APRIL 28, 2009

TEST REPORT #209107-2 REV.1.1

MIXED FLOWING GAS
TESTING

CONNECTOR PART NUMBERS

SEAF-50-05.0-X-10-1-A
SEAM-50-02.0-X-10-1-A

SAMTEC, INC.

APPROVED BY: DOMINIC ARPINO
PROJECT ENGINEERING MANAGER
CONTECH RESEARCH, INC.
ATTLEBORO, MA

ilac-MRA 1478 - 01 A2LA ACCREDITED Test Laboratory 1478 - 02

Contech Research
An Independent Test and Research Laboratory

REVISION HISTORY

DATE	REV. NO.	DESCRIPTION	ENG.
4/28/2009	1.0	Initial Issue	DA
4/29/2009	1.1	Added the connector part numbers to the cover page.	DA

CERTIFICATION

This is to certify that the evaluation described herein was designed and executed by personnel of Contech Research, Inc. It was performed with the concurrence of Samtec, Inc., of New Albany, IN who was the test sponsor.

All equipment and measuring instruments used during testing were calibrated and traceable to NIST according to ISO 10012-1 and ANSI/NCSL Z540-1 and MIL-STD-45662 as applicable.

All data, raw and summarized, analysis and conclusions presented herein are the property of the test sponsor. No copy of this report, except in full, shall be forwarded to any agency, customer, etc., without the written approval of the test sponsor and Contech Research.

Dominic Arpino
Project Engineering Manager
Contech Research, Inc.
Attleboro, MA

DA:cf

SCOPE

To perform Mixed Flowing Gas testing on SEAF/SEAM connector series as manufactured and submitted by the test sponsor Samtec, Inc.

APPLICABLE DOCUMENTS

1. Unless otherwise specified, the following documents of issue in effect at the time of testing performed form a part of this report to the extent as specified herein. The requirements of sub-tier specifications and/or standards apply only when specifically referenced in this report.

2. Standards: EIA Publication 364

TEST SAMPLES AND PREPARATION

1. The following test samples were submitted by the test sponsor, Samtec, Inc., for the evaluation to be performed by Contech Research, Inc.

TABLE 1

Connector Series	Samtec Reference	QTY
a) SEAF/SEAM (30Au)	TC0904-2208	8
b) SEAF/SEAM (50Au)	TC0903-2181	8

2. Test samples were supplied assembled and terminated to test boards by the test sponsor.

3. The test samples were tested in their ‘as received’ condition.

4. Spacers were assembled to each test sample to maintain stability between the mated pair.

5. Unless otherwise specified in the test procedures used, no further preparation was used.

TEST SELECTION

1. See Test Plan Flow Diagram, Figure #1, for test sequences used.

TEST SELECTION -continued

2. Test set ups and/or procedures which are standard or common are not detailed or documented herein provided they are certified as being performed in accordance with the applicable (industry or military) test methods, standards and/or drawings as specified in the detail specification.

SAMPLE CODING

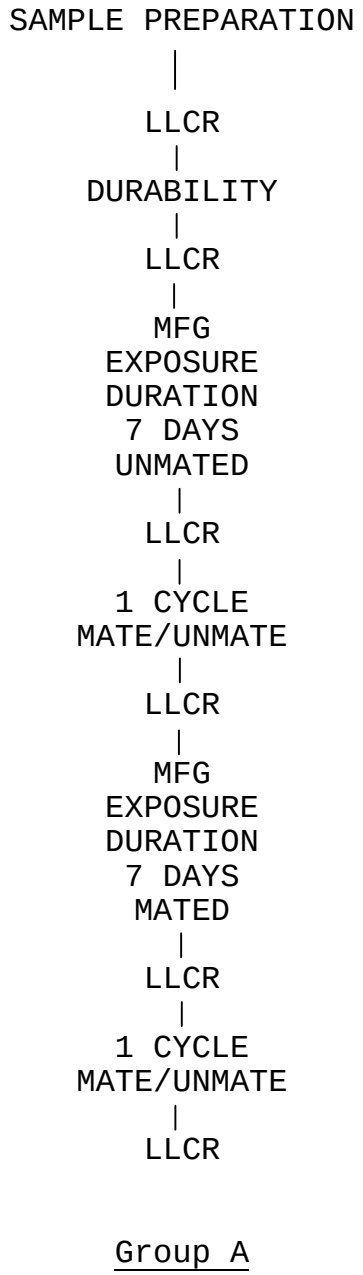
1. All samples were coded. Mated test samples remained with each other throughout the test group/sequences for which they were designated. Coding was performed in a manner which remained legible for the test duration.

2. The test samples were coded in the following manner:

Series	File ID#'s
SEAM/SEAF (30Au)	20910717
	20910718A
	20910719
	20910720
	20910722
	20910723
	20910760
	20910777
SEAM/SEAF (50Au)	20910725
	20910726
	20910727
	20910728
	20910729
	20910730A
	20910731
	20910732

FIGURE #1

TEST PLAN FLOW DIAGRAM



Group A

DATA SUMMARY

TEST	REQUIREMENT	RESULT
GROUP A		
LLCR		
SEAF/SEAM (30Au)	RECORD	8.3 mΩ MAX.
SEAF/SEAM (50Au)	RECORD	8.9 mΩ MAX.
DURABILITY		
SEAF/SEAM (30Au)	NO DAMAGE	PASSED
SEAF/SEAM (50Au)	NO DAMAGE	PASSED
LLCR		
SEAF/SEAM (30Au)	+10.0 mΩ MAX.CHG.	+1.1 mΩ MAX.CHG.
SEAF/SEAM (50Au)	+10.0 mΩ MAX.CHG.	+2.9 mΩ MAX.CHG.
MFG –UNMATED		
SEAF/SEAM (30Au)	NO DAMAGE	CORROSION
SEAF/SEAM (50Au)	NO DAMAGE	CORROSION
LLCR		
SEAF/SEAM (30Au)	+10.0 mΩ MAX.CHG.	+4.4 mΩ MAX.CHG.
SEAF/SEAM (50Au)	+10.0 mΩ MAX.CHG.	+1.2 mΩ MAX.CHG.
1 CYCLE		
SEAF/SEAM (30Au)	NO DAMAGE	CORROSION
SEAF/SEAM (50Au)	NO DAMAGE	CORROSION
LLCR		
SEAF/SEAM (30Au)	+10.0 mΩ MAX.CHG.	+2.9 mΩ MAX.CHG.
SEAF/SEAM (50Au)	+10.0 mΩ MAX.CHG.	+1.9 mΩ MAX.CHG.
MFG – MATED		
SEAF/SEAM (30Au)	NO DAMAGE	CORROSION
SEAF/SEAM (50Au)	NO DAMAGE	CORROSION
LLCR		
SEAF/SEAM (30Au)	+10.0 mΩ MAX.CHG.	+3.2 mΩ MAX.CHG.
SEAF/SEAM (50Au)	+10.0 mΩ MAX.CHG.	+0.9 mΩ MAX.CHG.

DATA SUMMARY -continued

TEST	REQUIREMENT	RESULT
GROUP A -continued		
1 CYCLE		
SEAF/SEAM (30Au)	NO DAMAGE	CORROSION
SEAF/SEAM (50Au)	NO DAMAGE	CORROSION
LLCR		
SEAF/SEAM (30Au)	+10.0 mΩ MAX.CHG.	+7.3 mΩ MAX.CHG.
SEAF/SEAM (50Au)	+10.0 mΩ MAX.CHG..	+4.9 mΩ MAX.CHG.

EQUIPMENT LIST

ID#	Next Cal	Last Cal	Equipment Name	Manufacturer	Model #	Serial #	Accuracy	Freq.Cal
102	2/27/2010	2/27/2009	Data Acquisition Unit	Hewlett Packard	3421A	2338A02027	±. 5 %Of Indicated	12mon
244	9/22/2009	9/22/2008	Micro-Ohm Meter	Keithley Instr.	580-1	467496	See Cal Cert	12mon
270			MFG Chamber	Contech Research	5 Cu Ft	N/A	N/A	Ea Test
297	11/13/2009	11/13/2008	Micro-Ohm Meter	Keithley Instr.	580	485414	See Cal Cert	12mon
323			Computer	Legatech	286-12	N/A	N/A	N/A
436			Gas Regulator	Liquid Carboinc Co.	702-S-3	392838	N/A	N/A
443			Gas Regulator Valve	Liquid Carbonic Co.	DRK-2-48	40197	See Manual	N/A
488			X-Y Table	N.E.Affiliated Tech.	N/A	932021	N/A	N/A
510			Regulator	Liquid Carbonic	SGS 160C	M2 42366	N/A	N/A
525			Gas Regulator	Superior Co.	5113A	350218	See Owners Manual	N/A
543	12/3/2009	12/3/2008	Analytical Balance	Ohaus Co.	AP250D	MO9198	± .4mg	12mon
1027			Computer	ARC Co.	Pent.133	026871	N/A	N/A
1110			Elect.Liquid Level Control	Cole Parmer	7187	15986	N/A	N/A
1116			Computer	ARC. Co.	P111-450		N/A	N/A
1296			MFG Control Panel	Contech Research	N/A	N/A	N/A	N/A
1381			Air Dryer	Balston	75-20	A03391	See Manual	N/A
1382			Force Gage Stand	Chatilon	20025	N/A	N/A	N/A
1507	4/6/2010	4/6/2009	Temp Humid Transmitter	Vaisala	HMT333	C1110019	See Cal Cert	12mon
1571			Chlorine Analyzer	IMS CO.	Air Sentury	1265AN	See Manual	EA Test
1595			H2S Analyzer	Teledyne Analyzer	101-E	1231	See Manual	Each Test
1599			NO2 Analyzer	Teledyne Analyzer	200E	289	See cert	12mon

TEST RESULTS

GROUP A

PROJECT NO.: 209107-2 SPECIFICATION: EIA-364

PART NO.: See page 4 PART DESCRIPTION: See page 4

SAMPLE SIZE: 16 connectors TECHNICIAN: DAM, AJP

START DATE: 3/6/09 COMPLETE DATE: 3/10/09

ROOM AMBIENT: 22°C RELATIVE HUMIDITY: 25%

EQUIPMENT ID#: 244, 297, 323, 1116

LOW LEVEL CIRCUIT RESISTANCE (LLCR)

PURPOSE:

1. To evaluate contact resistance characteristics of the contact systems under conditions where applied voltages and currents do not alter the physical contact interface and will detect oxides and films which degrade electrical stability. It is also sensitive to and may detect the presence of fretting corrosion induced by mechanical or thermal environments as well as any significant loss of contact pressure.

2. This attribute was monitored after each preconditioning and/or test exposure in order to determine said stability of the contact systems as they progress through the applicable test sequences.

3. The electrical stability of the system is determined by comparing the initial resistance value to that observed after a given test exposure. The difference is the change in resistance occurring whose magnitude establishes the stability of the interface being evaluated.

PROCEDURE:

1. The test was performed in accordance with EIA 364, Test Procedure 23 with the following conditions.

2. Test Conditions:

   a) Test Current : 100 milliamps maximum
   b) Open Circuit Voltage : 20 millivolts
   c) No. of Positions Tested : 25 per test sample

PROCEDURE: -continued

3. The points of application are shown in Figure #2.

REQUIREMENTS:

Low level circuit resistance shall be measured and recorded.

RESULTS:

1. The following is a summary of the data observed:

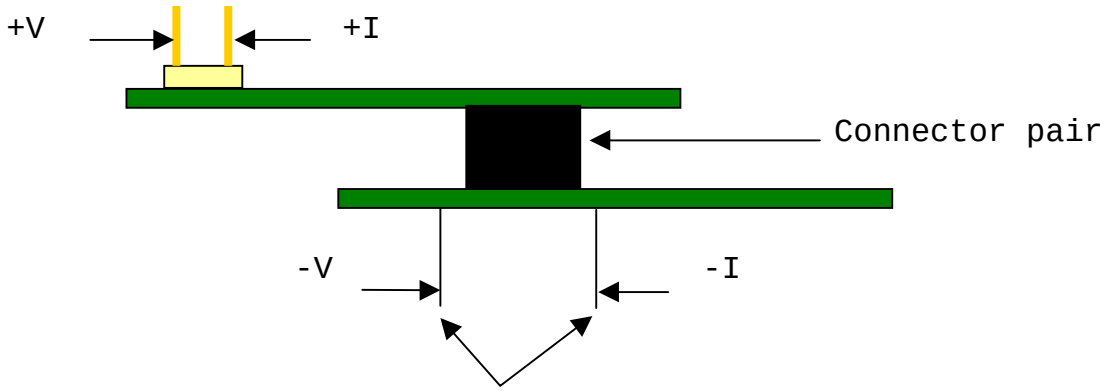
	LOW LEVEL CIRCUIT RESISTANCE (milliohms)		
Sample ID#	Avg.	Max.	Min.
GP 1 SEAF/SEAM-(30Au)			
2-17	5.3	5.9	4.9
2-18A	5.9	6.7	4.9
2-19	5.5	6.2	4.8
2-20	5.7	6.4	4.8
2-22	5.5	6.1	4.9
2-23	5.6	7.0	4.8
2-60	5.7	6.4	5.1
2-77	6.2	8.3	5.0

	LOW LEVEL CIRCUIT RESISTANCE (milliohms)		
Sample ID#	Avg.	Max.	Min.
GP 1 SEAF/SEAM -(50Au)			
2-25	6.6	8.9	5.1
2-26	5.5	6.4	5.0
2-27	5.8	7.6	4.9
2-28	5.6	7.3	5.0
2-29	5.7	7.5	4.6
2-30A	5.4	6.1	4.8
2-31	6.0	8.0	5.2
2-32	6.2	7.9	4.9

2. See the attached data files for individual data points.

FIGURE #2

TYPICAL LLCR SET UP



Buss wires are soldered to the 2 PTH's

PROJECT NO.: 209107-2 SPECIFICATION: EIA-364

PART NO.: See page 4 PART DESCRIPTION: See page 4

SAMPLE SIZE: 16 connectors TECHNICIAN: DAM

START DATE: 3/10/09 COMPLETE DATE: 3/11/09

ROOM AMBIENT: 22°C RELATIVE HUMIDITY: 25%

EQUIPMENT ID#: 488, 1382

DURABILITY

PURPOSE:

1. This is a preconditioning sequence which is used to induce the type of wear on the contacting surfaces which may occur under normal service conditions. The connectors are mated and unmated a predetermined number of cycles. Upon completion, the units being evaluated are exposed to the environments as specified to assess any impact on electrical stability resulting from wear or other wear dependent phenomenon.

2. This type or preconditioning sequence is also used to mechanically stress the connector system as would normally occur in actual service. This sequence in conjunction with other tests is used to determine if a significant loss of contact pressure occurs from said stresses which in turn, may result in an unstable electrical condition to exist.

PROCEDURE:

1. The test was performed in accordance with EIA 364, Test Procedure 09.

2. Test Conditions:

   a) No. of Cycles : 25X
   b) Rate : 1.0 inch per minute

3. The samples were cycled using an X Y Table and a drill press stand.

-continued on next page.

PROCEDURE: -continued

4. All subsequent variable testing was performed in accordance with the procedures previously indicated.

REQUIREMENTS:

1. There shall be no evidence of physical damage to the test samples so tested.

2. The change in low level circuit resistance shall not exceed +10.0 milliohms.

RESULTS:

1. The following is a summary of the data observed:

	CHANGE IN LOW LEVEL CIRCUIT RESISTANCE (milliohms)	
Sample ID#	Avg. Change	Max. Change
GP 1 SEAF/SEAM -(30Au)		
2-17	+0.2	+0.7
2-18A	-0.1	+0.9
2-19	-0.1	+0.7
2-20	+0.0	+0.8
2-22	+0.2	+1.1
2-23	-0.1	+0.5
2-60	-0.4	-0.1
2-77	-0.7	+0.6

2. See the attached data files for individual data points.

-continued on next page.

RESULTS: -continued

3. The following is a summary of the data observed:

Sample ID#	CHANGE IN LOW LEVEL CIRCUIT RESISTANCE (milliohms) Avg. Change	Max. Change
GP 1 SEAF/SEAM -(50Au)		
2-25	-0.8	+2.9
2-26	-0.4	+0.3
2-27	-0.5	+0.3
2-28	-0.6	+0.1
2-29	-0.6	+0.4
2-30A	+0.3	+1.5
2-31	-0.8	+0.0
2-32	-0.7	+0.4

4. See the attached data files for individual data points.

PROJECT NO.: 209107-2	SPECIFICATION: EIA-364-65
PART NO.: See page 4	PART DESCRIPTION: See page 4
SAMPLE SIZE: 16 connectors	TECHNICIAN: WJC
START DATE: 3/13/09	COMPLETE DATE: 3/30/09
ROOM AMBIENT: 21°C	RELATIVE HUMIDITY: 48%
EQUIPMENT ID#: 102, 270, 436, 443, 510, 525, 543, 1027, 1110 1296, 1381, 1507, 1571, 1595, 1599	

MIXED FLOWING GAS

PURPOSE:

1. To determine the impact on electrical stability of contact interfaces when the test samples are exposed to a mixed flowing gas environment. Said environment is based on field data simulating typical, severe, non-benign environments. Said exposure is indicative of expected behavior in the field.

2. Mixed flowing gas tests (MFG) are environmental test procedures whose primary purpose is to evaluate product performance under simulated storage or operating (field) conditions. For parts involving plated contact surfaces, such tests are also used to measure the effect of plating degradation (due to the environment) on the electrical and durability properties of a contact or connector system. The specific test conditions are usually chosen so as to simulate, in the test laboratory, the effects of certain representative field environments or environmental severity levels on standard metallic surfaces.

PROCEDURE:

1. The test environment was performed in accordance with EIA 364, Test Procedure 65 with the following conditions.

-continued on next page.

PROCEDURE: -continued

2. Environmental Conditions:

a) Temperature	:	30°C ± 1°C
b) Relative Humidity	:	70% ± 2%
c) $C1_2$	:	10 ± 3 ppb
d) NO_2	:	200 ± 50 ppb
e) H_2S	:	10 ± 5 ppb
f) SO_2	:	100 ± 20 ppb
g) Exposure Time	:	14 days
h) Mating Conditions	:	First 7 days -unmated Second 7 days -mated

3. The test chamber was allowed to stabilize at the specified conditions indicated.

4. After stabilization, the test samples and control coupons were placed in the chamber such that they were no closer than 2.0" from each other and/or the chamber walls.

5. The test samples were handled in a manner so as not to disturb the contact interface.

6. After placement of the test samples in the chamber, it was allowed to re-stabilize and adjusted as required to maintain the specified concentrations and conditions.

7. The test chamber was monitored periodically during the exposure period to assure the environmental conditions as specified were maintained.

8. All subsequent variable testing was performed in accordance with the procedures previously indicated.

REQUIREMENTS:

1. There shall be no evidence of damage or corrosion to the test samples as exposed which will cause mechanical or electrical malfunction of the said samples.

2. The change in low level circuit resistance shall not exceed +10.0 milliohms.

RESULTS: See Next Page

RESULTS:

1. Some evidence of corrosion was observed on the contact interface.

2. The following is a summary of the data observed following the 7 days unmated portion of the exposure:

Sample ID#	MAXIMUM CHANGE IN LOW LEVEL CIRCUIT RESISTANCE (milliohms) Avg. Change @ 7 Days	Max. Change @ 7 Days	Avg. Change 1 Cycle	Max. Change 1 Cycle
GP 1 SEAF/SEAM -(30Au)				
2-17	+0.3	+1.4	+0.6	+2.3
2-18A	+0.5	+4.4	+0.3	+2.3
2-19	+0.5	+2.1	+0.4	+1.3
2-20	+0.2	+1.1	+0.3	+1.3
2-22	+0.6	+2.0	+0.8	+2.9
2-23	+0.2	+1.6	+0.0	+1.0
2-60	+0.0	+1.2	+0.4	+1.5
2-77	-0.8	+0.1	-0.9	+0.1

Sample ID#	MAXIMUM CHANGE IN LOW LEVEL CIRCUIT RESISTANCE (milliohms) Avg. Change @ 7 Days	Max. Change @ 7 Days	Avg. Change 1 Cycle	Max. Change 1 Cycle
GP 1 SEAF/SEAM -(50Au)				
2-25	-0.7	+1.2	-0.9	+1.9
2-26	-0.3	+0.4	-0.4	+0.0
2-27	-0.2	+0.8	-0.5	+0.8
2-28	-0.5	+0.4	-0.5	+0.3
2-29	-0.3	+0.8	-0.3	+1.1
2-30A	-0.10	+0.6	-0.1	+0.4
2-31	-0.7	+0.5	-0.8	+0.0
2-32	-0.9	+0.6	-0.9	+0.5

-continued on next page.

RESULTS: -continued

3. The following is a summary of the data observed following the 14 days portion of the exposure:

Sample ID#	MAXIMUM CHANGE IN LOW LEVEL CIRCUIT RESISTANCE (milliohms) Avg. Change @ 14 Days	Max. Change @ 14 Days	Avg. Change 1 Cycle	Max. Change 1 Cycle
GP 1 SEAF/SEAM -(30Au)				
2-17	+0.3	+1.6	+0.7	+2.2
2-18A	+0.4	+3.2	+0.4	+1.7
2-19	+0.2	+1.3	+1.1	+7.3
2-20	+0.3	+1.7	+0.4	+2.3
2-22	+0.4	+1.6	+0.6	+1.7
2-23	-0.2	+0.6	+0.0	+2.7
2-60	+0.1	+1.7	+0.2	+2.5
2-77	-0.9	+0.1	+0.2	+2.6

Sample ID#	MAXIMUM CHANGE IN LOW LEVEL CIRCUIT RESISTANCE (Milliohms) Avg. Change @ 14 Days	Max. Change @ 14 Days	Avg. Change 1 Cycle	Max. Change 1 Cycle
GP 1 SEAF/SEAM -(50Au)				
2-25	-1.3	+0.2	-1.1	+0.7
2-26	-0.5	+0.2	-0.3	+0.3
2-27	-0.8	+0.0	-0.3	+1.3
2-28	-0.5	+0.6	-0.2	+4.9
2-29	-0.5	+0.8	-0.1	+1.5
2-30A	-0.2	+0.3	+0.1	+0.8
2-31	+0.6	+0.0	+0.6	+0.1
2-32	+0.8	+0.9	+0.9	+1.0

4. See the attached data files for individual data points.

-continued on next page.

RESULTS: -continued

5. Five copper coupons were placed in the chamber. Upon removal said coupons were evaluated via weight gain technique with the following results:

	WEIGHT GAIN (µgm/cm^2/Day)		
Coupon No.	Unmated	Mated	Mated
1	12+	15	14+
2	13	13+	14
3	14	14	12+
4	13+	14	13
5	14+	13	13+

Requirement: 12 to 16 µgm/cm^2/Day

Note: Third column of coupon data represents the coupon data for the additional samples tested.

LLCR DATA FILES

FILE NUMBERS

30 Au Group

20910717
20910718A
20910719
20910720
20910722
20910723
20910760
20910777

		Low Level Circuit Resistance - Delta Values				
Project:	209107				Spec: EIA 364 TP 23	
Customer:	Samtec				Subgroup: 2 SampleID# 17	
Product:	SEAF/SEAM				File No:	20910717
Description:	30AU				Tech:	DAM
Open circuit voltage:		20mv			Current:	100mv
Units: milliohms						
Temp ºC	21	22	21	21	21	22
R.H. %	30	30	25	25	30	27
Date:	09Mar09	11Mar09	20Mar09	20Mar09	30Mar09	31Mar09
Pos. ID	Initial	25X	7 Days	1X	7 Days	1X
			Unmated		mated	
1	5.1	0.4	0.5	0.2	0.0	1.3
2	5.2	-0.2	-0.2	0.2	-0.1	0.2
3	5.3	0.4	0.1	0.5	0.3	0.3
4	5.7	-0.5	-0.5	0.1	-0.2	-0.6
5	5.5	0.1	0.3	0.7	0.2	0.7
6	4.9	0.1	0.2	0.1	0.1	0.6
7	5.0	0.2	0.1	0.0	-0.1	0.4
8	5.9	0.7	0.6	0.7	0.4	1.7
9	5.2	0.0	-0.3	-0.1	-0.2	0.1
10	5.4	0.4	0.1	0.8	0.4	0.0
11	5.4	0.7	0.3	0.2	0.0	0.5
12	5.0	0.1	0.1	1.8	1.0	0.2
13	5.0	0.3	0.1	0.9	0.5	1.3
14	5.0	0.5	0.5	2.3	1.6	0.7
15	5.2	-0.1	0.4	1.0	0.4	0.5
16	5.0	-0.1	0.6	0.5	0.1	0.9
17	5.4	0.1	0.5	1.6	0.8	0.5
18	5.2	0.1	0.2	0.4	0.1	1.2
19	5.2	-0.2	0.1	0.5	-0.1	0.0
20	5.2	0.6	1.4	1.0	0.8	1.6
21	5.2	0.4	0.6	0.8	0.5	0.9
22	5.3	0.0	0.3	0.0	0.0	2.2
23	5.8	-0.3	1.3	-0.1	-0.4	0.0
24	5.6	0.7	0.3	0.7	0.4	1.9
25	5.7	0.0	0.0	0.2	0.2	-0.2
MAX	5.9	0.7	1.4	2.3	1.6	2.2
MIN	4.9	-0.5	-0.5	-0.1	-0.4	-0.6
AVG	5.3	0.2	0.3	0.6	0.3	0.7
STD	0.3	0.3	0.4	0.6	0.4	0.7
Open	0	0	0	0	0	0
Tech	DAM	AJP	MHB	MHB	DAM	DAM
Equip ID	323	244	1276	1276	323	323
	297	1116	207	207	297	297

		Low Level Circuit Resistance - Delta Values				
Project:	209107				Spec: EIA 364 TP 23	
Customer:	Samtec				Subgroup: 2 SampleID# 18A	
Product:	SEAF/SEAM				File No:	20910718A
Description:	30AU				Tech:	DAM
Open circuit voltage:		20mv			Current:	100mv
Units: milliohms						
Temp ºC	21	22	21	22	22	22
R.H. %	30	26	25	30	26	26
Date:	09Mar09	12Mar09	20Mar09	06Apr09	13Apr09	13Apr09
Pos. ID	Initial	25X	7 Days	1X	7 Days	1X
			Unmated		Mated	
1	4.9	0.3	0.4	0.5	0.4	0.4
2	6.3	-0.1	0.1	0.4	0.7	-0.4
3	5.3	0.4	0.5	0.1	0.5	1.1
4	6.2	-0.6	-0.8	-1.1	-0.4	-0.8
5	5.6	0.7	0.3	-0.1	0.1	0.7
6	5.5	-0.1	3.7	2.3	1.2	1.0
7	6.2	-0.4	-0.1	2.0	1.7	0.4
8	5.1	-0.1	0.0	-0.1	0.0	0.9
9	6.6	-1.0	-0.1	0.8	0.4	1.2
10	5.6	0.0	1.0	0.5	0.5	1.7
11	5.4	0.1	0.2	0.9	0.8	0.6
12	5.7	0.2	1.1	0.6	0.4	0.3
13	5.9	-0.7	-0.6	0.0	0.2	0.4
14	6.3	-0.8	-0.8	-0.7	-0.4	0.2
15	5.6	0.6	2.9	0.5	0.4	0.7
16	5.6	0.9	1.0	1.2	3.2	1.5
17	5.9	0.0	-0.1	0.0	-0.1	0.0
18	6.7	0.1	4.4	-0.2	-0.1	0.0
19	5.4	0.1	1.0	0.6	0.1	0.4
20	6.4	-0.9	-0.2	-0.3	-0.2	-0.2
21	6.0	0.2	1.2	0.2	0.1	0.2
22	6.4	-0.3	-0.6	-0.3	0.2	0.9
23	5.7	-0.7	-0.3	0.4	0.8	0.6
24	6.4	-0.8	-1.2	-0.8	-0.2	-1.0
25	6.2	-1.0	-0.4	-0.5	0.0	0.4
MAX	6.7	0.9	4.4	2.3	3.2	1.7
MIN	4.9	-1.0	-1.2	-1.1	-0.4	-1.0
AVG	5.9	-0.1	0.5	0.3	0.4	0.4
STD	0.5	0.5	1.4	0.8	0.8	0.6
Open	0	0	0	0	0	0
Tech	DAM	AJP	MHB	DAM	DAM	DAM
Equip ID	323	244	1276	323	323	323
	297	1116	207	297	297	297

		Low Level Circuit Resistance - Delta Values				
Project:	209107				Spec: EIA 364 TP 23	
Customer:	Samtec				Subgroup: 2 SampleID# 19	
Product:	SEAF/SEAM				File No:	20910719
Description:	30AU				Tech:	DAM
Open circuit voltage:		20mv			Current:	100mv
Units: milliohms						
Temp ºC	21	22	21	21	21	22
R.H. %	30	30	25	25	30	27
Date:	09Mar09	11Mar09	20Mar09	20Mar09	30Mar09	31Mar09
Pos. ID	Initial	25X	7 Days	1X	7 Days	1X
			Unmated		mated	
1	4.8	0.5	1.3	1.3	1.3	7.3
2	5.5	-0.1	0.5	0.4	0.5	1.2
3	5.3	-0.2	0.3	0.3	0.2	0.9
4	5.8	-0.4	1.0	0.3	0.4	1.1
5	5.1	-0.1	1.3	0.7	0.5	0.4
6	5.0	0.0	0.1	0.4	0.2	0.3
7	6.2	-0.7	-0.3	-0.1	-0.3	0.8
8	5.1	-0.1	-0.1	0.1	0.0	0.8
9	4.9	0.0	0.9	0.5	0.3	0.2
10	5.4	-0.2	0.8	0.3	0.3	0.8
11	5.6	0.2	1.5	1.0	0.8	0.8
12	5.3	-0.4	0.4	0.4	0.2	0.5
13	5.3	0.1	0.3	0.2	0.1	0.4
14	5.5	-0.7	-0.1	-0.2	-0.4	0.0
15	6.0	-0.6	0.3	0.4	0.0	1.0
16	5.8	0.5	2.1	1.1	0.6	1.8
17	5.6	-0.4	-0.2	0.2	-0.3	0.5
18	5.2	0.0	0.2	0.1	0.1	0.4
19	5.8	-0.3	0.3	0.4	-0.2	1.2
20	5.9	-0.4	-0.3	-0.1	-0.2	0.9
21	5.7	-0.1	-0.2	0.5	0.0	1.2
22	5.8	0.3	0.3	0.8	0.3	2.6
23	5.9	0.7	2.1	0.8	0.6	1.7
24	6.0	-0.3	0.8	0.3	-0.2	0.7
25	6.1	-0.2	-0.1	-0.1	-0.3	0.0
MAX	6.2	0.7	2.1	1.3	1.3	7.3
MIN	4.8	-0.7	-0.3	-0.2	-0.4	0.0
AVG	5.5	-0.1	0.5	0.4	0.2	1.1
STD	0.4	0.4	0.7	0.4	0.4	1.4
Open	0	0	0	0	0	0
Tech	DAM	DAM	MHB	MHB	DAM	DAM
Equip ID	323	323	1276	1276	323	323
	297	297	207	207	297	297

		Low Level Circuit Resistance - Delta Values				
Project:	209107				Spec: EIA 364 TP 23	
Customer:	Samtec				Subgroup: 2 SampleID# 20	
Product:	SEAF/SEAM				File No:	20910720
Description:	30AU				Tech:	DAM
Open circuit voltage:		20mv			Current:	100mv
Units: milliohms						
Temp ºC	21	22	21	21	21	22
R.H. %	30	30	25	25	30	27
Date:	09Mar09	11Mar09	20Mar09	20Mar09	30Mar09	31Mar09
Pos. ID	Initial	25X	7 Days	1X	7 Days	1X
			Unmated		mated	
1	5.0	0.2	0.1	0.6	0.6	0.7
2	6.4	0.8	0.7	0.7	0.5	1.5
3	5.2	0.1	0.0	0.0	-0.1	0.5
4	5.9	-0.7	-0.5	0.2	-0.7	-0.7
5	5.8	0.3	-0.5	0.2	0.1	0.4
6	6.0	-0.5	-0.6	-0.6	-0.8	1.0
7	5.9	0.1	0.1	0.2	0.2	0.3
8	5.4	0.0	0.0	-0.1	-0.3	0.3
9	4.8	0.3	0.2	0.2	0.0	0.3
10	6.1	0.0	-0.8	1.3	0.3	-0.7
11	5.8	0.5	1.1	0.7	0.2	0.5
12	5.9	-0.2	-0.7	0.0	-0.5	-0.9
13	5.2	-0.1	0.1	0.1	-0.2	0.1
14	5.6	-0.4	-0.3	0.6	0.2	0.0
15	5.9	-0.5	-0.1	0.4	0.0	-0.6
16	5.8	-0.2	0.6	0.3	0.6	0.7
17	5.2	-0.2	-0.2	-0.2	0.0	-0.3
18	6.0	-0.1	0.6	0.9	1.7	0.1
19	5.3	0.5	0.6	0.7	0.7	2.3
20	5.7	0.1	0.9	0.9	0.9	1.0
21	6.0	0.1	1.0	1.0	1.1	0.1
22	6.1	0.1	-0.2	-0.2	0.5	-0.1
23	6.1	0.3	0.8	0.4	1.3	1.7
24	6.1	0.0	0.8	0.2	0.2	2.2
25	6.2	0.0	0.3	0.2	0.6	0.7
MAX	6.4	0.8	1.1	1.3	1.7	2.3
MIN	4.8	-0.7	-0.8	-0.6	-0.8	-0.9
AVG	5.7	0.0	0.2	0.3	0.3	0.4
STD	0.4	0.3	0.6	0.4	0.6	0.8
Open	0	0	0	0	0	0
Tech	DAM	DAM	MHB	AJP	DAM	DAM
Equip ID	323	323	1276	244	323	323
	297	297	207	1116	297	297

		Low Level Circuit Resistance - Delta Values				
Project:	209107				Spec: EIA 364 TP 23	
Customer:	Samtec				Subgroup: 2 SampleID# 22	
Product:	SEAF/SEAM				File No:	20910722
Description:	30AU				Tech:	DAM
Open circuit voltage:		20mv			Current:	100mv
Units: milliohms						
Temp ºC	21	22	21	21	21	22
R.H. %	30	30	25	25	30	27
Date:	09Mar09	11Mar09	20Mar09	20Mar09	30Mar09	31Mar09
Pos. ID	Initial	25X	7 Days	1X	7 Days	1X
			Unmated		mated	
1	5.4	-0.1	2.0	0.8	0.4	1.1
2	5.6	0.0	0.9	1.7	0.1	0.3
3	5.7	0.3	0.4	1.2	0.5	0.5
4	5.1	-0.1	-0.2	0.0	-0.2	-0.2
5	5.3	0.3	1.3	2.3	1.2	0.8
6	5.3	-0.2	-0.1	0.4	0.2	0.3
7	5.7	-0.1	1.2	0.8	0.2	0.0
8	5.7	0.3	1.0	0.6	0.0	0.2
9	5.8	0.3	0.1	0.2	-0.2	-0.1
10	6.0	1.1	1.7	1.1	0.3	1.0
11	5.8	0.2	0.4	0.4	0.2	0.7
12	5.5	0.3	-0.2	0.9	0.4	0.2
13	4.9	0.0	0.3	0.1	0.0	0.3
14	5.2	0.1	0.6	0.9	0.8	0.7
15	5.0	0.4	0.3	0.5	0.4	0.4
16	5.2	0.2	1.1	0.5	0.4	1.7
17	4.9	0.6	0.8	2.9	1.6	0.8
18	5.7	0.1	0.1	0.2	0.2	0.4
19	5.1	0.6	0.7	1.7	1.0	0.6
20	6.1	-0.1	-0.5	-0.3	0.3	0.4
21	5.5	0.6	1.8	1.0	1.1	0.9
22	5.3	0.0	0.0	0.0	0.1	1.5
23	5.9	1.0	1.6	1.7	0.7	0.7
24	5.3	-0.2	-0.3	0.6	0.1	0.0
25	5.5	0.0	0.7	0.1	0.1	1.5
MAX	6.1	1.1	2.0	2.9	1.6	1.7
MIN	4.9	-0.2	-0.5	-0.3	-0.2	-0.2
AVG	5.5	0.2	0.6	0.8	0.4	0.6
STD	0.3	0.3	0.7	0.8	0.4	0.5
Open	0	0	0	0	0	0
Tech	DAM	AJP	MHB	AJP	DAM	DAM
Equip ID	323	244	1276	244	323	323
	297	1116	207	1116	297	297

		Low Level Circuit Resistance - Delta Values				
Project:	209107				Spec: EIA 364 TP 23	
Customer:	Samtec				Subgroup: 2 SampleID# 23	
Product:	SEAF/SEAM				File No:	20910723
Description:	30Au				Tech:	DAM
Open circuit voltage:		20mv			Current:	100mv
Units: milliohms						
Temp ºC	22	22	21	22	22	20
R.H. %	30	26	25	30	26	27
Date:	11Mar09	12Mar09	20Mar09	06Apr09	13Apr09	14Apr09
Pos. ID	Initial	25X	7 Days	1X	7 Days	1X
			Unmated		mated	
1	4.8	0.3	0.8	1.0	0.6	2.7
2	6.1	-0.3	1.6	0.4	0.2	0.2
3	5.8	0.1	-0.5	-0.6	-0.8	-0.5
4	7.0	-1.5	-0.5	-1.1	-1.4	-0.9
5	5.8	0.2	0.8	0.4	0.1	0.2
6	5.6	-0.7	-0.7	-0.7	-0.7	-0.6
7	5.4	0.1	-0.1	-0.2	-0.2	-0.3
8	5.7	-0.2	0.0	-0.6	-0.8	-0.5
9	5.2	-0.1	0.1	0.4	0.0	-0.1
10	6.3	-1.1	-0.6	-0.8	-1.0	-0.6
11	5.2	-0.4	1.0	0.6	0.0	0.1
12	5.9	0.0	0.4	-0.6	-0.8	-0.7
13	5.5	-0.3	0.8	0.9	0.4	0.0
14	5.4	0.1	0.1	0.6	0.6	0.1
15	5.5	-0.1	-0.2	-0.1	-0.4	0.4
16	5.2	-0.2	0.0	-0.1	-0.2	-0.3
17	5.4	0.5	0.6	-0.2	-0.1	1.8
18	5.8	0.4	0.5	-0.2	-0.2	-0.1
19	5.2	0.2	0.0	-0.1	0.3	-0.1
20	5.9	-0.5	0.0	-0.2	0.0	-0.2
21	5.6	0.3	0.4	0.7	0.4	0.2
22	5.3	0.1	-0.1	0.0	0.0	0.1
23	5.4	-0.2	0.1	0.1	0.1	-0.2
24	5.7	0.1	-0.1	-0.4	-0.4	-0.4
25	5.5	-0.1	0.8	0.2	0.3	1.0
MAX	7.0	0.5	1.6	1.0	0.6	2.7
MIN	4.8	-1.5	-0.7	-1.1	-1.4	-0.9
AVG	5.6	-0.1	0.2	0.0	-0.2	0.0
STD	0.4	0.5	0.5	0.6	0.5	0.8
Open	0	0	0	0	0	0
Tech	AJP	AJP	MHB	DAM	DAM	DAM
Equip ID	244	244	1276	323	323	323
	1116	1116	207	297	297	297

		Low Level Circuit Resistance - Delta Values				
Project:	209107				Spec: EIA 364 TP 23	
Customer:	Samtec				Subgroup: 2	SampleID# 60
Product:	SEAF/SEAM				File No:	20910760
Description:	30AU				Tech:	DAM
Open circuit voltage:		20mv			Current:	100mv
Units: milliohms						
Temp ºC	21	22	21	22	22	22
R.H. %	30	30	25	30	26	26
Date:	09Mar09	11Mar09	20Mar09	06Apr09	13Apr09	13Apr09
Pos. ID	Initial	25X	7 Days	1X	7 Days	1X
			Unmated			
1	6.0	-0.4	-0.4	-0.1	-0.2	-0.4
2	5.4	-0.3	-0.3	0.3	0.1	-0.1
3	5.7	-0.5	-0.4	0.3	-0.1	0.1
4	5.5	-0.5	-0.5	0.1	-0.2	0.0
5	6.1	-0.3	-0.7	1.5	0.1	-0.6
6	5.1	-0.2	0.0	0.7	0.5	2.3
7	5.4	-0.4	-0.3	0.2	0.0	-0.2
8	5.4	-0.2	-0.3	0.0	-0.5	-0.1
9	5.5	-0.3	-0.2	0.6	-0.4	-0.2
10	6.2	-1.0	-0.8	0.5	-0.7	2.5
11	6.0	-0.8	-0.7	1.5	0.4	-0.5
12	5.2	-0.4	0.3	0.6	-0.3	0.4
13	6.4	-0.8	0.8	1.5	0.2	1.3
14	5.5	-0.9	-0.1	0.1	-0.4	-0.1
15	5.4	-0.2	0.6	0.4	0.1	0.6
16	5.7	-0.2	-0.3	0.4	-0.2	-0.2
17	5.7	-0.2	1.0	1.5	0.3	-0.2
18	5.9	-0.5	1.2	0.7	1.7	0.5
19	5.2	-0.2	-0.1	0.0	0.0	-0.1
20	5.3	-0.2	-0.2	-0.1	0.3	0.0
21	5.6	-0.2	0.1	0.0	0.1	-0.2
22	5.8	-0.5	-0.1	-0.1	0.9	-0.3
23	5.7	-0.3	0.2	0.3	0.7	0.0
24	6.3	-0.1	0.4	-0.3	0.0	0.3
25	6.2	-0.3	-0.2	-0.2	-0.1	0.1
MAX	6.4	-0.1	1.2	1.5	1.7	2.5
MIN	5.1	-1.0	-0.8	-0.3	-0.7	-0.6
AVG	5.7	-0.4	0.0	0.4	0.1	0.2
STD	0.4	0.2	0.5	0.6	0.5	0.8
Open	0	0	0	0	0	0
Tech	DAM	DAM	MHB	DAM	DAM	DAM
Equip ID	323	323	1276	323	323	323
	297	297	207	297	297	297

		Low Level Circuit Resistance - Delta Values				
Project:	209107				Spec: EIA 364 TP 23	
Customer:	Samtec				Subgroup: 2 SampleID# 77	
Product:	SEAF/SEAM				File No:	20910777
Description:	30AU				Tech:	DAM
Open circuit voltage:		20mv			Current:	100mv
Units: milliohms						
Temp ºC	22	22	22	22	21	21
R.H. %	30	30	26	26	40	40
Date:	06Apr09	06Apr09	13Apr09	13Apr09	22Apr09	22Apr09
Pos. ID	Initial	25x	MFG 7 Days	1X	MFG 7 Days	1X
			Unmated		mated	
1	5.0	0.6	0.2	0.0	0.1	1.7
2	5.9	0.4	0.4	0.0	-0.1	1.4
3	5.6	0.0	-0.5	-0.6	-0.6	-0.3
4	5.9	-0.3	-0.6	-0.5	-0.6	-0.3
5	5.5	-0.2	-0.3	-0.5	-0.6	2.5
6	5.2	0.1	-0.2	-0.2	-0.2	0.1
7	5.2	-0.1	0.2	0.1	0.0	2.6
8	7.6	-1.8	-2.0	-2.1	-2.1	-1.3
9	6.7	-1.2	-1.3	-1.4	-1.6	-1.0
10	6.7	-0.3	-0.8	-0.9	-1.2	0.1
11	6.8	-1.6	-1.5	-1.6	-1.7	-1.4
12	5.4	-0.4	-0.5	-0.5	-0.6	-0.5
13	6.6	-1.5	-0.5	-0.8	-1.2	2.4
14	5.7	-0.3	-0.6	-0.7	-0.7	-0.5
15	7.4	-2.0	-1.9	-1.9	-2.1	-1.5
16	8.3	-3.1	-2.7	-2.1	-2.3	1.2
17	5.6	-0.6	-0.5	-0.6	-0.6	-0.3
18	7.9	-1.7	-1.9	-2.3	-2.2	-2.4
19	5.7	0.1	-0.2	-0.3	-0.3	-0.3
20	6.6	-0.6	-0.9	-1.0	-1.2	0.0
21	6.3	-0.6	-0.6	-0.6	-0.5	0.8
22	6.2	0.3	0.3	-0.1	0.0	1.2
23	6.5	-1.4	-1.0	-0.6	-1.0	-1.0
24	5.6	-0.3	-0.2	-0.3	-0.4	0.6
25	5.9	-0.4	-0.5	-0.3	-0.3	0.1
MAX	8.3	0.6	0.4	0.1	0.1	2.6
MIN	5.0	-3.1	-2.7	-2.3	-2.3	-2.4
AVG	6.2	-0.7	-0.7	-0.8	-0.9	0.2
STD	0.9	0.9	0.8	0.7	0.7	1.3
Open	0	0	0	0	0	0
Tech	DAM	DAM	DAM	DAM	DAM	DAM
Equip ID	323	323	323	323	323	323
	297	297	297	297	297	297

LLCR DATA FILES

FILE NUMBERS

50 Au Group

20910725
20910726
20910727
20910728
20910729
20910730A
20910731
20910732

		Low Level Circuit Resistance - Delta Values				
Project:	209107				Spec: EIA 364 TP 23	
Customer:	Samtec				Subgroup: 2 SampleID# 25	
Product:	SEAF/SEAM				File No:	20910725
Description:	50Au				Tech:	DAM
Open circuit voltage:		20mv			Current:	100mv
Units: milliohms						
Temp ºC	22	22	21	21	21	21
R.H. %	30	26	25	25	30	30
Date:	11Mar09	12Mar09	20Mar09	20Mar09	30Mar09	30Mar09
Pos. ID	Initial	25X	MFG 7 Days	1X	MFG 7 Day	1X
			Unmated		Mated	
1	5.1	0.0	-0.1	-0.1	-0.4	-0.1
2	6.8	-0.5	-0.7	-1.3	-1.1	-1.4
3	6.8	-1.6	-0.5	-1.5	-1.8	-1.7
4	7.1	-1.6	-1.6	-1.9	-2.1	-1.9
5	5.5	-0.4	-0.2	-0.4	-0.4	-0.5
6	5.5	-0.5	-0.2	-0.1	-0.5	-0.5
7	5.8	-0.3	0.2	0.3	0.2	0.0
8	6.2	-0.9	-0.9	-0.7	-0.9	-1.1
9	7.1	-1.9	-1.5	-1.6	-1.9	-2.1
10	7.3	-2.2	-1.0	-1.4	-1.7	-1.7
11	6.9	-1.7	-1.3	-1.5	-1.8	-1.5
12	6.4	-1.3	-1.0	-1.4	-1.6	-1.6
13	7.9	-2.4	-1.7	-1.9	-2.9	-2.2
14	6.1	0.5	-0.7	-1.0	-1.3	-1.1
15	6.3	-0.9	-0.5	-1.2	-1.2	-1.1
16	8.9	-2.9	-0.9	-2.4	-3.2	-2.8
17	6.5	-1.1	-1.0	-1.4	-1.6	-1.4
18	7.8	-1.8	-2.2	-2.6	-2.5	-2.6
19	5.5	-0.4	-0.2	-0.6	-0.7	-0.7
20	6.5	0.5	-0.5	0.1	-0.3	-0.5
21	6.5	-0.2	-0.6	-0.6	-1.1	-0.7
22	7.1	2.9	-0.6	-0.3	-1.0	-0.8
23	6.0	1.0	1.2	1.9	0.2	0.7
24	6.5	-0.8	-0.4	-1.0	-1.3	-1.1
25	6.4	-0.8	-0.7	-1.0	-1.1	0.0
MAX	8.9	2.9	1.2	1.9	0.2	0.7
MIN	5.1	-2.9	-2.2	-2.6	-3.2	-2.8
AVG	6.6	-0.8	-0.7	-0.9	-1.3	-1.1
STD	0.8	1.2	0.7	1.0	0.9	0.9
Open	0	0	0	0	0	0
Tech	AJP	AJP	AJP	AJP	AJP	AJP
Equip ID	244	244	244	244	244	244
	1116	1116	1116	1116	1116	1116

		Low Level Circuit Resistance - Delta Values				
Project:	209107				Spec: EIA 364 TP 23	
Customer:	Samtec				Subgroup: 2 SampleID# 26	
Product:	SEAF/SEAM				File No:	20910726
Description:	50au				Tech:	DAM
Open circuit voltage:		20mv			Current:	100mv
Units: milliohms						
Temp ºC	21	22	21	21	21	21
R.H. %	30	30	25	25	30	30
Date:	09Mar09	11Mar09	20Mar09	20Mar09	30Mar09	30Mar09
Pos. ID	Initial	25X	MFG 7 Days	1X	MFG 7 Days	1X
			Unmated		Mated	
1	5.3	-0.5	-0.3	-0.2	-0.2	0.1
2	6.1	-0.3	-0.1	-0.3	-0.4	-0.4
3	5.4	-0.2	0.1	-0.2	-0.4	0.0
4	5.3	-0.4	0.4	-0.4	-0.5	-0.3
5	5.3	-0.4	-0.3	-0.2	-0.2	-0.2
6	5.3	-0.2	-0.2	-0.5	-0.3	0.2
7	5.6	0.0	0.1	-0.2	-0.2	0.1
8	5.1	-0.1	-0.2	-0.1	-0.4	-0.4
9	5.0	-0.1	-0.2	0.0	0.0	0.2
10	5.3	-0.7	-0.2	-0.4	-0.4	-0.4
11	5.7	-0.5	0.2	-0.3	-0.5	0.3
12	5.1	-0.5	-0.1	-0.5	-0.5	-0.2
13	5.3	-0.6	-0.5	-0.4	-0.7	-0.4
14	5.3	-0.4	-0.5	-0.5	-0.7	-0.6
15	5.7	-0.9	-0.9	-0.8	-1.1	-0.9
16	6.0	-0.3	-0.6	-0.8	-0.9	-0.3
17	5.2	0.0	0.1	-0.1	-0.2	-0.2
18	5.9	-0.9	-1.3	-1.0	-1.2	-1.0
19	5.0	-0.3	-0.4	-0.3	-0.2	-0.3
20	5.9	-0.3	-0.4	-0.1	-0.5	0.0
21	6.4	-1.1	-1.0	-1.1	-1.3	-0.9
22	5.7	-0.3	-0.6	-0.4	-0.5	-0.5
23	5.4	0.3	0.1	0.0	-0.3	-0.2
24	5.8	-0.2	-0.5	0.0	-0.3	-0.5
25	6.0	-0.7	-0.1	0.0	0.2	0.0
MAX	6.4	0.3	0.4	0.0	0.2	0.3
MIN	5.0	-1.1	-1.3	-1.1	-1.3	-1.0
AVG	5.5	-0.4	-0.3	-0.4	-0.5	-0.3
STD	0.4	0.3	0.4	0.3	0.3	0.4
Open	0	0	0	0	0	0.0
Tech	AJP	AJP	AJP	AJP	AJP	AJP
Equip ID	244	244	244	244	244	244
	1116	1116	1116	1116	1116	1116

		Low Level Circuit Resistance - Delta Values				
Project:	209107				Spec: EIA 364 TP 23	
Customer:	Samtec				Subgroup: 2 SampleID# 27	
Product:	SEAF/SEAM				File No:	20910727
Description:	50au				Tech:	DAM
Open circuit voltage:		20mv			Current:	100mv
Units: milliohms						
Temp ºC	21	22	21	21	21	21
R.H. %	30	30	25	25	30	30
Date:	09Mar09	11Mar09	20Mar09	20Mar09	30Mar09	30Mar09
Pos. ID	Initial	25X	MFG 7 Days	1X	MFG 7 Day	1X
			Unmated		Mated	
1	5.3	0.0	-0.1	-0.2	-0.2	0.0
2	5.7	0.3	-0.3	-0.1	-0.6	0.0
3	5.3	-0.2	0.0	-0.3	-0.7	-0.2
4	5.6	-0.2	0.7	-0.4	-0.7	0.0
5	5.6	0.0	0.4	0.8	0.0	0.2
6	5.4	0.1	0.8	0.3	-0.1	1.3
7	5.7	-0.2	0.0	0.0	-0.5	0.2
8	5.1	0.1	0.0	0.2	-0.3	0.0
9	5.6	-0.1	-0.1	-0.4	-0.7	-0.4
10	6.6	-0.7	-0.1	-1.2	-1.4	-0.5
11	5.4	-0.1	0.2	0.0	-0.3	-0.2
12	4.9	-0.3	0.0	-0.1	-0.2	-0.2
13	7.0	-1.9	-1.2	-1.4	-1.8	-1.8
14	5.2	-0.3	0.0	-0.3	-0.5	-0.3
15	7.4	-2.3	-1.5	-2.2	-2.4	-2.3
16	5.2	-0.3	0.0	-0.3	-0.5	-0.4
17	5.2	-0.5	-0.2	-0.1	-0.2	-0.4
18	7.6	-2.1	-1.5	-2.4	-2.5	-2.4
19	5.3	-0.3	-0.2	-0.4	-0.6	-0.4
20	5.6	-0.2	-0.1	-0.1	-0.3	-0.5
21	6.5	-1.3	-0.9	-1.3	-1.5	-1.2
22	6.3	-0.1	-0.3	-0.4	-0.8	0.7
23	6.5	0.0	-0.7	-0.4	-0.6	0.5
24	6.1	-0.7	-0.5	-0.9	-1.2	-0.7
25	5.9	-0.2	0.0	-0.3	-0.3	0.2
MAX	7.6	0.3	0.8	0.8	0.0	1.3
MIN	4.9	-2.3	-1.5	-2.4	-2.5	-2.4
AVG	5.8	-0.5	-0.2	-0.5	-0.8	-0.3
STD	0.7	0.7	0.6	0.7	0.7	0.8
Open	0	0	0	0	0.0	0.0
Tech	AJP	AJP	AJP	AJP	AJP	AJP
Equip ID	244	244	244	244	244	244
	1116	1116	1116	1116	1116	1116

		Low Level Circuit Resistance - Delta Values				
Project:	209107				Spec: EIA 364 TP 23	
Customer:	Samtec				Subgroup: 2 SampleID# 28	
Product:	SEAF/SEAM				File No:	20910728
Description:	50au				Tech:	DAM
Open circuit voltage:		20mv			Current:	100mv
Units: milliohms						
Temp ºC	21	22	21	21	21	21
R.H. %	30	30	25	25	30	30
Date:	09Mar09	11Mar09	20Mar09	20Mar09	30Mar09	30Mar09
Pos. ID	Initial	25X	MFG 7 Days	1X	MFG 7 Day	1X
			Unmated		Unmated	
1	5.6	-0.3	-0.4	-0.5	-0.5	1.2
2	5.3	-0.3	-0.4	-0.4	-0.6	-0.1
3	5.2	-0.5	-0.6	-0.7	-0.6	-0.3
4	7.3	-2.2	-2.1	-2.1	-2.2	-2.3
5	5.6	-0.8	-0.7	-0.7	-0.7	-0.8
6	5.1	0.1	0.4	0.3	0.6	4.9
7	5.2	-0.3	-0.4	-0.5	-0.3	-0.3
8	5.5	-0.3	-0.2	-0.2	-0.3	-0.2
9	5.0	-0.4	0.0	0.0	-0.2	-0.1
10	5.7	-1.1	-1.0	-1.0	-0.9	-0.7
11	5.3	-0.6	-0.3	-0.3	-0.4	-0.4
12	5.6	-0.2	-0.6	-0.6	-0.7	-0.7
13	5.2	-0.5	-0.4	-0.4	-0.4	-0.4
14	5.2	-0.5	-0.5	-0.5	-0.4	-0.4
15	5.9	-1.3	-1.1	-1.0	-0.9	-1.1
16	5.4	-0.6	-0.7	-0.7	-0.8	-0.7
17	5.2	-0.4	-0.5	-0.5	-0.5	-0.5
18	5.4	-0.6	-0.6	-0.6	-0.7	-0.5
19	5.9	-1.0	-1.0	-1.0	-1.2	-1.1
20	5.4	-0.4	0.0	0.0	0.6	0.6
21	5.6	-0.4	-0.3	-0.3	-0.5	-0.5
22	5.8	-0.3	-0.8	-0.8	-0.7	-0.6
23	6.1	-0.5	-0.5	-0.5	-0.4	-0.4
24	6.1	-0.4	-0.6	-0.7	-0.5	-0.5
25	5.4	-0.1	0.0	0.0	0.2	-0.2
MAX	7.3	0.1	0.4	0.3	0.6	4.9
MIN	5.0	-2.2	-2.1	-2.1	-2.2	-2.3
AVG	5.6	-0.6	-0.5	-0.5	-0.5	-0.2
STD	0.5	0.5	0.5	0.5	0.5	1.2
Open	0	0	0	0	0	0
Tech	AJP	AJP	AJP	AJP	AJP	AJP
Equip ID	244	244	244	244	244	244
	1116	1116	1116	1116	1116	1116

		Low Level Circuit Resistance - Delta Values				
Project:	209107				Spec: EIA 364 TP 23	
Customer:	Samtec				Subgroup: 2 SampleID# 29	
Product:	SEAF/SEAM				File No:	20910729
Description:	50au				Tech:	DAM
Open circuit voltage:		20mv			Current:	100mv
Units: milliohms						
Temp ºC	21	22	21	21	21	21
R.H. %	30	30	25	25	30	30
Date:	09Mar09	11Mar09	20Mar09	20Mar09	30Mar09	30Mar09
Pos. ID	Initial	25X	MFG 7 Days	1X	MFG 7 Day	1X
			Unmated		Mated	
1	4.8	0.0	0.0	0.4	0.5	0.3
2	6.3	-0.6	0.8	-0.2	-0.2	-0.3
3	7.5	-2.6	-2.5	-2.3	-2.5	-2.1
4	6.2	-1.0	0.2	1.1	0.8	-0.3
5	7.3	-1.9	-0.5	-0.8	-1.8	-1.3
6	5.8	-0.5	-0.7	-0.3	-0.9	-0.7
7	5.9	-0.9	0.3	0.0	-0.2	-0.1
8	5.5	-0.7	-0.4	-0.4	-0.5	-0.1
9	4.9	-0.1	-0.1	0.1	0.0	0.0
10	6.3	-1.2	-1.1	-1.3	-1.3	-0.8
11	5.6	0.0	-0.1	0.7	0.2	0.5
12	7.2	-2.4	-2.3	-1.8	-1.6	-1.6
13	5.5	-0.4	-0.6	-0.5	-0.6	-0.1
14	5.2	-0.6	-0.3	0.0	-0.4	0.0
15	6.8	-0.7	-1.3	-1.5	-1.9	-0.4
16	5.2	-0.4	-0.2	-0.1	-0.3	0.5
17	5.0	0.0	-0.1	0.0	-0.1	0.4
18	5.2	-0.5	-0.5	-0.5	-0.5	-0.1
19	4.6	0.0	0.2	0.2	0.1	0.2
20	5.6	0.4	0.4	0.3	0.3	0.8
21	6.1	-0.9	-0.9	-0.6	-0.4	-0.1
22	5.7	-0.2	0.1	0.2	-0.7	0.0
23	5.1	-0.2	0.2	0.0	0.0	0.2
24	5.0	0.1	0.3	0.3	0.3	0.0
25	5.0	0.2	0.4	0.7	-0.5	1.5
MAX	7.5	0.4	0.8	1.1	0.8	1.5
MIN	4.6	-2.6	-2.5	-2.3	-2.5	-2.1
AVG	5.7	-0.6	-0.3	-0.3	-0.5	-0.1
STD	0.8	0.8	0.8	0.8	0.8	0.7
Open	0	0	0	0	0	0
Tech	AJP	AJP	AJP	AJP	AJP	AJP
Equip ID	244	244	244	244	244	244
	1116	1116	1116	1116	1116	1116

		Low Level Circuit Resistance - Delta Values				
Project:	209107				Spec: EIA 364 TP 23	
Customer:	Samtec				Subgroup: 2 SampleID# 30A	
Product:	SEAF/SEAM				File No:	20910730A
Description:	50au				Tech:	DAM
Open circuit voltage:		20mv			Current:	100mv
Units: milliohms						
Temp ºC	21	22	21	22	22	20
R.H. %	30	30	25	30	26	27
Date:	09Mar09	11Mar09	20Mar09	06Apr09	13Apr09	14Apr09
Pos. ID	Initial	25X	MFG 7 days	1X	MFG 7 days	1X
			unmated		Mated	
1	5.1	0.1	-0.3	-0.2	-0.2	0.0
2	5.7	0.1	-0.6	-0.1	-0.4	0.1
3	5.1	0.3	0.0	0.0	-0.1	0.7
4	5.3	0.1	-0.3	-0.2	-0.2	0.2
5	5.9	-0.5	0.1	-0.2	-0.5	0.2
6	5.3	0.4	-0.2	-0.1	-0.3	0.5
7	6.1	0.1	-1.0	-0.6	-0.7	-0.8
8	5.1	0.2	0.0	0.0	-0.2	-0.2
9	5.1	0.9	-0.2	-0.2	-0.3	0.1
10	5.5	0.3	-0.5	-0.3	-0.5	-0.2
11	5.0	1.1	0.6	0.2	-0.1	0.0
12	4.8	0.4	0.1	0.2	0.3	0.5
13	5.5	-0.3	-0.4	-0.1	-0.2	-0.5
14	5.2	0.4	-0.2	-0.2	-0.1	0.1
15	5.9	1.5	0.6	0.4	-0.1	0.5
16	5.7	0.9	-0.2	0.0	-0.3	0.6
17	5.5	-0.2	-0.5	-0.2	-0.2	-0.3
18	5.8	0.1	-0.2	-0.2	-0.4	-0.3
19	5.2	-0.1	-0.4	-0.3	-0.4	0.5
20	5.6	0.0	-0.5	-0.5	-0.4	-0.6
21	5.8	0.1	0.4	-0.3	-0.1	0.8
22	5.4	0.4	0.4	-0.1	-0.3	0.0
23	5.6	0.3	0.1	0.1	0.0	0.1
24	5.3	0.4	0.0	0.1	-0.1	0.2
25	5.6	-0.3	-0.3	-0.1	-0.1	0.3
MAX	6.1	1.5	0.6	0.4	0.3	0.8
MIN	4.8	-0.5	-1.0	-0.6	-0.7	-0.8
AVG	5.4	0.3	-0.1	-0.1	-0.2	0.1
STD	0.3	0.5	0.4	0.2	0.2	0.4
Open	0	0	0	0	0	0
Tech	AJP	AJP	AJP	DAM	DAM	DAM
Equip ID	244	244	244	323	323	323
	1116	1116	1116	297	297	297

		Low Level Circuit Resistance - Delta Values				
Project:	209107				Spec: EIA 364 TP 23	
Customer:	Samtec				Subgroup: 2 SampleID# 31	
Product:	SEAF/SEAM				File No:	20910731
Description:	50au				Tech:	DAM
Open circuit voltage:		20mv			Current:	100mv
Units: milliohms						
Temp ºC	22	22	21	21	21	21
R.H. %	30	26	25	25	30	30
Date:	11Mar09	12Mar09	20Mar09	20Mar09	30Mar09	30Mar09
Pos. ID	Initial	25X	MFG 7 Days	1X	MFG 7 Day	1X
			Unmated		Unmated	
1	5.5	-0.7	-0.6	-0.7	-0.6	-0.5
2	5.5	-0.6	-0.7	-0.8	-0.8	-0.6
3	5.3	-0.5	-0.6	-0.4	-0.6	-0.5
4	6.9	-1.7	-1.9	-1.6	-1.9	-1.6
5	6.3	-1.3	-1.2	-1.3	-1.4	-1.1
6	5.2	-0.2	0.1	0.0	-0.1	-0.3
7	5.4	-0.7	-0.7	-0.8	-0.7	-0.6
8	5.6	-0.6	0.0	-0.4	-0.7	-0.5
9	7.5	-2.0	-2.3	-1.9	-2.3	-2.2
10	6.2	-0.8	-0.3	-0.4	-0.6	0.1
11	6.3	-1.3	-1.4	-1.3	-1.5	-1.4
12	5.6	-0.7	-0.6	-0.6	-0.9	-0.7
13	6.2	-1.2	-0.4	-0.7	-1.2	-0.3
14	5.6	-0.4	-0.5	-0.7	-0.9	-0.3
15	6.0	-0.7	-0.6	-0.7	-1.0	-0.9
16	5.9	-0.8	-1.0	-1.1	-1.1	-1.2
17	5.5	-0.5	-0.2	-0.7	-0.7	-0.6
18	5.9	-0.5	0.5	-0.5	-0.7	-0.1
19	5.2	0.0	-0.2	0.0	0.0	-0.4
20	5.7	0.0	0.2	-0.2	-0.4	-0.2
21	5.5	0.0	0.1	-0.2	-0.3	-0.2
22	8.0	-2.2	-1.9	-2.0	-2.4	-1.8
23	6.4	-0.6	-0.7	-1.1	-1.2	-1.2
24	6.1	-0.8	-0.8	-0.5	-1.0	-0.8
25	6.5	-0.8	-0.8	-1.0	-1.3	-0.9
MAX	8.0	0.0	0.5	0.0	0.0	0.1
MIN	5.2	-2.2	-2.3	-2.0	-2.4	-2.2
AVG	6.0	-0.8	-0.7	-0.8	-1.0	-0.7
STD	0.7	0.6	0.7	0.5	0.6	0.6
Open	0	0	0	0	0	0
Tech	AJP	DAM	AJP	AJP	AJP	AJP
Equip ID	244	323	244	244	244	244
	1116	297	1116	1116	1116	1116

		Low Level Circuit Resistance - Delta Values				
Project:	209107				Spec: EIA 364 TP 23	
Customer:	Samtec				Subgroup: 2 SampleID# 32	
Product:	SEAF/SEAM				File No:	20910732
Description:	50au				Tech:	DAM
Open circuit voltage:		20mv			Current:	100mv
Units: milliohms						
Temp ºC	21	22	21	22	22	20
R.H. %	30	30	25	30	26	27
Date:	09Mar09	11Mar09	20Mar09	06Apr09	13Apr09	14Apr09
Pos. ID	Initial	25X	MFG 7 Days	1X	MFG 7 Days	1X
			Unmated		Mated	
1	4.9	-0.2	0.0	0.1	-0.1	0.0
2	6.2	-0.6	-1.0	-1.0	-0.8	-1.3
3	5.4	0.4	-0.7	-0.6	-0.5	-0.7
4	7.0	-1.6	-1.9	-1.1	-1.1	-1.8
5	5.2	0.0	0.1	-0.1	0.1	-0.2
6	4.9	0.3	0.5	0.4	0.9	1.0
7	5.3	-0.2	0.0	0.0	-0.3	-0.2
8	5.2	0.0	0.6	0.5	0.8	0.3
9	5.5	0.3	-0.4	-0.2	-0.3	-0.5
10	7.1	-1.5	-2.0	-2.2	-1.9	-2.3
11	7.9	-2.4	-2.2	-2.1	-2.2	-2.3
12	6.3	-1.1	-1.8	-1.6	-1.5	-1.7
13	6.1	-0.7	-0.7	-0.4	-0.9	-0.8
14	7.2	-1.6	-2.5	-2.5	-2.3	-2.5
15	6.8	-0.4	-1.3	-1.3	-1.4	-1.7
16	6.4	-1.2	-1.3	-1.4	-1.3	-1.5
17	5.9	-0.4	-1.0	-1.1	-0.9	-1.1
18	7.1	-1.4	-2.2	-2.2	-2.2	-2.1
19	7.4	-1.8	-2.1	-1.9	-1.9	-2.3
20	5.8	-0.1	-0.3	-0.5	-0.4	-0.7
21	5.9	-0.3	-0.6	-0.7	-0.6	-0.9
22	6.1	-0.5	-0.5	-0.9	-0.7	-0.9
23	6.4	-0.6	-0.5	-0.8	-0.5	-1.1
24	5.7	0.0	-0.6	-0.5	-0.6	-0.7
25	6.6	-1.0	0.0	-0.5	-0.5	-0.9
MAX	7.9	0.4	0.6	0.5	0.9	1.0
MIN	4.9	-2.4	-2.5	-2.5	-2.3	-2.5
AVG	6.2	-0.7	-0.9	-0.9	-0.8	-1.1
STD	0.8	0.7	0.9	0.8	0.8	0.9
Open	0	0	0	0	0	0
Tech	AJP	AJP	AJP	DAM	DAM	DAM
Equip ID	244	244	244	323	323	323
	1116	1116	1116	297	297	297