

MARCH 1, 2010

TEST REPORT #209665A

UPPT SERIES CONNECTOR

PART#: UPPT-08-01-01-L-RA-SD
MATING PART#: UPPT-08-01-01-L-RA-SD

SAMTEC, INC.

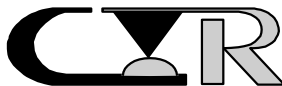
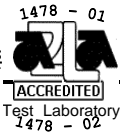


APPROVED BY: ALICE HATHAWAY
PROJECT ENGINEER
CONTECH RESEARCH, INC.
ATTLEBORO, MA



REVISION HISTORY

DATE	REV. NO.	DESCRIPTION	ENG.
03/01/2010	1.0	Initial Issue	APH



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CERTIFICATION

This is to certify that the UPPT series connector 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, 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.



ALICE HATHAWAY
PROJECT ENGINEER
CONTECH RESEARCH, INC.
ATTLEBORO, MA

APH:ld



SCOPE

To perform qualification testing on the UPPT series connector as manufactured and submitted by the test sponsor, Samtec, Inc.

APPLICABLE DOCUMENTS

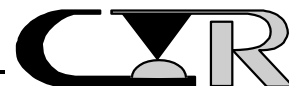
1. Unless otherwise specified, the following documents of issue in effect at the time of testing performed form a part of this report to the extent as specified herein. The requirements of sub-tier specifications and/or standards apply only when specifically referenced in this report.
2. Samtec Test Plan: TC0953-2993 UPPT Full Qual
3. 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.

<u>Description</u>	<u>Part Number</u>
a) Connector	UPPT-08-01-01-L-RA-SD
b) Mating Connector	UPPT-08-01-01-L-RA-SD

2. Test samples were supplied assembled and terminated to test boards by the test sponsor. Specific test boards were supplied for the following tests:
 - LLCR
3. Test leads were attached to the appropriate measurement areas of the test samples and applicable mating elements.
4. The test samples were tested in their 'as received' condition.
5. Unless otherwise specified in the test procedures used, no further preparation was used.
6. The mated test samples were secured via a stabilizing medium to maintain mechanical stability during testing.



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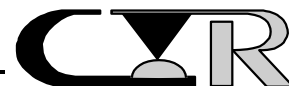
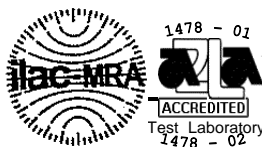
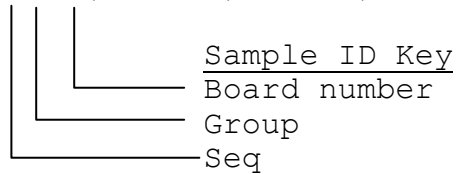
TEST SELECTION

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

Seq B: Group A - B-A-1, B-A-2, B-A-3, B-A-4, B-A-5,
B-A-6, B-A-7, B-A-8, B-A-9, B-A-10

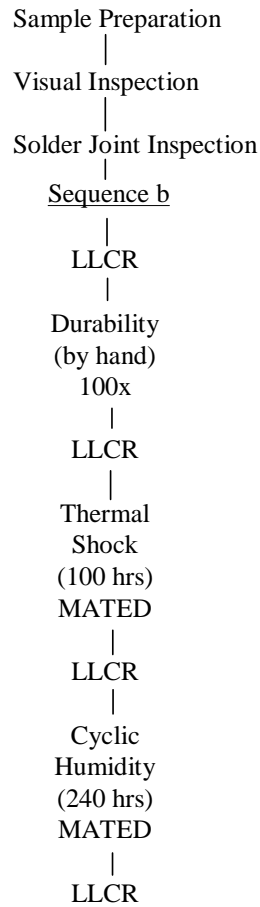


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FIGURE #1

TEST PLAN FLOW DIAGRAM



Group A
60 points
10 mated pairs

LLCR : Low Level Circuit Resistance



DATA SUMMARY

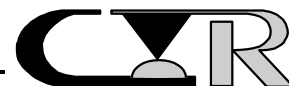
TEST

REQUIREMENT

RESULTS

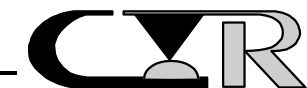
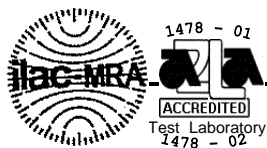
SEQUENCE B

LLCR DURABILITY	RECORD NO DAMAGE	0.46 mΩ MAX. PASSED
LLCR THERMAL SHOCK	+10.0 mΩ MAX.CHG. NO DAMAGE	+0.34 mΩ MAX.CHG. PASSED
LLCR CYCLIC HUMIDITY	+10.0 mΩ MAX.CHG. NO DAMAGE	+0.15 mΩ MAX.CHG. PASSED
LLCR	+10.0 mΩ MAX.CHG.	+0.17 mΩ MAX.CHG.



EQUIPMENT LIST

ID#	Next Cal	Last Cal	Equipment Name	Manufacturer	Model #	Serial #	Accuracy	Freq.Cal
558			Computer	ARC Elect.	P111-450	274B031586	N/A	N/A
614			Oven	Tenney Co.	TH Jr.	9712-510	See Manual	Ea Test
1047	12/10/2010	12/10/2009	Microohm Meter	Keithley	580	0705731	See Cal Cert	12mon
1230			Temp-humid-Chamber	Blue M.	FRM-256B	FRM277	See Manual	Ea Test
1303	7/30/2010	7/30/2009	Data Aquisition Multimeter	Keithley Co.	2700	0816531	See CERT	12mon
1314	3/5/2010	3/5/2009	Multiplexer card	Keithley Co.	7708	0862544	See CERT	12mon
1361	3/5/2010	3/5/2009	Multiplexer Card	Keithley	7708	1067661	See Cal Cert	12mon
1609	5/27/2010	5/27/2009	Vert Thermal Shock Chamber	C.S.Z.	VTS-1.0-2-2-H/AC	08-VT14810	See Manual	12mon



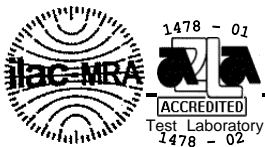
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TEST RESULTS

SEQUENCE B

Group A



PROJECT NO.: 209665A

SPECIFICATION: TC0953-2993

PART NO.: See Page 4

PART DESCRIPTION: See Page 4

SAMPLE SIZE: 10 Samples

TECHNICIAN: GL

START DATE: 1/26/10

COMPLETE DATE: 1/26/10

ROOM AMBIENT: 22°C

RELATIVE HUMIDITY: 32%

EQUIPMENT ID#: 558, 1047

LOW LEVEL CIRCUIT RESISTANCE (LLCR)

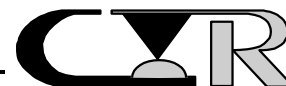
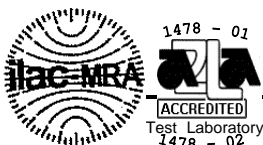
PURPOSE:

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.
2. Test Conditions:
 - a) Test Current : 10 milliamps maximum
 - b) Open Circuit Voltage : 20 millivolts
 - c) No. of Positions Tested : 6 per test sample

REQUIREMENTS: See Next Page.



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REQUIREMENTS:

Low level circuit resistance shall be measured and recorded.

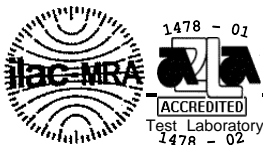
RESULTS:

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

LOW LEVEL CIRCUIT RESISTANCE
(milliohms)

<u>Sample ID#</u>	<u>Avg.</u>	<u>Max.</u>	<u>Min.</u>
B-A-1	0.38	0.42	0.36
B-A-2	0.36	0.39	0.35
B-A-3	0.38	0.41	0.36
B-A-4	0.38	0.43	0.36
B-A-5	0.38	0.42	0.35
B-A-6	0.33	0.37	0.26
B-A-7	0.44	0.46	0.43
B-A-8	0.36	0.41	0.33
B-A-9	0.40	0.43	0.37
B-A-10	0.37	0.41	0.34

2. See data files 209665A01 through 209665A10 for individual data points.



PROJECT NO.: 209665A

SPECIFICATION: TC0953-2993

PART NO.: See Page 4

PART DESCRIPTION: See Page 4

SAMPLE SIZE: 10 Samples

TECHNICIAN: GL

START DATE: 1/26/10

COMPLETE DATE: 1/27/10

ROOM AMBIENT: 22°C

RELATIVE HUMIDITY: 32%

EQUIPMENT ID#: N/A (manual)

DURABILITY

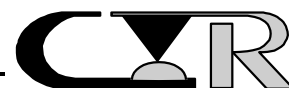
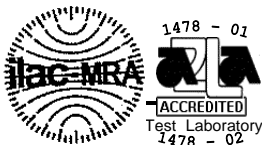
PURPOSE:

1. This is a conditioning 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 of conditioning 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 : 100
 - b) Rate : 1.0 inch per minute
3. The part and the mating part were cycled by hand. Speed is approximate.
4. Care was taken to prevent the mating faces of the test samples from contacting each other.

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PROCEDURE:-continued

5. Each test sample was carefully mated by sliding one connector into the other from the top in a straight downward motion. To unmate, the mated pair was placed upside down with the LLCR board on a flat surface and the mating board unsupported. The test sample was then gently pushed apart in a straight downward motion.
6. 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.

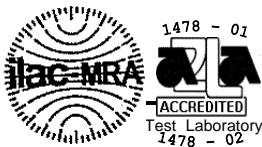
RESULTS:

1. There was no evidence of physical damage to the test samples as tested.
2. The following is a summary of the data observed:

CHANGE IN
LOW LEVEL CIRCUIT RESISTANCE
(milliohms)

<u>Sample ID#</u>	<u>Avg. Change</u>	<u>Max. Change</u>
B-A-1	+0.19	+0.34
B-A-2	+0.08	+0.11
B-A-3	+0.10	+0.17
B-A-4	+0.16	+0.27
B-A-5	+0.04	+0.07
B-A-6	+0.15	+0.26
B-A-7	+0.00	+0.02
B-A-8	+0.06	+0.08
B-A-9	+0.17	+0.36
B-A-10	+0.14	+0.21

3. See data files 209665A01 through 209665A10 for individual data points.



PROJECT NO.: 209665A

SPECIFICATION: TC0953-2993

PART NO.: See Page 4

PART DESCRIPTION: See Page 4

SAMPLE SIZE: 10 Samples

TECHNICIAN: GL

START DATE: 1/28/10

COMPLETE DATE: 2/1/10

ROOM AMBIENT: 22°C

RELATIVE HUMIDITY: 33%

EQUIPMENT ID#: 1303, 1314, 1361, 1609

THERMAL SHOCK

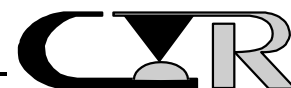
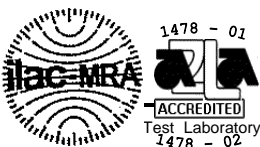
PURPOSE:

To determine the resistance of a given electrical connector to exposure at extremes of high and low temperatures and the shock of alternate exposures to these extremes, simulating the worst probable conditions of storage, transportation and application.

PROCEDURE:

1. The test environment was performed in accordance with EIA 364, Test Procedure 32, Method A, Test Condition I.
2. Test Conditions:
 - a) Number of Cycles : 100 Cycles
 - b) Hot Extreme : +85°C +3°C/-0°C
 - c) Cold Extreme : -55°C +0°C/-3°C
 - d) Time at Temperature : 30 Minutes
 - e) Mating Conditions : Mated
 - f) Mounting Conditions : Mounted
 - g) Transfer Time : Instantaneous
3. The total number of cycles were performed continuously.
4. All subsequent variable testing was performed in accordance with the procedures as previously indicated.
5. Prior to performing variable measurements, the test samples were allowed to recover to room ambient conditions.

REQUIREMENTS: See Next Page.



REQUIREMENTS:

1. There shall be no evidence of physical damage to the test samples as tested.
2. The change in low level circuit resistance shall not exceed +10.0 milliohms.

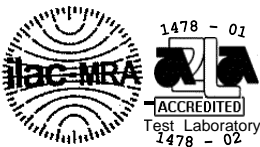
RESULTS:

1. There was no evidence of physical damage to the test samples as tested.
2. The following is a summary of the data observed:

CHANGE IN
LOW LEVEL CIRCUIT RESISTANCE
(milliohms)

<u>Sample ID#</u>	<u>Avg. Change</u>	<u>Max. Change</u>
B-A-1	+0.08	+0.15
B-A-2	+0.02	+0.02
B-A-3	+0.05	+0.07
B-A-4	+0.04	+0.05
B-A-5	+0.00	+0.05
B-A-6	+0.04	+0.15
B-A-7	-0.07	-0.05
B-A-8	+0.00	+0.02
B-A-9	-0.01	+0.01
B-A-10	+0.03	+0.05

3. See data files 209665A01 through 209665A10 for individual data points.



PROJECT NO.: 209665A

SPECIFICATION: TC0953-2993

PART NO.: See Page 4

PART DESCRIPTION: See Page 4

SAMPLE SIZE: 10 Samples

TECHNICIAN: GL

START DATE: 2/6/10

COMPLETE DATE: 2/16/10

ROOM AMBIENT: 22°C

RELATIVE HUMIDITY: 19%

EQUIPMENT ID#: 614, 1230, 1303, 1314, 1361

HUMIDITY (THERMAL CYCLING)

PURPOSE:

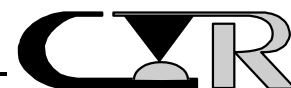
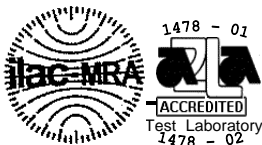
To evaluate the impact on electrical stability of the contact system when exposed to any environment which may generate thermal/moisture type failure mechanisms such as:

- a) Fretting corrosion due to wear resulting from micromotion, induced by thermal cycling. Humidity accelerates the oxidation process.
- b) Oxidation of wear debris or from particulates from the surrounding atmosphere which may have become entrapped between the contacting surfaces.
- c) Failure mechanisms resulting from a wet oxidation process.

PROCEDURE:

1. The test environment was performed in accordance with EIA 364, Test Procedure 31, Test Condition B, Method III (omitting steps 7a and 7b) with the following conditions.
2. Test Conditions:
 - a) Preconditioning (24 hours) : 50°C ± 5°C
 - b) Relative Humidity : 90% to 95%
 - c) Temperature Conditions : 25°C to 65°C
 - d) Cold Cycle : No
 - e) Polarizing Voltage : No
 - f) Mating Conditions : Mated
 - g) Mounting Conditions : Mounted
 - h) Duration : 240 hours

-continued on next page.



PROCEDURE:-continued

3. Prior to performing variable measurements, the test samples were allowed to recover to room ambient conditions.
4. All subsequent variable testing was performed in accordance with the procedures previously indicated.

REQUIREMENTS:

1. There shall be no evidence of physical deterioration of the test samples as tested.
2. The change in low level circuit resistance shall not exceed +10.0 milliohms.

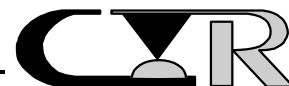
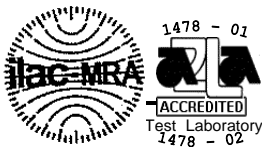
RESULTS:

1. The test samples as tested showed no evidence of physical deterioration.
2. The following is a summary of the data observed:

CHANGE IN
LOW LEVEL CIRCUIT RESISTANCE
(milliohms)

<u>Sample ID#</u>	<u>Avg. Change</u>	<u>Max. Change</u>
B-A-1	+0.04	+0.06
B-A-2	+0.02	+0.04
B-A-3	+0.04	+0.07
B-A-4	+0.00	+0.03
B-A-5	-0.02	+0.01
B-A-6	+0.04	+0.17
B-A-7	-0.08	-0.04
B-A-8	+0.07	+0.10
B-A-9	-0.01	+0.05
B-A-10	-0.02	+0.01

3. See data files 209665A01 through 209665A10 for individual data points.



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LLCR DATA FILES

DATA FILE NUMBERS

209665A01

209665A02

209665A03

209665A04

209665A05

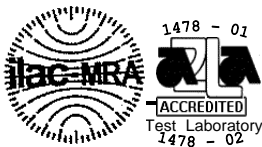
209665A06

209665A07

209665A08

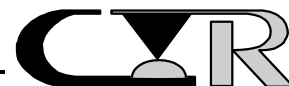
209665A09

209665A10



Low Level Contact Resistance

Project:	209665A			Spec: EIA 364, TP23
Customer:	Samtec			Subgroup: Seq B
Product:	Series UPPT Connectors			File #: 209665A01
Description:	B-A-1			
Open circuit voltage:	20mv		Current:	10ma
		Delta values units: milliohms		
Temp °C	22	21	22	22
R.H. %	32	28	20	20
Date:	26Jan10	27Jan10	02Feb10	16Feb10
Pos. ID	Initial	100X	Thermal	Cyclic
			Shock	Humidity
1	0.42	0.10	0.07	0.05
2	0.37	0.14	0.05	0.04
3	0.41	0.31	0.15	0.06
4	0.36	0.11	0.04	0.03
5	0.36	0.13	0.07	0.04
6	0.39	0.34	0.07	0.02
MAX	0.42	0.34	0.15	0.06
MIN	0.36	0.10	0.04	0.02
AVG	0.38	0.19	0.08	0.04
STD	0.03	0.11	0.04	0.02
Open	0	0	0	0
Tech	GL	GL	GL	GL
Equip ID	1047	1047	1047	1047
	558	558	558	558

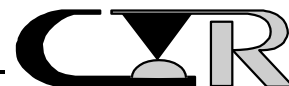


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Low Level Contact Resistance

Project:	209665A			Spec: EIA 364, TP23
Customer:	Samtec			Subgroup: Seq B
Product:	Series UPPT Connectors			File #: 209665A02
Description:	B-A-2			
Open circuit voltage:	20mv		Current:	10ma
		Delta values units: milliohms		
Temp °C	22	21	22	22
R.H. %	32	28	20	20
Date:	26Jan10	27Jan10	02Feb10	16Feb10
Pos. ID	Initial	100X	Thermal	Cyclic
			Shock	Humidity
1	0.39	0.09	0.02	0.04
2	0.35	0.08	0.02	0.02
3	0.36	0.11	0.01	0.03
4	0.35	0.06	0.01	0.02
5	0.35	0.08	0.01	0.02
6	0.37	0.05	0.01	0.00
MAX	0.39	0.11	0.02	0.04
MIN	0.35	0.05	0.01	0.00
AVG	0.36	0.08	0.02	0.02
STD	0.02	0.02	0.01	0.01
Open	0	0	0	0
Tech	GL	GL	GL	GL
Equip ID	1047	1047	1047	1047
	558	558	558	558

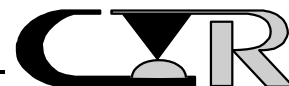
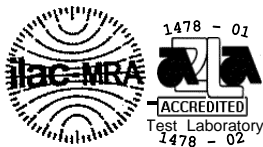


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Low Level Contact Resistance

Project:	209665A			Spec: EIA 364, TP23
Customer:	Samtec			Subgroup: Seq B
Product:	Series UPPT Connectors			File #: 209665A03
Description:	B-A-3			
Open circuit voltage:	20mv		Current:	10ma
		Delta values units: milliohms		
Temp °C	22	21	22	22
R.H. %	32	28	20	20
Date:	26Jan10	27Jan10	02Feb10	16Feb10
Pos. ID	Initial	100X	Thermal Shock	Cyclic Humidity
1	0.41	0.17	0.04	0.03
2	0.38	0.15	0.07	0.07
3	0.36	0.07	0.03	0.03
4	0.36	0.08	0.04	0.07
5	0.38	0.06	0.04	0.01
6	0.37	0.10	0.06	0.03
MAX	0.41	0.17	0.07	0.07
MIN	0.36	0.06	0.03	0.01
AVG	0.38	0.10	0.05	0.04
STD	0.02	0.05	0.01	0.02
Open	0	0	0	0
Tech	GL	GL	GL	GL
Equip ID	1047	1047	1047	1047
	558	558	558	558

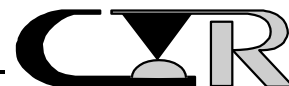


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Project:	209665A			Spec: EIA 364, TP23
Customer:	Samtec			Subgroup: Seq B
Product:	Series UPPT Connectors			File #: 209665A04
Description:	B-A-4			
Open circuit voltage:	20mv		Current:	10ma
		Delta values units: milliohms		
Temp °C	22	21	22	22
R.H. %	32	28	20	20
Date:	26Jan10	27Jan10	02Feb10	16Feb10
Pos. ID	Initial	100X	Thermal	Cyclic
			Shock	Humidity
1	0.43	0.20	0.04	-0.03
2	0.37	0.20	0.05	0.03
3	0.36	0.27	0.03	0.01
4	0.36	0.09	0.05	0.00
5	0.38	0.06	0.03	-0.01
6	0.39	0.13	0.03	-0.01
MAX	0.43	0.27	0.05	0.03
MIN	0.36	0.06	0.03	-0.03
AVG	0.38	0.16	0.04	0.00
STD	0.03	0.08	0.01	0.02
Open	0	0	0	0
Tech	GL	GL	GL	GL
Equip ID	1047	1047	1047	1047
	558	558	558	558

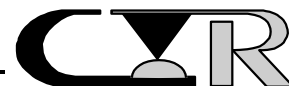
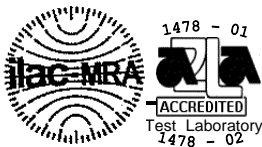


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Project:	209665A			Spec: EIA 364, TP23
Customer:	Samtec			Subgroup: Seq B
Product:	Series UPPT Connectors			File #: 209665A05
Description:	B-A-5			
Open circuit voltage:	20mv		Current:	10ma
		Delta values units: milliohms		
Temp °C	22	21	22	22
R.H. %	32	28	20	20
Date:	26Jan10	27Jan10	02Feb10	16Feb10
Pos. ID	Initial	100X	Thermal Shock	Cyclic Humidity
1	0.41	0.04	0.05	-0.02
2	0.42	-0.02	-0.04	-0.05
3	0.36	0.04	0.01	0.01
4	0.37	0.06	0.00	-0.01
5	0.38	0.06	-0.01	-0.02
6	0.35	0.07	0.01	0.00
MAX	0.42	0.07	0.05	0.01
MIN	0.35	-0.02	-0.04	-0.05
AVG	0.38	0.04	0.00	-0.02
STD	0.03	0.03	0.03	0.02
Open	0	0	0	0
Tech	GL	GL	GL	GL
Equip ID	1047	1047	1047	1047
	558	558	558	558

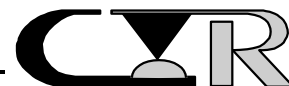
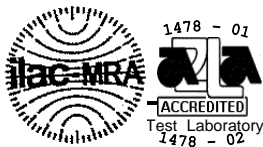


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Project:	209665A			Spec: EIA 364, TP23
Customer:	Samtec			Subgroup: Seq B
Product:	Series UPPT Connectors			File #: 209665A06
Description:	B-A-6			
Open circuit voltage:	20mv		Current:	10ma
		Delta values units: milliohms		
Temp °C	22	21	22	22
R.H. %	32	28	20	20
Date:	26Jan10	27Jan10	02Feb10	16Feb10
Pos. ID	Initial	100X	Thermal Shock	Cyclic Humidity
1	0.26	0.26	0.15	0.17
2	0.28	0.18	0.08	0.09
3	0.36	0.09	0.00	0.01
4	0.36	0.06	-0.02	-0.02
5	0.37	0.16	0.01	0.00
6	0.35	0.13	0.02	0.01
MAX	0.37	0.26	0.15	0.17
MIN	0.26	0.06	-0.02	-0.02
AVG	0.33	0.15	0.04	0.04
STD	0.05	0.07	0.06	0.07
Open	0	0	0	0
Tech	GL	GL	GL	GL
Equip ID	1047	1047	1047	1047
	558	558	558	558

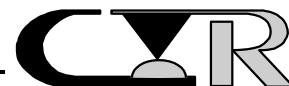


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Project:	209665A			Spec: EIA 364, TP23
Customer:	Samtec			Subgroup: Seq B
Product:	Series UPPT Connectors			File #: 209665A07
Description:	B-A-7			
Open circuit voltage:	20mv		Current:	10ma
		Delta values units: milliohms		
Temp °C	22	21	22	22
R.H. %	32	28	20	20
Date:	26Jan10	27Jan10	02Feb10	16Feb10
Pos. ID	Initial	100X	Thermal Shock	Cyclic Humidity
1	0.46	0.02	-0.05	-0.06
2	0.46	-0.01	-0.09	-0.12
3	0.43	0.00	-0.06	-0.04
4	0.44	0.00	-0.08	-0.09
5	0.43	-0.01	-0.06	-0.10
6	0.44	-0.02	-0.07	-0.09
MAX	0.46	0.02	-0.05	-0.04
MIN	0.43	-0.02	-0.09	-0.12
AVG	0.44	0.00	-0.07	-0.08
STD	0.01	0.01	0.01	0.03
Open	0	0	0	0
Tech	GL	GL	GL	GL
Equip ID	1047	1047	1047	1047
	558	558	558	558

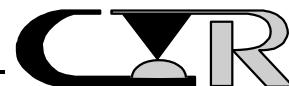


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Project:	209665A			Spec: EIA 364, TP23
Customer:	Samtec			Subgroup: Seq B
Product:	Series UPPT Connectors			File #: 209665A08
Description:	B-A-8			
Open circuit voltage:	20mv		Current:	10ma
		Delta values units: milliohms		
Temp °C	22	21	22	22
R.H. %	32	28	20	20
Date:	26Jan10	27Jan10	02Feb10	16Feb10
Pos. ID	Initial	100X	Thermal Shock	Cyclic Humidity
1	0.41	0.06	-0.01	0.08
2	0.34	0.08	0.02	0.07
3	0.37	0.04	-0.02	0.07
4	0.33	0.07	0.01	0.04
5	0.35	0.05	-0.01	0.05
6	0.35	0.06	0.01	0.10
MAX	0.41	0.08	0.02	0.10
MIN	0.33	0.04	-0.02	0.04
AVG	0.36	0.06	0.00	0.07
STD	0.03	0.01	0.01	0.02
Open	0	0	0	0
Tech	GL	GL	GL	GL
Equip ID	1047	1047	1047	1047
	558	558	558	558

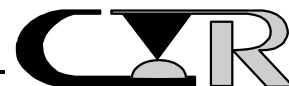
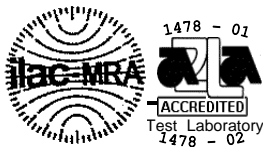


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Project:	209665A			Spec: EIA 364, TP23
Customer:	Samtec			Subgroup: Seq B
Product:	Series UPPT Connectors			File #: 209665A09
Description:	B-A-9			
Open circuit voltage:	20mv		Current:	10ma
		Delta values units: milliohms		
Temp °C	22	21	22	22
R.H. %	32	28	20	20
Date:	26Jan10	27Jan10	02Feb10	16Feb10
Pos. ID	Initial	100X	Thermal Shock	Cyclic Humidity
1	0.43	0.19	-0.01	0.05
2	0.41	0.36	0.00	-0.02
3	0.40	0.17	-0.02	-0.03
4	0.40	0.10	-0.03	-0.05
5	0.37	0.08	0.01	0.00
6	0.39	0.11	0.00	-0.01
MAX	0.43	0.36	0.01	0.05
MIN	0.37	0.08	-0.03	-0.05
AVG	0.40	0.17	-0.01	-0.01
STD	0.02	0.11	0.01	0.03
Open	0	0	0	0
Tech	GL	GL	GL	GL
Equip ID	1047	1047	1047	1047
	558	558	558	558

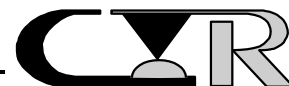


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Project:	209665A			Spec: EIA 364, TP23
Customer:	Samtec			Subgroup: Seq B
Product:	Series UPPT Connectors			File #: 209665A10
Description:	B-A-10			
Open circuit voltage:	20mv		Current:	10ma
		Delta values units: milliohms		
Temp °C	22	21	22	22
R.H. %	32	28	20	20
Date:	26Jan10	27Jan10	02Feb10	16Feb10
Pos. ID	Initial	100X	Thermal Shock	Cyclic Humidity
1	0.41	0.14	0.03	-0.02
2	0.37	0.21	0.05	0.01
3	0.38	0.12	-0.01	-0.06
4	0.34	0.10	0.05	0.01
5	0.36	0.13	0.02	-0.03
6	0.35	0.13	0.03	-0.01
MAX	0.41	0.21	0.05	0.01
MIN	0.34	0.10	-0.01	-0.06
AVG	0.37	0.14	0.03	-0.02
STD	0.02	0.04	0.02	0.03
Open	0	0	0	0
Tech	GL	GL	GL	GL
Equip ID	1047	1047	1047	1047
	558	558	558	558



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