	0.1	0.3
1	P8	4.1	-0.1	-0.1	0.0
1	P9	3.9	-0.3	-0.1	-0.1
1	P10	3.6	-0.1	-0.1	-0.1
1	P11	3.7	-0.1	0.1	0.2
1	P12	3.8	-0.2	-0.1	-0.2
1	P13	5.2	-1.0	-0.2	0.8
1	P14	3.8	-0.1	0.2	0.5
1	P15	4.1	-0.4	-0.4	-0.1
1	P16	3.9	-0.3	-0.2	0.0
1	P17	3.8	0.0	0.2	0.9
1	P18	3.5	-0.2	0.3	0.3
1	P19	3.7	-0.2	0.0	0.1
1	P20	3.8	0.1	0.1	0.2
1	P21	4.2	-0.5	-0.1	0.1
1	P22	3.8	-0.1	0.1	0.2
1	P23	4.2	-0.7	-0.3	0.3
1	P24	3.7	0.2	0.5	0.5
1	P25	3.4	0.1	0.5	0.3
2	P1	3.9	-0.1	0.3	0.1
2	P2	3.7	-0.1	0.0	-0.1
2	P3	3.8	0.0	0.0	0.6
2	P4	3.7	-0.2	0.0	0.2
2	P5	3.9	-0.1	-0.1	0.0
2	P6	3.8	-0.1	-0.1	0.2
2	P7	3.9	0.1	0.2	0.2
2	P8	3.9	0.0	0.0	0.0
2	P9	4.3	0.2	0.2	0.6
2	P10	4.2	-0.2	-0.2	0.0
2	P11	4.2	-0.3	-0.5	-0.3
2	P12	4.2	-0.1	-0.4	-0.2
2	P13	4.0	-0.1	-0.3	-0.1
2	P14	4.1	-0.2	-0.3	0.2

Tracking Code: TC0817--1680

Part #: SSW-125-02-S-D/TSM-125-01-S-DV

Part description: SSW/TSM

2	P15	3.9	0.0	-0.1	0.1
2	P16	4.0	-0.1	-0.2	0.4
2	P17	3.7	0.0	0.0	0.0
2	P18	4.5	-0.7	-0.6	-0.4
2	P19	4.0	0.1	0.3	0.5
2	P20	3.8	0.0	0.0	0.0
2	P21	4.0	-0.2	-0.3	-0.1
2	P22	4.4	-0.5	-0.6	-0.1
2	P23	3.8	0.0	0.0	0.1
2	P24	3.9	-0.2	-0.2	0.1
2	P25	4.1	-0.4	-0.2	0.1
4	P1	3.8	-0.1	0.3	0.6
4	P2	4.0	-0.1	0.2	0.4
4	P3	4.0	-0.1	0.0	1.5
4	P4	3.9	-0.1	-0.1	1.5
4	P5	3.9	-0.1	-0.2	0.3
4	P6	3.9	-0.2	-0.3	0.3
4	P7	3.9	-0.1	0.2	0.1
4	P8	3.7	-0.1	0.2	0.3
4	P9	3.8	-0.1	0.1	0.2
4	P10	4.1	-0.2	-0.2	0.1
4	P11	3.8	-0.3	-0.2	0.2
4	P12	4.1	-0.2	-0.2	0.2
4	P13	4.1	-0.2	-0.3	0.2
4	P14	3.8	0.2	0.0	0.8
4	P15	3.7	-0.2	-0.2	0.5
4	P16	3.8	-0.2	-0.2	2.0
4	P17	4.7	-0.7	-0.7	1.4
4	P18	3.7	0.0	0.2	1.1
4	P19	3.7	0.1	0.2	1.8
4	P20	3.9	0.2	0.0	1.7
4	P21	3.9	0.0	0.0	1.7
4	P22	3.6	-0.1	0.0	0.5
4	P23	3.8	0.2	0.1	1.7
4	P24	3.6	0.0	0.3	1.2
4	P25	3.5	0.1	0.7	1.3
5	P1	3.9	-0.3	0.0	-0.1
5	P2	3.9	-0.3	0.0	-0.2
5	P3	4.1	-0.3	-0.1	0.4
5	P4	3.7	-0.1	0.0	0.0
5	P5	3.9	-0.1	-0.1	0.3
5	P6	3.8	0.0	0.1	0.7
5	P7	4.1	-0.3	-0.2	-0.3
5	P8	3.6	0.1	0.3	0.3
5	P9	3.7	-0.1	0.3	0.3
5	P10	3.8	0.0	0.2	0.3
5	P11	3.6	0.1	0.4	0.6
5	P12	3.8	-0.1	0.1	0.6
5	P13	3.6	0.0	0.0	0.2
5	P14	4.2	-0.5	-0.3	0.8

Tracking Code: TC0817--1680

Part #: SSW-125-02-S-D/TSM-125-01-S-DV

Part description: SSW/TSM

5	P15	3.9	-0.3	-0.2	0.0
5	P16	3.9	-0.2	0.0	0.6
5	P17	3.7	-0.1	0.2	0.3
5	P18	3.7	-0.1	0.1	0.2
5	P19	3.9	0.1	0.2	0.9
5	P20	4.4	-0.7	-0.6	-0.1
5	P21	3.7	0.0	0.0	0.5
5	P22	3.7	-0.1	0.0	1.3
5	P23	3.7	-0.2	-0.1	0.5
5	P24	3.7	-0.2	0.1	0.2
5	P25	3.6	0.0	0.4	0.5

	mOhm values	Actual	Delta	Delta	Delta
Board	Position	Initial	500 Cycles	Thermal	Humidity
1	P1	3.9	-0.2	0.1	0.2
1	P2	3.8	-0.3	-0.2	0.0
1	P3	4.0	-0.5	-0.2	0.0
1	P4	4.2	0.0	0.3	2.5
1	P5	4.4	-0.8	-0.5	-0.1
1	P6	3.9	-0.3	0.0	0.1
1	P7	4.1	-0.5	-0.2	0.9
1	P8	3.7	-0.2	-0.2	0.0
1	P9	3.9	-0.3	0.0	0.9
1	P10	3.9	0.2	0.6	0.7
1	P11	3.8	-0.3	-0.2	-0.1
1	P12	4.2	-0.1	0.5	0.9
1	P13	4.0	-0.5	-0.1	0.4
1	P14	4.0	-0.4	0.2	0.6
1	P15	3.9	-0.3	-0.2	0.1
1	P16	4.2	-0.8	-0.1	0.9
1	P17	3.7	-0.3	-0.2	0.2
1	P18	3.8	-0.3	-0.3	-0.2
1	P19	4.0	-0.4	-0.4	-0.4
1	P20	3.9	-0.3	0.0	0.2
1	P21	3.9	-0.4	-0.2	0.1
1	P22	4.1	-0.5	-0.1	0.9
1	P23	3.8	-0.3	-0.2	0.0
1	P24	3.7	-0.2	0.2	0.8
1	P25	3.8	-0.3	-0.1	0.0
2	P1	5.8	-2.2	-1.7	-1.0
2	P2	4.4	-0.8	-0.8	-0.7
2	P3	4.9	-1.5	-1.2	-0.7
2	P4	4.6	-1.1	-1.0	-0.8
2	P5	4.1	-0.7	-0.5	-0.3
2	P6	5.2	-1.6	-1.7	-1.5
2	P7	4.2	-0.6	-0.5	-0.4
2	P8	4.2	-0.6	-0.4	-0.4
2	P9	4.2	-0.7	-0.5	-0.4
2	P10	4.5	-1.0	-0.9	-0.7

Tracking Code: TC0817--1680

Part #: SSW-125-02-S-D/TSM-125-01-S-DV

Part description: SSW/TSM

2	P11	4.3	-0.8	-0.8	-0.7
2	P12	4.7	-1.1	-1.1	-0.3
2	P13	5.4	-2.1	-2.0	-1.7
2	P14	4.8	-1.0	-0.9	0.9
2	P15	4.3	-0.9	-0.8	-0.5
2	P16	3.8	-0.1	0.0	0.3
2	P17	3.9	-0.3	-0.3	-0.3
2	P18	3.7	-0.4	-0.3	-0.1
2	P19	4.1	-0.5	-0.4	-0.2
2	P20	4.8	-0.9	-0.9	-0.6
2	P21	4.0	-0.3	0.0	0.7
2	P22	4.1	-0.3	-0.1	0.7
2	P23	3.6	0.1	0.2	0.6
2	P24	3.8	0.0	1.0	1.7
2	P25	3.7	-0.2	-0.2	0.1
3	P1	4.0	-0.4	-0.2	-0.3
3	P2	3.9	-0.5	-0.3	-0.4
3	P3	4.0	-0.3	-0.3	-0.2
3	P4	4.0	-0.4	-0.4	-0.3
3	P5	4.4	-1.1	-1.0	-1.0
3	P6	3.9	-0.4	-0.4	-0.3
3	P7	3.8	-0.3	-0.2	-0.3
3	P8	4.6	-1.3	-1.1	-1.2
3	P9	3.9	-0.4	-0.3	-0.4
3	P10	4.0	-0.6	-0.6	-0.6
3	P11	4.2	-0.8	-0.9	-0.8
3	P12	4.2	-0.7	-0.7	-0.6
3	P13	4.4	-0.9	-0.9	-0.9
3	P14	3.9	-0.4	-0.4	-0.3
3	P15	3.9	-0.2	-0.1	-0.2
3	P16	3.9	-0.1	0.1	0.1
3	P17	4.5	-0.6	-0.4	-0.5
3	P18	4.1	-0.6	-0.5	-0.4
3	P19	4.1	-0.5	-0.4	-0.4
3	P20	4.3	-0.7	-0.7	-0.6
3	P21	4.6	-1.0	-0.9	-0.8
3	P22	4.7	-1.1	-1.1	-1.0
3	P23	4.0	-0.4	-0.3	-0.3
3	P24	3.9	-0.1	0.1	0.1
3	P25	4.0	-0.5	-0.3	-0.3
4	P1	4.5	-0.6	-0.4	-0.6
4	P2	4.3	-0.3	0.3	0.1
4	P3	4.6	-0.8	-0.8	-0.8
4	P4	3.9	-0.2	-0.3	-0.3
4	P5	4.1	-0.1	-0.2	-0.2
4	P6	4.2	-0.5	-0.5	-0.4
4	P7	4.2	-0.5	-0.5	-0.6
4	P8	4.1	-0.4	-0.4	-0.4
4	P9	4.4	-0.4	-0.3	-0.3
4	P10	4.4	-0.7	-0.6	-0.5

4	P11	4.3	-0.5	-0.5	-0.5
4	P12	4.9	-1.1	-1.2	-1.0
4	P13	3.9	-0.3	-0.3	-0.3
4	P14	4.4	-0.6	-0.6	-0.5
4	P15	3.9	-0.4	-0.4	-0.3
4	P16	4.4	-0.5	-0.4	-0.4
4	P17	4.0	-0.4	-0.3	-0.3
4	P18	3.9	-0.3	-0.2	-0.2
4	P19	4.0	-0.2	-0.2	-0.2
4	P20	4.3	-0.4	-0.3	0.0
4	P21	4.0	-0.3	-0.3	-0.2
4	P22	4.0	-0.2	-0.2	-0.1
4	P23	4.8	-1.2	-1.2	-1.0
4	P24	4.4	-0.7	-0.6	-0.4
4	P25	4.6	-0.2	-0.1	0.3

	mOhm values	Actual	Delta	Delta	Delta
Board	Position	Initial	1000 Cycles	Thermal	Humidity
1	P1	3.7	-0.3	-0.1	0.8
1	P2	3.8	-0.2	0.2	3.4
1	P3	4.8	-1.2	-1.0	-0.1
1	P4	4.8	-0.9	-0.4	0.7
1	P5	4.3	-0.6	-0.5	-0.3
1	P6	4.2	-0.7	-0.6	0.1
1	P7	3.9	-0.5	-0.5	-0.4
1	P8	4.1	-0.4	0.3	0.0
1	P9	3.9	-0.3	0.0	0.0
1	P10	3.9	-0.5	-0.4	-0.3
1	P11	4.2	-0.6	-0.6	0.3
1	P12	4.2	-0.7	-0.7	0.0
1	P13	4.1	-0.7	-0.7	0.5
1	P14	4.0	-0.5	-0.5	0.3
1	P15	4.0	-0.4	-0.4	0.2
1	P16	3.9	-0.4	-0.3	-0.1
1	P17	4.1	-0.5	-0.1	0.8
1	P18	3.9	-0.4	0.0	0.4
1	P19	4.0	-0.5	-0.3	-0.1
1	P20	4.2	-0.7	-0.5	0.7
1	P21	4.1	-0.4	-0.4	0.1
1	P22	3.9	-0.4	-0.1	0.5
1	P23	4.5	-0.7	-0.6	-0.5
1	P24	4.0	-0.5	-0.3	0.0
1	P25	4.0	-0.4	0.1	0.3
2	P1	3.7	-0.1	0.0	0.0
2	P2	4.1	-0.8	-0.7	-0.7
2	P3	4.4	-1.1	-1.1	-0.6
2	P4	4.3	-1.0	-1.0	-1.0
2	P5	3.8	-0.2	-0.2	0.0

Tracking Code: TC0817--1680

Part #: SSW-125-02-S-D/TSM-125-01-S-DV

Part description: SSW/TSM

2	P6	4.5	-1.0	-1.1	-0.6
2	P7	3.9	-0.5	-0.1	-0.1
2	P8	3.9	-0.4	-0.2	-0.1
2	P9	4.0	-0.3	0.0	0.1
2	P10	3.6	-0.1	0.1	0.2
2	P11	4.0	-0.4	-0.2	0.0
2	P12	3.9	-0.2	-0.2	0.1
2	P13	4.0	-0.3	-0.3	0.2
2	P14	3.9	-0.3	-0.3	0.0
2	P15	3.9	-0.4	-0.3	0.0
2	P16	3.6	0.0	0.2	0.7
2	P17	4.1	-0.4	-0.3	0.0
2	P18	3.8	-0.1	0.0	0.0
2	P19	3.5	0.4	0.9	0.6
2	P20	4.1	-0.6	-0.4	-0.1
2	P21	3.9	-0.4	-0.4	0.3
2	P22	3.6	-0.1	0.1	0.4
2	P23	4.0	-0.3	-0.1	0.3
2	P24	3.9	-0.4	0.3	1.4
2	P25	3.7	0.0	1.5	1.0
4	P1	4.7	-1.0	-0.4	-0.4
4	P2	4.2	-0.4	-0.5	-0.3
4	P3	4.2	-0.2	-0.2	0.0
4	P4	4.0	-0.3	-0.5	-0.3
4	P5	4.0	-0.2	-0.3	-0.2
4	P6	4.4	-0.6	-0.9	-0.8
4	P7	4.3	-0.6	0.1	0.4
4	P8	4.1	-0.7	-0.1	0.9
4	P9	4.5	-0.8	-0.6	-0.1
4	P10	4.1	-0.7	-0.3	0.5
4	P11	4.1	-0.5	-0.4	0.4
4	P12	4.8	-1.1	-0.8	1.0
4	P13	4.0	-0.5	-0.4	-0.2
4	P14	4.2	-0.4	0.1	0.4
4	P15	3.9	-0.1	-0.2	0.4
4	P16	4.1	-0.4	-0.5	-0.1
4	P17	3.9	-0.4	0.1	0.6
4	P18	3.9	-0.5	-0.3	0.0
4	P19	4.0	-0.4	-0.3	-0.2
4	P20	4.4	-0.5	-0.5	0.2
4	P21	4.0	-0.7	-0.6	-0.5
4	P22	5.2	-0.9	-1.1	-0.6
4	P23	4.0	-0.5	-0.5	0.0
4	P24	3.9	0.2	0.3	2.8
4	P25	3.9	-0.5	0.1	3.9
5	P1	4.3	-0.8	-0.7	-0.7
5	P2	4.0	-0.4	-0.4	-0.2
5	P3	3.9	-0.3	-0.3	0.0
5	P4	4.8	-1.0	-0.9	0.0
5	P5	4.6	-1.0	-1.1	-0.4

Tracking Code: TC0817--1680	Part #: SSW-125-02-S-D/TSM-125-01-S-DV
Part description: SSW/TSM	

5	P6	4.2	-0.6	-0.6	0.5
5	P7	4.0	-0.4	-0.4	-0.2
5	P8	3.7	-0.2	-0.2	-0.2
5	P9	4.0	-0.2	-0.2	-0.2
5	P10	4.1	-0.6	-0.6	-0.5
5	P11	4.4	-0.8	-0.8	-0.6
5	P12	4.6	-0.8	-0.9	-0.7
5	P13	3.9	-0.4	-0.4	-0.3
5	P14	4.1	-0.4	-0.5	-0.2
5	P15	4.0	-0.4	-0.4	0.2
5	P16	4.1	-0.5	-0.5	-0.3
5	P17	3.9	-0.4	-0.3	0.1
5	P18	3.7	-0.3	-0.1	0.1
5	P19	3.9	-0.3	-0.2	-0.2
5	P20	3.8	-0.3	-0.3	0.0
5	P21	3.8	0.0	-0.1	0.3
5	P22	4.1	-0.4	-0.3	0.3
5	P23	4.2	-0.5	-0.5	-0.4
5	P24	4.6	-0.9	-0.7	0.4
5	P25	3.7	-0.1	0.0	0.1

EQUIPMENT AND CALIBRATION SCHEDULES**Equipment #:** MO-06**Description:** Micro-Ohmmeter**Manufacturer:** Keithley**Model:** 580**Serial #:** 1110525**Accuracy:** See Manual

... Last Cal: 06/22/2007, Next Cal: 06/22/2008

Equipment #: MO-07**Description:** Multimeter / Data Acquisition System**Manufacturer:** Keithley**Model:** 2700**Serial #:** 1116559**Accuracy:** See Manual

... Last Cal: 6/22/2007, Next Cal: 6/22/2008

Equipment #: TCT-01**Description:** Test Stand**Manufacturer:** Chatillon**Model:** TCD-1000**Serial #:** 05 23 00 02**Accuracy:** Speed Accuracy: +/-5% of max speed; Displacement: +/-0.5% or +/-0.005, whichever is greater.

... Last Cal: 5/24/07, Next Cal: 5/31/08

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

... Last Cal: 06/22/07, Next Cal: 06/22/08

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

... Last Cal: 06/22/07, Next Cal: 06/22/08