Project Number: Design Qualification Test Report		Tracking Code: TC1034--3500_Report_Rev_1			
Requested by: Leo Lee		Date: 12/01/2010		Product Rev: 0	
Part #: MECF-50-02-L-DV-WT\Mating Card		Lot #:1		Tech: Kason He	Eng: Vico Zhao
Part description: MECF				Qty to test: 60	
Test Start: 08/18/2010	Test Completed: 09/13/2010				
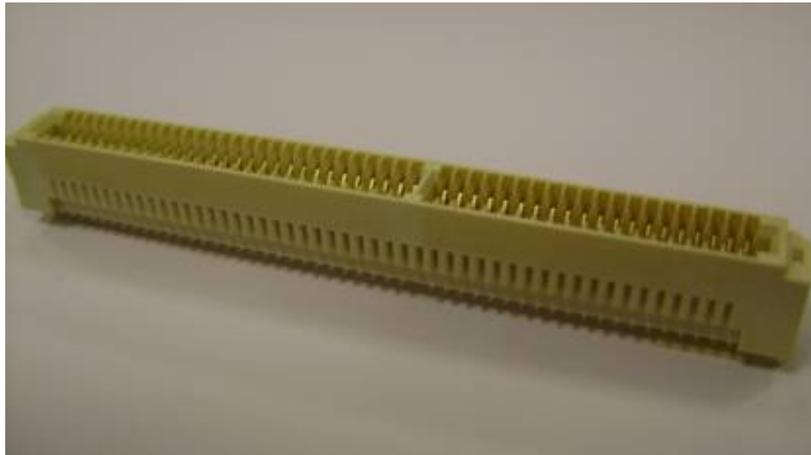
Design Qualification Test Report

MECF

MECF-50-02-L-DV-WT\Mating Card

CERTIFICATION

All instruments and measuring equipment were calibrated to National Institute for Standards and Technology (NIST) traceable standards according to IS0 10012-l and ANSI/NCSL 2540-1, as applicable.

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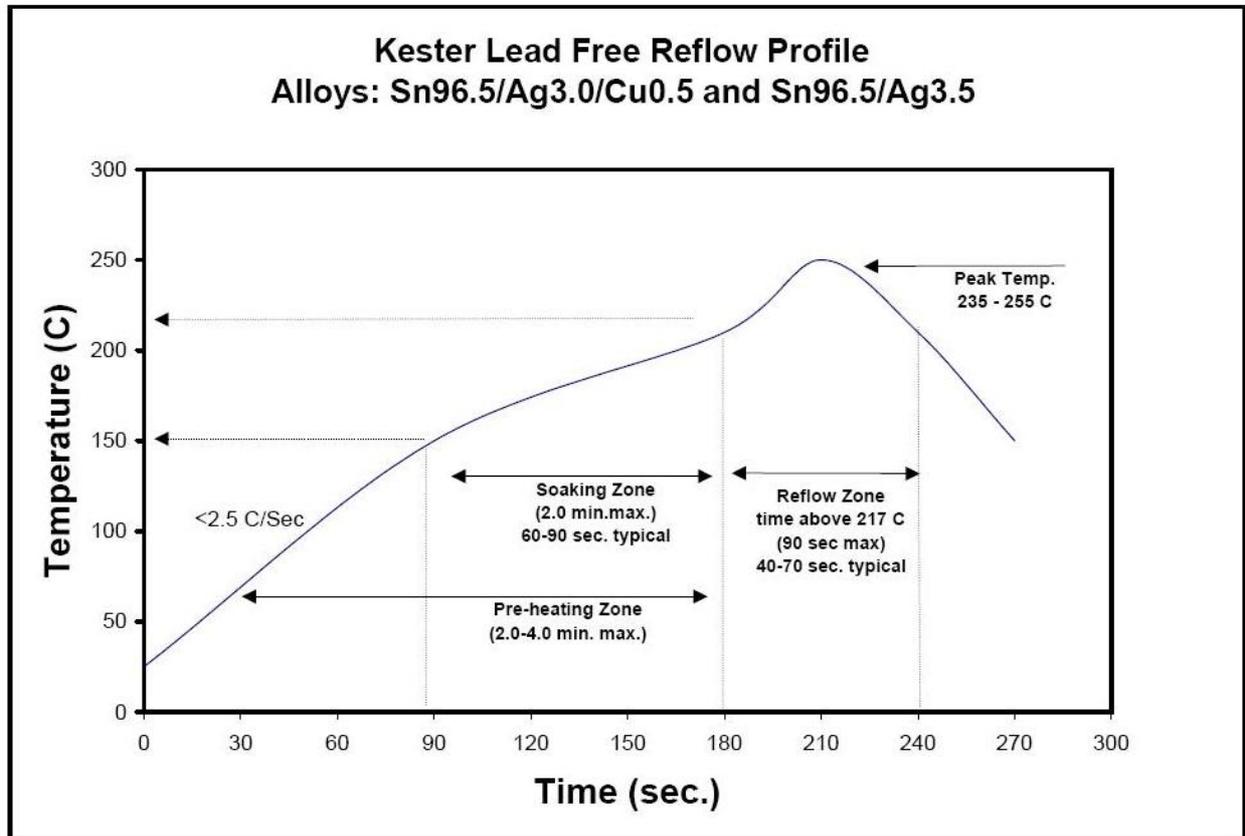
SCOPE
To perform the following tests: Design Qualification Test, Please see test plan

APPLICABLE DOCUMENTS
Standards: EIA Publication 364

TEST SAMPLES AND PREPARATION
1) All materials were manufactured in accordance with the applicable product specification.
2) All test samples were identified and encoded to maintain traceability throughout the test sequences.
3) After soldering, the parts to be used for LLCR and DWV/IR testing were cleaned according to TLWI-0001.
4) Either an automated cleaning procedure or an ultrasonic cleaning procedure may be used.
5) The automated procedure is used with aqueous compatible soldering materials.
6) Parts not intended for testing LLCR and DWV/IR are visually inspected and cleaned if necessary.
7) Any additional preparation will be noted in the individual test sequences.
8) Solder Information: Lead free
9) Re-Flow Time/Temp: See accompanying profile.
10) Samtec Test PCBs used: PCB-102618-TST\PCB-102622-TST

TYPICAL OVEN PROFILE (Soldering Parts to Test Boards)

Kester Lead Free Reflow Profile
Alloys: Sn96.5/Ag3.0/Cu0.5 and Sn96.5/Ag3.5

Peak Temp. 235 - 255 C

<2.5 C/Sec

Soaking Zone (2.0 min.max.) 60-90 sec. typical

Reflow Zone time above 217 C (90 sec max) 40-70 sec. typical

Pre-heating Zone (2.0-4.0 min. max.)

FLOWCHARTS

Gas Tight

TEST STEP	GROUP A1 192 Points 2.12mm thick edge card (Min)
01	LLCR-1
02	Gas Tight
03	LLCR-2

Gas Tight = EIA-364-36A

LLCR = EIA-364-23, LLCR

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

IR / DWV

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

* - DWV on group B to be performed at Test Voltage

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

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

      Time Condition 'B' (250 hours)

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

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

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

IR = EIA-364-21

DWV = EIA-364-20, Test Condition 1

FLOWCHARTS Continued

Mating/Unmating/Gaps/Normal Force/Deflection Force

TEST STEP	GROUP A1 10 Boards (largest position submitted) 2.12mm thick edge card (Min)	GROUP A2 10 Boards (largest position submitted) 2.60mm thick edge card (Max)	GROUP A3 6 Boards (middle position submitted) 2.36mm thick edge card (mid)	GROUP A4 6 Boards (largest position submitted) 2.36 mm thick edge card (mid)
01	Contact Gaps	Contact Gaps	Contact Gaps	Contact Gaps
02	Mating / Unmating	Mating / Unmating	Mating / Unmating	Mating / Unmating
03	25 Cycles	25 Cycles	25 Cycles	25 Cycles
04	Clean w/Compressed Air	Clean w/Compressed Air	Clean w/Compressed Air	Clean w/Compressed Air
05	Mating / Unmating	Mating / Unmating	Mating / Unmating	Mating / Unmating
06	25 Cycles (50 Total)	25 Cycles (50 Total)	25 Cycles (50 Total)	25 Cycles (50 Total)
07	Clean w/Compressed Air	Clean w/Compressed Air	Clean w/Compressed Air	Clean w/Compressed Air
08	Mating / Unmating	Mating / Unmating	Mating / Unmating	Mating / Unmating
09	25 Cycles (75 Total)	25 Cycles (75 Total)	25 Cycles (75 Total)	25 Cycles (75 Total)
10	Clean w/Compressed Air	Clean w/Compressed Air	Clean w/Compressed Air	Clean w/Compressed Air
11	Mating / Unmating	Mating / Unmating	Mating / Unmating	Mating / Unmating
12	25 Cycles (100 Total)	25 Cycles (100 Total)	25 Cycles (100 Total)	25 Cycles (100 Total)
13	Clean w/Compressed Air	Clean w/Compressed Air	Clean w/Compressed Air	Clean w/Compressed Air
14	Mating / Unmating	Mating / Unmating	Mating / Unmating	Mating / Unmating
15	Contact Gaps	Contact Gaps	Contact Gaps	Contact Gaps
16	Thermal Aging (Mated)	Thermal Aging (Mated)		
17	Mating / Unmating	Mating / Unmating		
18	Contact Gaps	Contact Gaps		
19	Cyclic Humidity (Mated)	Cyclic Humidity (Mated)		
20	Mating / Unmating	Mating / Unmating		

TEST STEP	GROUP B1 Individual Contacts (8-10 min) 2.60mm thick edge card (Max)	GROUP B2 Individual Contacts (8-10 min) 2.60mm thick edge card (Max)
01	Setup Approved	Setup Approved
02	Normal Force (in the body and soldered on PCB unless otherwise specified)	Thermal Aging (Mated)
03		Normal Force (in the body and soldered on PCB unless otherwise specified)

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

       Time Condition 'B' (250 Hours)

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

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

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

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

Normal Force = EIA-364-04

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

       Spec is 50 N @ 1 mm displacement

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

FLOWCHARTS Continued

Durability/Thermal Age/Cyclic Humidity

TEST STEP	GROUP A1 192 Points 100 Cycles 2.12mm thick edge card (Min)	GROUP A2 192 Points 100 Cycles 2.60mm thick edge card (Max)
01	LLCR-1	LLCR-1
02	100 Cycles	100 Cycles
03	Clean Mating Interface	Clean Mating Interface
04	LLCR-2	LLCR-2
05	Thermal Age (Mated and undisturbed)	Thermal Age (Mated and undisturbed)
06	LLCR-3	LLCR-3
07	Cyclic Humidity (Mated and undisturbed)	Cyclic Humidity (Mated and undisturbed)
08	LLCR-4	LLCR-4

Thermal Aging = EIA-364-17, Test Condition 4 (105°C)
Time Condition 'B' (250 Hours)
Humidity = EIA-364-31, Test Condition 'B' (240 Hours)
and Method III (+25°C to +65°C @ 90% RH to 98% RH)
ambient pre-condition and delete steps 7a and 7b
LLCR = EIA-364-23, LLCR
use Keithley 580 in the dry circuit mode, 10 mA Max

Current Carrying Capacity

Current Carrying Capacity   3 Mated Assemblies Each

DOUBLE ROW

TEST STEP	GROUP A 3 Mated Assembies 2 CONTACT POWERED	GROUP B 3 Mated Assembies 4 CONTACTS POWERED	GROUP C 3 Mated Assembies 6 CONTACTS POWERED	GROUP D 3 Mated Assembies 8 CONTACTS POWERED	GROUP E 3 Mated Assembies ALL CONTACTS POWERED
01	CCC	CCC	CCC	CCC	CCC

(TIN PLATING) - Tabulate calculated current at RT, 65° C, 75° C and 95° C
after derating 20% and based on 105° C
(GOLD PLATING) - Tabulate calculated current at RT, 85° C, 95° C and 115° C
after derating 20% and based on 125° C
CCC, Temp rise = EIA-364-70

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.

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

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

ATTRIBUTE DEFINITIONS
The following is a brief, simplified description of attributes.

TEMPERATURE RISE (Current Carrying Capacity, CCC):
1) EIA-364-70, *Temperature Rise versus Current Test Procedure for Electrical Connectors and Sockets*.
2) When current passes through a contact, the temperature of the contact increases as a result of I^2R (resistive) heating.
3) The number of contacts being investigated plays a significant part in power dissipation and therefore temperature rise.
4) The size of the temperature probe can affect the measured temperature.
5) Copper traces on PC boards will contribute to temperature rise:
   a. Self heating (resistive)
   b. Reduction in heat sink capacity affecting the heated contacts
6) A de-rating curve, usually 20%, is calculated.
7) Calculated de-rated currents at three temperature points are reported:
   a. Ambient
   b. 80° C
   c. 95° C
   d. 115° C
8) Typically, neighboring contacts (in close proximity to maximize heat build up) are energized.
9) The thermocouple (or temperature measuring probe) will be positioned at a location to sense the maximum temperature in the vicinity of the heat generation area.
10) A computer program, *TR 803.exe*, ensures accurate stability for data acquisition.
11) Hook-up wire cross section is larger than the cross section of any connector leads/PC board traces, jumpers, etc.
12) Hook-up wire length is longer than the minimum specified in the referencing standard.

INSULATION RESISTANCE (IR):
To determine the resistance of insulation materials to leakage of current through or on the surface of these materials when a DC potential is applied.
1) PROCEDURE:
   a. Reference document: EIA-364-21, *Insulation Resistance Test Procedure for Electrical Connectors*.
   b. Test Conditions:
      i. Between Adjacent Contacts or Signal-to-Ground
      ii. Electrification Time 2.0 minutes
      iii. Test Voltage (500 VDC) corresponds to calibration settings for measuring resistances.
2) MEASUREMENTS:
3) When the specified test voltage is applied (VDC), the insulation resistance shall not be less than 5000 megohms.

ATTRIBUTE DEFINITIONS
The following is a brief, simplified description of attributes

DIELECTRIC WITHSTANDING VOLTAGE (DWV):

To determine if the sockets can operate at its rated voltage and withstand momentary over potentials due to switching, surges, and other similar phenomenon. Separate samples are used to evaluate the effect of environmental stresses so not to influence the readings from arcing that occurs during the measurement process.

1) PROCEDURE:
   a. Reference document: EIA-364-20, *Withstanding Voltage Test Procedure for Electrical Connectors*.
   b. Test Conditions:
      i. Between Adjacent Contacts or Signal-to-Ground
      ii. Barometric Test Condition 1
      iii. Rate of Application 500 V/Sec
      iv. Test Voltage (VAC) until breakdown occurs
2) MEASUREMENTS/CALCULATIONS
   a. The breakdown voltage shall be measured and recorded.
   b. The dielectric withstanding voltage shall be recorded as 75% of the minimum breakdown voltage.
   c. The working voltage shall be recorded as one-third (1/3) of the dielectric withstanding voltage (one-fourth of the breakdown voltage).

LLCR:

1) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets*.
2) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
3) The following guidelines are used to categorize the changes in LLCR as a result from stressing
   a. <= +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

ATTRIBUTE DEFINITIONS
The following is a brief, simplified description of attributes.

GAS TIGHT:

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

1) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets.*
2) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
3) The following guidelines are used to categorize the changes in LLCR as a result from stressing
   a. <= +5.0 mOhms: --------------------------- Stable
   b. +5.1 to +10.0 mOhms: --------------------- Minor
   c. +10.1 to +15.0 mOhms: ------------------- Acceptable
   d. +15.1 to +50.0 mOhms: ------------------- Marginal
   e. +50.1 to +2000 mOhms: ------------------ Unstable
   f. >+2000 mOhms: --------------------------- Open Failure
4) Procedure:
   a. Reference document: EIA-364-36, *Test Procedure for Determination of Gas-Tight Characteristics for Electrical Connectors, Sockets and/or Contact Systems.*
   b. Test Conditions:
      i. Class II--- Mated pairs of contacts assembled to their plastic housings.
      ii. Reagent grade Nitric Acid shall be used of sufficient volume to saturate the test chamber
      iii. The ratio of the volume of the test chamber to the surface area of the acid shall be 10:1.
      iv. The chamber shall be saturated with the vapor for at least 15 minutes before samples are added.
      v. Exposure time, 55 to 65 minutes.
      vi. The samples shall be no closer to the chamber walls than 1 inches and no closer to the surface of the acid than 3 inches.
      vii. The samples shall be dried after exposure for a minimum of 1 hour.
      viii. Drying temperature 50° C
      ix. The final LLCR shall be conducted within 1 hour after drying.

RESULTS

Temperature Rise, CCC at a 20% de-rating
- **CCC for a 30°C Temperature Rise** ----------------------------3.5A per contact with 2 adjacent contacts powered
- **CCC for a 30°C Temperature Rise** ----------------------------2.8A per contact with 4 adjacent contacts powered
- **CCC for a 30°C Temperature Rise** ----------------------------2.5A per contact with 6 adjacent contacts powered
- **CCC for a 30°C Temperature Rise** ----------------------------2.4A per contact with 8 adjacent contacts powered
- **CCC for a 30°C Temperature Rise** ----------------------------1.3A per contact with all adjacent contacts powered

Contact Gaps
 MECF-50 pos   2.12 mm thick edge card (Min)
- **Initial**
  - **Min** -- 1.1011 mm
  - **Max** -- 1.2103 mm
- **After 100 Cycles**
  - **Min** -- 1.2355 mm
  - **Max** -- 1.3783 mm
- **After Thermal**
  - **Min** -- 1.3615 mm
  - **Max** -- 1.4928 mm

 MECF-50 pos   2.60 mm thick edge card (Max)
- **Initial**
  - **Min** -- 1.1041 mm
  - **Max** -- 1.2071 mm
- **After 100 Cycles**
  - **Min** -- 1.4476 mm
  - **Max** -- 1.6765 mm
- **After Thermal**
  - **Min** -- 1.6390 mm
  - **Max** -- 1.7196 mm

 MECF-20 pos   2.36mm thick edge card (Mid)
- **Initial**
  - **Min** -- 1.1967 mm
  - **Max** -- 1.3627 mm
- **After 100 Cycles**
  - **Min** -- 1.4494 mm
  - **Max** -- 1.5192 mm

 MECF-08 pos   2.36mm thick edge card (Mid)
- **Initial**
  - **Min** -- 1.2505 mm
  - **Max** -- 1.3326 mm
- **After 100 Cycles**
  - **Min** -- 1.4841 mm
  - **Max** -- 1.5438 mm

RESULTS Continued

Mating – Unmating Forces
MECF-50 pos   2.12 mm thick edge card (Min)

- **Initial**
  - **Mating**
    - **Min** --**12.40 Lbs**
    - **Max**--**13.35 Lbs**
  - **Unmating**
    - **Min** -- **2.22 Lbs**
    - **Max**-- **2.70 Lbs**
- **After 25 Cycles**
  - **Mating**
    - **Min** --**10.59 Lbs**
    - **Max**--**11.78 Lbs**
  - **Unmating**
    - **Min** -- **2.22 Lbs**
    - **Max**-- **2.58 Lbs**
- **After 50 Cycles**
  - **Mating**
    - **Min** --**10.62 Lbs**
    - **Max**--**11.83 Lbs**
  - **Unmating**
    - **Min** -- **2.26 Lbs**
    - **Max**-- **2.60 Lbs**
- **After 75 Cycles**
  - **Mating**
    - **Min** --**10.23 Lbs**
    - **Max**--**11.92 Lbs**
  - **Unmating**
    - **Min** -- **2.30 Lbs**
    - **Max**-- **2.68 Lbs**
- **After 100 Cycles**
  - **Mating**
    - **Min** --**10.64 Lbs**
    - **Max**--**11.57 Lbs**
  - **Unmating**
    - **Min** -- **2.33 Lbs**
    - **Max**-- **2.55 Lbs**
- **Thermal**
  - **Mating**
    - **Min** -- **8.28 Lbs**
    - **Max**-- **9.51 Lbs**
  - **Unmating**
    - **Min** -- **2.39 Lbs**
    - **Max**-- **2.84 Lbs**
- **Humidity**
  - **Mating**
    - **Min** -- **8.14 Lbs**
    - **Max**-- **8.94 Lbs**
  - **Unmating**
    - **Min** -- **2.35 Lbs**
    - **Max**-- **2.72 Lbs**

RESULTS Continued

Mating – Unmating Forces
MECF-50 pos   2.60 mm thick edge card (Max)

- **Initial**
  - **Mating**
    - **Min** ------------------------------------15.95 Lbs
    - **Max**-------------------------------------18.03 Lbs
  - **Unmating**
    - **Min** ------------------------------------ 3.73 Lbs
    - **Max**------------------------------------- 4.81 Lbs
- **After 25 Cycles**
  - **Mating**
    - **Min** ------------------------------------15.13 Lbs
    - **Max**-------------------------------------16.61 Lbs
  - **Unmating**
    - **Min** ------------------------------------ 3.16 Lbs
    - **Max**------------------------------------- 4.15 Lbs
- **After 50 Cycles**
  - **Mating**
    - **Min** ------------------------------------14.81 Lbs
    - **Max**-------------------------------------16.31 Lbs
  - **Unmating**
    - **Min** ------------------------------------ 3.25 Lbs
    - **Max**------------------------------------- 3.97 Lbs
- **After 75 Cycles**
  - **Mating**
    - **Min** ------------------------------------13.84 Lbs
    - **Max**-------------------------------------15.12 Lbs
  - **Unmating**
    - **Min** ------------------------------------ 3.43 Lbs
    - **Max**------------------------------------- 4.23 Lbs
- **After 100 Cycles**
  - **Mating**
    - **Min** ------------------------------------13.84 Lbs
    - **Max**-------------------------------------14.72 Lbs
  - **Unmating**
    - **Min** ------------------------------------ 3.06 Lbs
    - **Max**------------------------------------- 3.94 Lbs
- **Thermal**
  - **Mating**
    - **Min** ------------------------------------11.55 Lbs
    - **Max**-------------------------------------12.60 Lbs
  - **Unmating**
    - **Min** ------------------------------------ 3.15 Lbs
    - **Max**------------------------------------- 3.86 Lbs
- **Humidity**
  - **Mating**
    - **Min** ------------------------------------ 9.91 Lbs
    - **Max**-------------------------------------11.65 Lbs
  - **Unmating**
    - **Min** ------------------------------------ 3.04 Lbs
    - **Max**------------------------------------- 3.57 Lbs

RESULTS Continued

Mating – Unmating Forces
MECF-20 pos   2.36mm thick edge card (Mid)

- **Initial**
  - **Mating**
    - **Min** ------------------------------------- **4.85 Lbs**
    - **Max**------------------------------------- **5.49 Lbs**
  - **Unmating**
    - **Min** ------------------------------------- **1.26 Lbs**
    - **Max**------------------------------------- **1.50 Lbs**
- **After 25 Cycles**
  - **Mating**
    - **Min** ------------------------------------- **4.61 Lbs**
    - **Max**------------------------------------- **5.47 Lbs**
  - **Unmating**
    - **Min** ------------------------------------- **1.21 Lbs**
    - **Max**------------------------------------- **1.37 Lbs**
- **After 50 Cycles**
  - **Mating**
    - **Min** ------------------------------------- **5.36 Lbs**
    - **Max**------------------------------------- **5.84 Lbs**
  - **Unmating**
    - **Min** ------------------------------------- **1.28 Lbs**
    - **Max**------------------------------------- **1.41 Lbs**
- **After 75 Cycles**
  - **Mating**
    - **Min** ------------------------------------- **4.83 Lbs**
    - **Max**------------------------------------- **6.06 Lbs**
  - **Unmating**
    - **Min** ------------------------------------- **1.19 Lbs**
    - **Max**------------------------------------- **1.35 Lbs**
- **After 100 Cycles**
  - **Mating**
    - **Min** ------------------------------------- **4.28 Lbs**
    - **Max**------------------------------------- **5.18 Lbs**
  - **Unmating**
    - **Min** ------------------------------------- **1.15 Lbs**
    - **Max**------------------------------------- **1.23 Lbs**

RESULTS Continued

Mating – Unmating Forces
MECF-08 pos   2.36mm thick edge card (Mid)

- **Initial**
  - **Mating**
    - **Min** -------------------------------------- **1.61 Lbs**
    - **Max**-------------------------------------- **2.09 Lbs**
  - **Unmating**
    - **Min** -------------------------------------- **0.49 Lbs**
    - **Max**-------------------------------------- **0.60 Lbs**
- **After 25 Cycles**
  - **Mating**
    - **Min** -------------------------------------- **1.52 Lbs**
    - **Max**-------------------------------------- **1.87 Lbs**
  - **Unmating**
    - **Min** -------------------------------------- **0.42 Lbs**
    - **Max**-------------------------------------- **0.49 Lbs**
- **After 50 Cycles**
  - **Mating**
    - **Min** -------------------------------------- **1.39 Lbs**
    - **Max**-------------------------------------- **2.03 Lbs**
  - **Unmating**
    - **Min** -------------------------------------- **0.44 Lbs**
    - **Max**-------------------------------------- **0.51 Lbs**
- **After 75 Cycles**
  - **Mating**
    - **Min** -------------------------------------- **1.35 Lbs**
    - **Max**-------------------------------------- **1.98 Lbs**
  - **Unmating**
    - **Min** -------------------------------------- **0.40 Lbs**
    - **Max**-------------------------------------- **0.53 Lbs**
- **After 100 Cycles**
  - **Mating**
    - **Min** -------------------------------------- **1.35 Lbs**
    - **Max**-------------------------------------- **2.01 Lbs**
  - **Unmating**
    - **Min** -------------------------------------- **0.37 Lbs**
    - **Max**-------------------------------------- **0.49 Lbs**

RESULTS Continued

Normal Force at 0.68 mm deflection
- **Initial**
  - **Min** --**99.00 gf**   **Set ----- 0.0800 mm**
  - **Max** --- **102.00 gf**   **Set ----- 0.0900 mm**
- **Thermal**
  - **Min** --- **100.10 gf**   **Set ----- 0.0700 mm**
  - **Max** --- **105.14 gf**   **Set ----- 0.0900 mm**

Insulation Resistance minimums, IR
- **Initial**
  - **Mated** ---**10000Meg Ω** ----------------------- **Pass**
  - **Unmated** ---**10000Meg Ω** --------------------- **Pass**
- **Thermal**
  - **Mated** ---**10000Meg Ω** --------------------- **Pass**
  - **Unmated** ---**10000Meg Ω** --------------------- **Pass**
- **Humidity**
  - **Mated** ---**10000Meg Ω** --------------------- **Pass**
  - **Unmated** ---**10000Meg Ω** --------------------- **Pass**

Dielectric Withstanding Voltage minimums, DWV

> **Breakdown** ---------------------------------- **1120VAC**
> **DWV** ---**840VAC**
> **Working voltage** --------------------------------**280VAC**

> **Initial**   ----------------------------------**Passed**
> **Thermal**   ----------------------------------**Passed**
> **Humidity** ----------------------------------**Passed**

RESULTS Continued

LLCR Durability (192 LLCR test points)
MECF-50 pos   2.12 mm thick edge card (Min)
- **Initial** --**7.8mOhms Max**
- **Durability, 100 Cycles**
  - **<= +5.0 mOhms** ----------------------------------- **192 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** ----------------------------------- **189 Points** ----------------------- **Stable**
  - **+5.1 to +10.0 mOhms** ----------------------------------**3 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** ----------------------------------- **181 Points** ----------------------- **Stable**
  - **+5.1 to +10.0 mOhms** ----------------------------- **11 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 (192 LLCR test points)
MECF-50 pos   2.60 mm thick edge card (Max)
- **Initial** --**6.0mOhms Max**
- **Durability, 100 Cycles**
  - **<= +5.0 mOhms** ----------------------------------- **192 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** ----------------------------------- **192 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** ----------------------------------- **181 Points** ----------------------- **Stable**
  - **+5.1 to +10.0 mOhms** ----------------------------- **11 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**

RESULTS Continued

LLCR Gas Tight (192 LLCR test points)
- **Initial** --**6.2mOhms Max**
- **Gas-Tight**
  - **<= +5.0 mOhms** ----------------------------------- **192 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
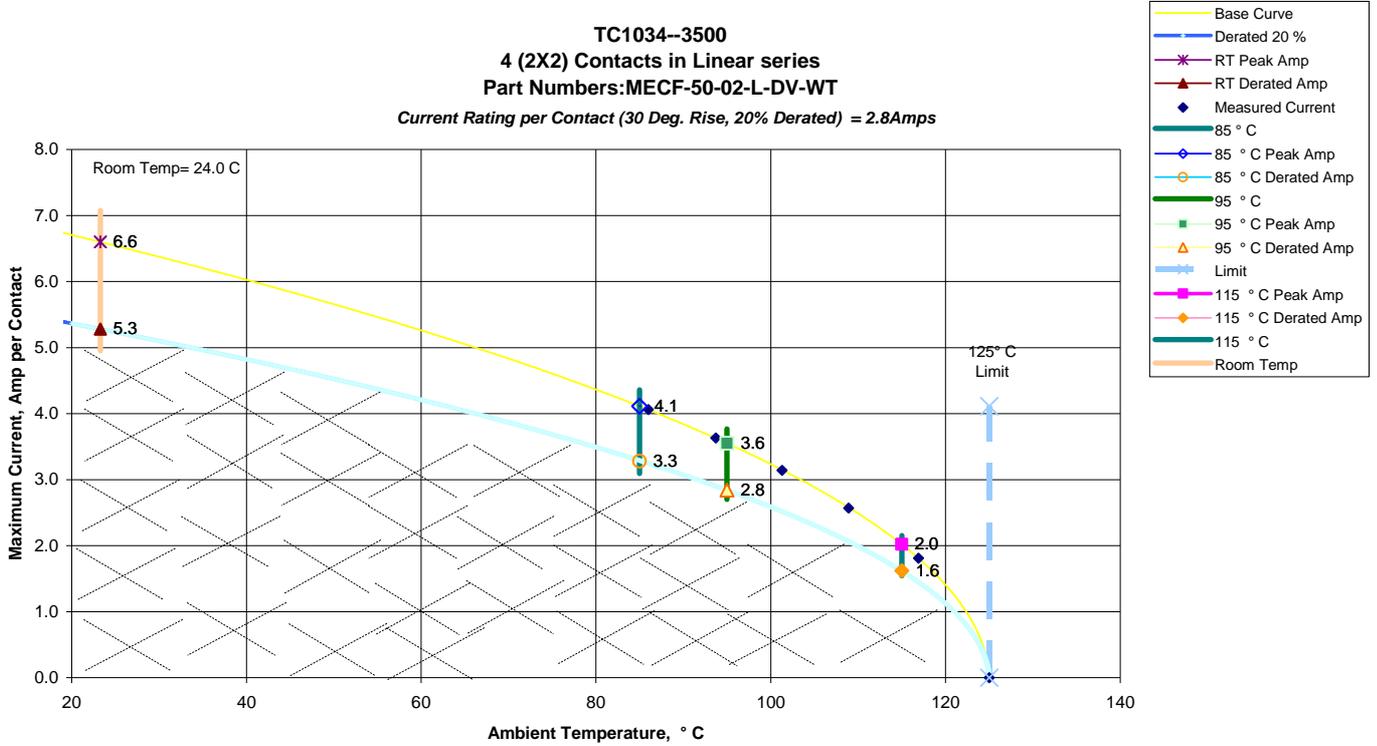
TEMPERATURE RISE (Current Carrying Capacity, CCC):

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

      a. Linear configuration with 2 adjacent conductors /contacts powered

TC1034--3500
2(2X1) Contacts in Linear series
Part Numbers: MECF-50-02-L-DV-WT
Current Rating per Contact (30 Deg. Rise, 20% Derated) = 3.5Amps
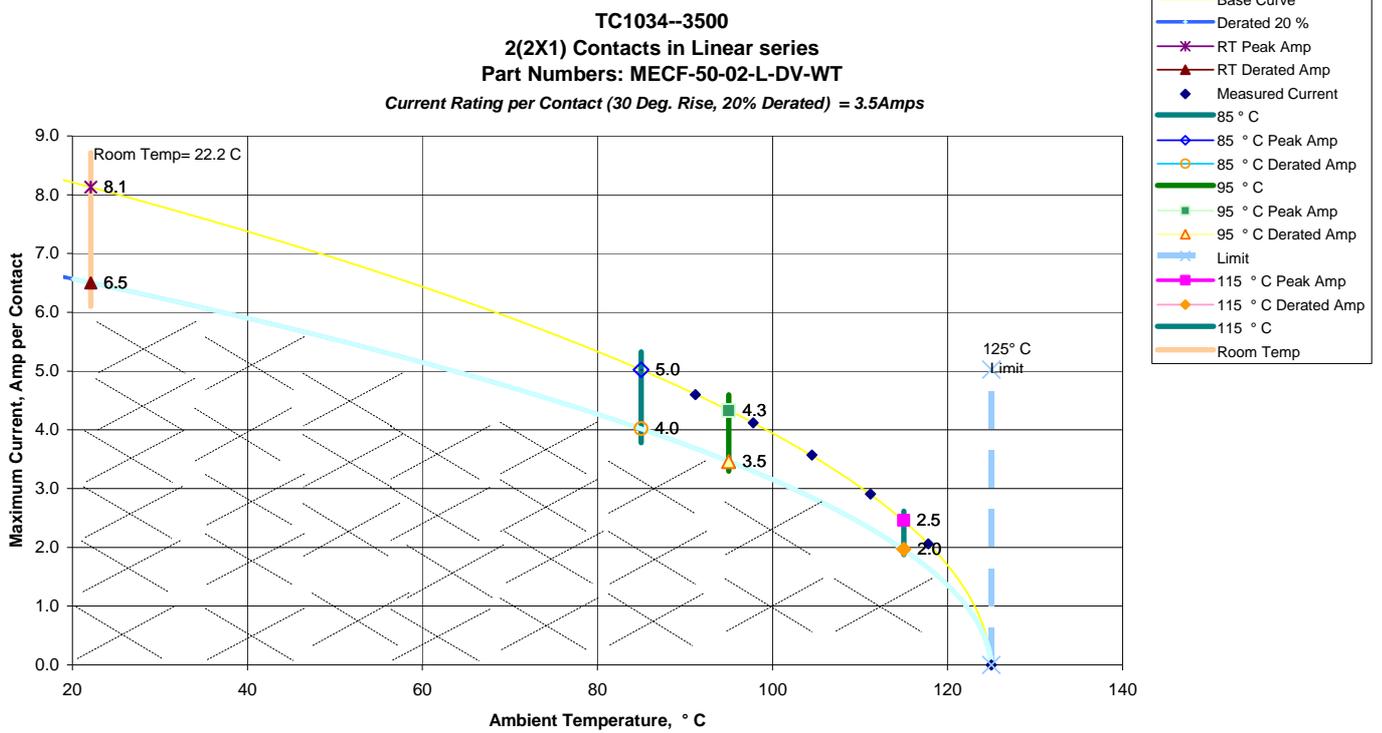
DATA SUMMARIES Continued

b.   Linear configuration with 4 adjacent conductors /contacts powered

TC1034--3500
4 (2X2) Contacts in Linear series
Part Numbers:MECF-50-02-L-DV-WT
Current Rating per Contact (30 Deg. Rise, 20% Derated) = 2.8Amps

DATA SUMMARIES Continued

c. Linear configuration with 6 adjacent conductors/contacts powered

TC1034--3500
6(2x3) Contacts in Linear series
Part Numbers: MECF-50-02-L-DV-WT
Current Rating per Contact (30 Deg. Rise, 20% Derated) = 2.5Amps

DATA SUMMARIES Continued

d. Linear configuration with 8 adjacent conductors/contacts powered

TC1034--3500
8(2X4) Contacts in Linear series
Part Numbers: MECF-50-02-L-DV-WT
Current Rating per Contact (30 Deg. Rise, 20% Derated) = 2.4Amps
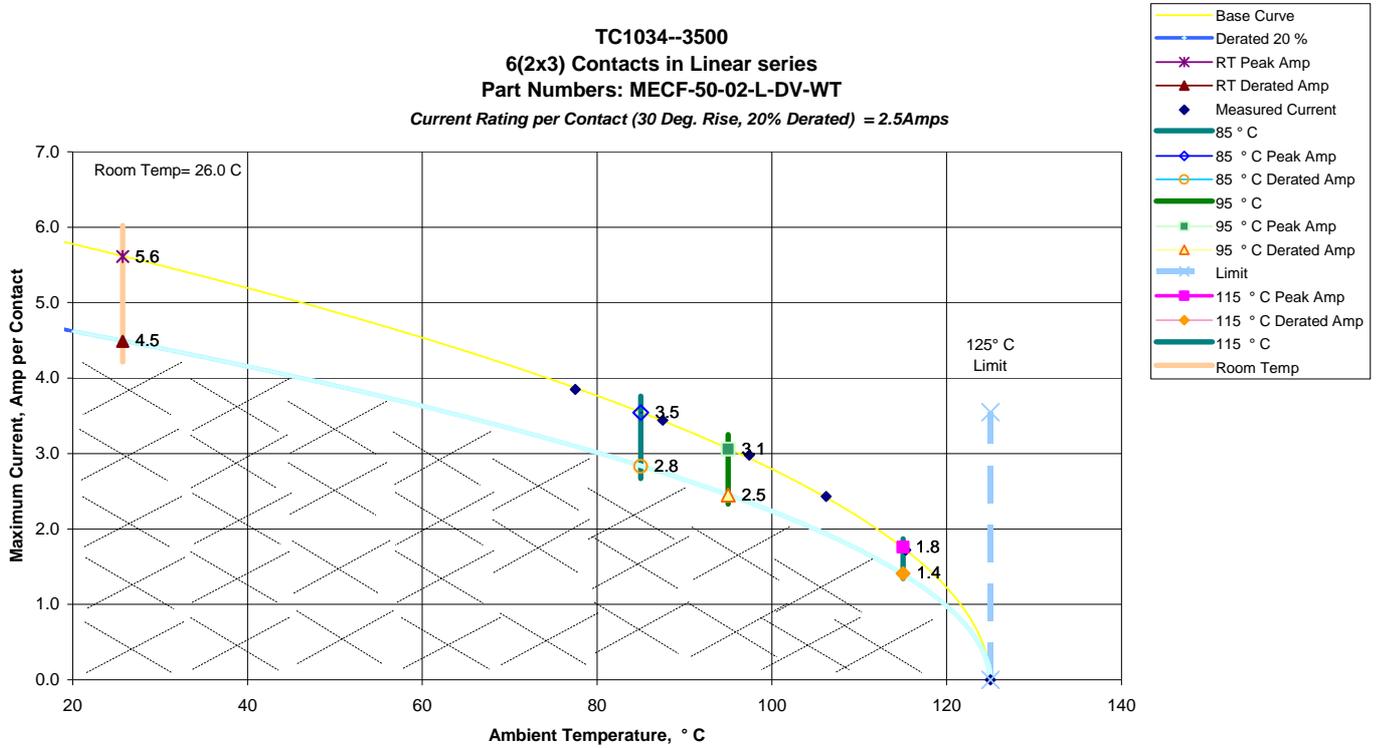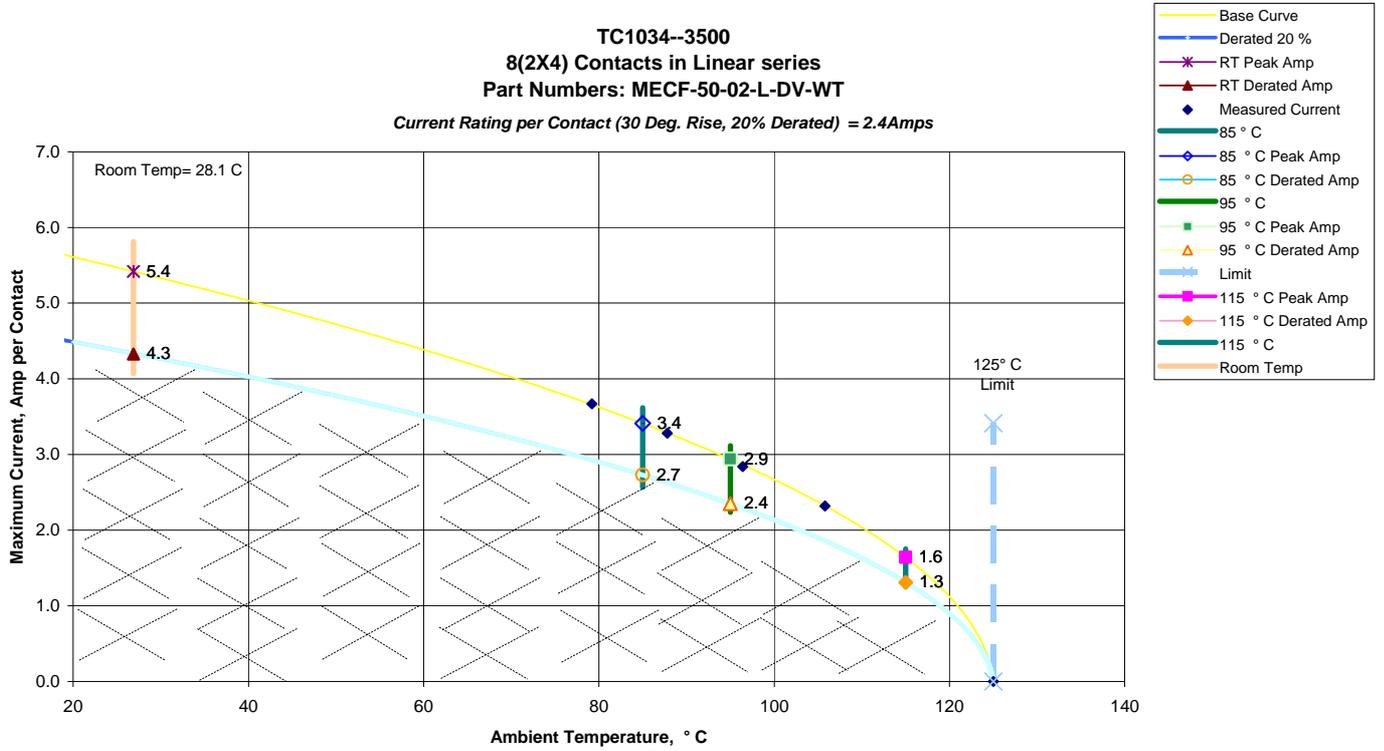
DATA SUMMARIES Continued

e. Linear configuration with all adjacent conductors/contacts powered

TC1034--3500
98(ALL) Contacts in Linear series
Part Numbers: MECF-50-02-L-DV-WT

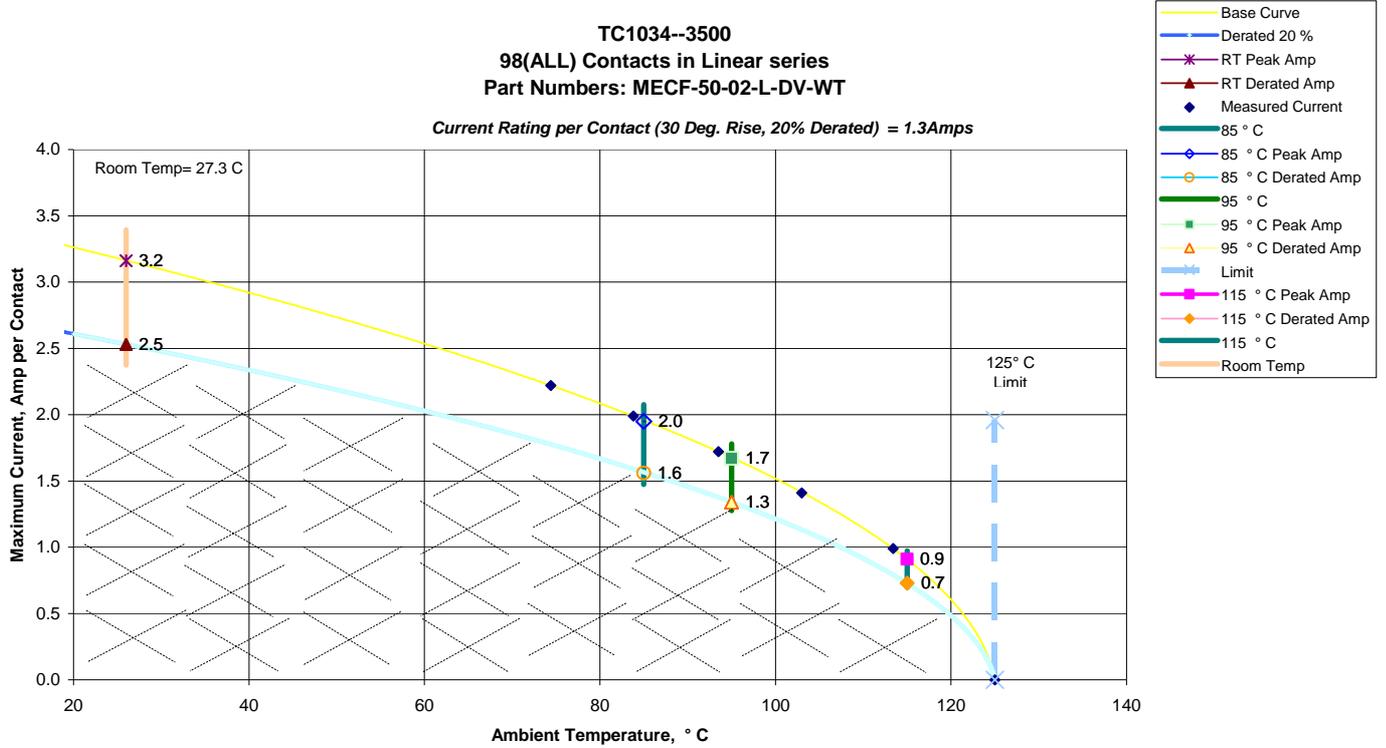*Current Rating per Contact (30 Deg. Rise, 20% Derated) = 1.3Amps*

DATA SUMMARIES Continued

CONTACT GAPS:

MECF-50 pos   2.12 mm thick edge card (Min)

Initial		After 100 Cycles		After Thermal	
Units:	mm	Units:	mm	Units:	mm
Minimum	1.1011	Minimum	1.2355	Minimum	1.3615
Maximum	1.2103	Maximum	1.3783	Maximum	1.4928
Average	1.1665	Average	1.2841	Average	1.4214
St. Dev.	0.0183	St. Dev.	0.0265	St. Dev.	0.0238
Count	490	Count	490	Count	490

MECF-50 pos   2.60 mm thick edge card (Max)

Initial		After 100 Cycles		After Thermal	
Units:	mm	Units:	mm	Units:	mm
Minimum	1.1041	Minimum	1.4476	Minimum	1.6390
Maximum	1.2071	Maximum	1.6765	Maximum	1.7196
Average	1.1655	Average	1.4982	Average	1.6822
St. Dev.	0.0177	St. Dev.	0.0240	St. Dev.	0.0163
Count	490	Count	490	Count	490

MECF-20 pos   2.36 mm thick edge card (Mid)

Initial		After 100 Cycles	
Units:	mm	Units:	mm
Minimum	1.1967	Minimum	1.4494
Maximum	1.3627	Maximum	1.5192
Average	1.2711	Average	1.4687
St. Dev.	0.1218	St. Dev.	0.1391
Count	114	Count	114

MECF-08 pos   2.36 mm thick edge card (Mid)

Initial		After 100 Cycles	
Units:	mm	Units:	mm
Minimum	1.2505	Minimum	1.4841
Maximum	1.3326	Maximum	1.5438
Average	1.2927	Average	1.5199
St. Dev.	0.0214	St. Dev.	0.0147
Count	42	Count	42

DATA SUMMARIES Continued

MATING/UNMATING

MECF-50 pos   2.12 mm thick edge card (Min)

	Initial				After 25 Cycles			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	55.16	12.40	9.87	2.22	47.10	10.59	9.87	2.22
Maximum	59.38	13.35	12.01	2.70	52.40	11.78	11.48	2.58
Average	57.96	**13.03**	11.04	**2.48**	49.67	**11.17**	10.85	**2.44**
St Dev	1.24	0.28	0.54	0.12	1.82	0.41	0.48	0.11
Count	10	10	10	10	10	10	10	10

	After 50 Cycles				After 75 Cycles			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	47.24	10.62	10.05	2.26	47.50	10.68	10.23	2.30
Maximum	52.62	11.83	11.56	2.60	52.09	11.71	11.92	2.68
Average	49.80	**11.20**	10.86	**2.44**	49.73	**11.18**	10.91	**2.45**
St Dev	1.89	0.42	0.46	0.10	1.56	0.35	0.52	0.12
Count	10	10	10	10	10	10	10	10

	After 100 Cycles				After Thermals			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	47.33	10.64	10.36	2.33	36.83	8.28	10.63	2.39
Maximum	51.46	11.57	11.34	2.55	42.30	9.51	12.63	2.84
Average	49.44	**11.11**	10.94	**2.46**	39.80	**8.95**	11.85	**2.66**
St Dev	1.65	0.37	0.31	0.07	2.26	0.51	0.67	0.15
Count	10	10	10	10	10	10	10	10

	After Humidity			
	Mating		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	36.21	8.14	10.45	2.35
Maximum	39.77	8.94	12.10	2.72
Average	37.83	**8.51**	11.39	**2.56**
St Dev	1.44	0.32	0.52	0.12
Count	10	10	10	10

DATA SUMMARIES Continued

MATING/UNMATING

MECF-50 pos   2.60 mm thick edge card (Max)

	Initial				After 25 Cycles			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	70.95	15.95	16.59	3.73	67.30	15.13	14.06	3.16
Maximum	80.20	18.03	21.39	4.81	73.88	16.61	18.46	4.15
Average	74.82	**16.82**	18.42	**4.14**	70.35	**15.82**	17.07	**3.84**
St Dev	2.73	0.61	1.41	0.32	1.91	0.43	1.32	0.30
Count	10	10	10	10	10	10	10	10

	After 50 Cycles				After 75 Cycles			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	65.87	14.81	14.46	3.25	61.56	13.84	15.26	3.43
Maximum	72.55	16.31	17.66	3.97	67.25	15.12	18.82	4.23
Average	68.90	**15.49**	16.44	**3.70**	64.37	**14.47**	16.87	**3.79**
St Dev	2.03	0.46	0.95	0.21	1.58	0.35	1.07	0.24
Count	10	10	10	10	10	10	10	10

	After 100 Cycles				After Thermals			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	61.56	13.84	13.61	3.06	51.37	11.55	14.01	3.15
Maximum	65.47	14.72	17.53	3.94	56.04	12.60	17.17	3.86
Average	63.35	**14.24**	16.16	**3.63**	53.32	**11.99**	15.47	**3.48**
St Dev	1.16	0.26	1.10	0.25	1.75	0.39	1.22	0.27
Count	10	10	10	10	10	10	10	10

	After Humidity			
	Mating		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	44.08	9.91	13.52	3.04
Maximum	51.82	11.65	15.88	3.57
Average	47.79	**10.75**	14.36	**3.23**
St Dev	2.44	0.55	0.90	0.20
Count	10	10	10	10

DATA SUMMARIES Continued

MATING/UNMATING

MECF-20 pos   2.36 mm thick edge card (Mid)

	Initial				After 25 Cycles			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	21.58	4.85	5.59	1.26	20.50	4.61	5.39	1.21
Maximum	24.42	5.49	6.67	1.50	24.32	5.47	6.08	1.37
Average	23.13	**5.20**	6.15	**1.38**	22.38	**5.03**	5.72	**1.29**
St Dev	1.00	0.22	0.42	0.09	1.50	0.34	0.25	0.06
Count	6	6	6	6	6	6	6	6

	After 50 Cycles				After 75 Cycles			
	Mating		**Unmating**		**Mating**		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	23.83	5.36	5.69	1.28	21.48	4.83	5.30	1.19
Maximum	25.99	5.84	6.28	1.41	26.97	6.06	5.98	1.35
Average	24.68	**5.55**	5.93	**1.33**	24.00	**5.39**	5.53	**1.24**
St Dev	0.72	0.16	0.21	0.05	1.90	0.43	0.25	0.06
Count	6	6	6	6	6	6	6	6

	After 100 Cycles			
	Mating		**Unmating**	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	19.03	4.28	5.10	1.15
Maximum	23.05	5.18	5.49	1.23
Average	20.55	**4.62**	5.36	**1.21**
St Dev	1.53	0.34	0.16	0.04
Count	6	6	6	6

DATA SUMMARIES Continued

MATING/UNMATING

MECF-08 pos   2.36 mm thick edge card (Mid)

	Initial				After 25 Cycles			
	Mating		**Unmating**		**Mating**		**Unmating**	
	newtons	Force (Lbs)	newtons	Force (Lbs)	newtons	Force (Lbs)	newtons	Force (Lbs)
Minimum	7.2	1.61	2.2	0.49	6.8	1.52	1.9	0.42
Maximum	9.3	2.09	2.65	0.60	8.34	1.87	2.16	0.49
Average	7.9	**1.8**	2.4	**0.5**	7.3	**1.7**	2.0	**0.4**

	After 50 Cycles				After 75 Cycles			
	Mating		**Unmating**		**Mating**		**Unmating**	
	newtons	Force (Lbs)	newtons	Force (Lbs)	newtons	Force (Lbs)	newtons	Force (Lbs)
Minimum	6.2	1.39	2.0	0.44	6.0	1.35	1.8	0.40
Maximum	9.03	2.03	2.26	0.51	8.83	1.98	2.35	0.53
Average	7.2	**1.6**	2.1	**0.5**	7.1	**1.6**	2.1	**0.5**

	After 100 Cycles			
	Mating		**Unmating**	
	newtons	Force (Lbs)	newtons	Force (Lbs)
Minimum	6.0	1.35	1.7	0.37
Maximum	8.93	2.01	2.16	0.49
Average	6.8	**1.5**	2.0	**0.4**

DATA SUMMARIES Continued

NORMAL FORCE (FOR CONTACTS TESTED IN THE HOUSING):
1) Calibrated force gauges are used along with computer controlled positioning equipment.
2) For Normal force 8-10 measurements are taken and the averages reported.

Initial	Deflections in mm Forces in Grams			
	0.340	**0.510**	**0.680**	**SET**
Averages	58.46	83.46	100.62	0.0823
Min	58.00	83.00	99.00	0.0800
Max	60.00	85.00	102.00	0.0900
St. Dev	0.66	0.66	0.87	0.0044
Count	13	13	13	13

Thermal	Deflections in mm, Forces in Grams			
	0.340	**0.510**	**0.680**	*SET*
Averages	58.44	83.99	102.14	0.0823
Min	56.80	81.70	100.10	0.0700
Max	59.70	86.00	105.14	0.0900
St. Dev	0.81	1.32	1.46	0.0056
Count	13	13	13	13

INSULATION RESISTANCE (IR):

	Pin to Pin		
	Mated	Unmated	Unmated
Minimum	MECF/Card	MECF	Card
Initial	10000	10000	Not Tested
Thermal	10000	10000	Not Tested
Humidity	10000	10000	Not Tested

DIELECTRIC WITHSTANDING VOLTAGE (DWV):

Voltage Rating Summary	
Minimum	MECF/Card
Break Down Voltage	1120
Test Voltage	840
Working Voltage	280

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

DATA SUMMARIES Continued

LLCR:

1) A total of 192 points were measured.
2) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets.*
3) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
4) The following guidelines are used to categorize the changes in LLCR as a result from stressing.
   - a. <= +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

Group A Mating card 2.12 mm

Date	Aug. 18 2010	Aug. 19 2010	Aug. 31 2010	Sep. 13 2010
Room Temp C	27	24	24	27
RH	66%	55%	53%	61%
Name	Kason He	Kason He	kason	Kason
mOhm values	**Actual Initial**	**Delta 100 Cycles**	**Delta Thermal**	**Delta Humidity**
Average	5.4	0.2	2.2	2.3
St. Dev.	0.5	0.8	1.3	1.6
Min	4.6	-2.3	-2.2	-1.8
Max	7.8	3.7	5.4	7.0
Count	192	192	192	192

How many samples are being tested? __8__

How many contacts are on each board? __24__

	Stable	Minor	Acceptable	Marginal	Unstable	Open
100 Cycles	192	0	0	0	0	0
Thermal	189	3	0	0	0	0
Humidity	181	11	0	0	0	0

DATA SUMMARIES Continued

Group B Mting card 2.60 mm

Date	Aug. 18 2010	Aug. 19 2010	Aug. 31 2010	Sep. 13 2010
Room Temp C	27	24	23	27
RH	66%	55%	55%	61%
Name	Kason He	Kason He	kason	Kason
mOhm values	Actual Initial	Delta 100 Cycles	Delta Thermal	Delta Humidity
Average	5.4	0.4	1.4	2.3
St. Dev.	0.2	0.6	1.1	1.5
Min	4.8	-0.5	-0.1	-0.5
Max	6.0	4.6	4.9	6.4
Count	192	192	192	192

How many samples are being tested?	__8__
How many contacts are on each board?	__24__

	Stable	Minor	Acceptable	Marginal	Unstable	Open
100 Cycles	192	0	0	0	0	0
Thermal	192	0	0	0	0	0
Humidity	181	11	0	0	0	0

DATA SUMMARIES Continued

GAS TIGHT:
1) A total of 192 points were measured.
2) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets.*
3) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
4) The following guidelines are used to categorize the changes in LLCR as a result from stressing.
   a. <= +5.0 mOhms: --------------------------- Stable
   b. +5.1 to +10.0 mOhms: --------------------- Minor
   c. +10.1 to +15.0 mOhms: ------------------- Acceptable
   d. +15.1 to +50.0 mOhms: ------------------- Marginal
   e. +50.1 to +2000 mOhms: ------------------ Unstable
   f. >+2000 mOhms: --------------------------- Open Failure

Date	Aug. 19 2010	Oct. 14 2010
Room Temp C	24	23
RH	55%	53%
Name	Kason He	Peter Chen
mOhm values	**Actual Initial**	**Delta Gas Tight**
Average	5.2	0.6
St. Dev.	0.3	0.7
Min	4.4	-0.6
Max	6.2	3.3
Count	192	192

How many samples are being tested?	**8**
How many contacts are on each board?	**24**

	Stable	Minor	Acceptable	Marginal	Unstable	Open
Gas Tight	192	0	0	0	0	0

DATA

INSULATION RESISTANCE (IR):

Initial Insulation Resistance
Measured In Meg Ohms

	Pin to Pin		
	Mated	**Unmated**	
	x	**x**	
Sample#	**MECF/Card**	**MECF**	**Card**
1	10000	10000	
2	10000	10000	

Thermal Insulation Resistance
Measured In Meg Ohms

	Pin to Pin		
	Mated	**Unmated**	
	x	**x**	
Sample#	**MECF/Card**	**MECF**	**Card**
1	10000	10000	
2	10000	10000	

Humidity Insulation Resistance
Measured In Meg Ohms

	Pin to Pin		
	Mated	**Unmated**	
	x	**x**	
Sample#	**MECF/Card**	**MECF**	**Card**
1	10000	10000	
2	10000	10000	

DATA Continued

DIELECTRIC WITHSTANDING VOLTAGE (DWV):

Initial Breakdown Voltage
Test Voltage *Until Breakdown Occurs*

Pin to Pin			
Mated		**Unmated**	
	x		
Sample#	**MECF/Card**	**MECF**	**Card**
1	1120	1120	✕
2	1120	1140	✕
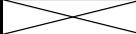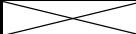
Initial DWV
Test Voltage= 840

Pin to Pin			
Mated		**Unmated**	
Sample#	**MECF/Card**	**MECF**	**Card**
1	840	840	✕
2	840	840	✕
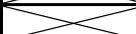
Thermal Test Voltage
Test Voltage= 840

Pin to Pin			
Mated		**Unmated**	
Sample#	**MECF/Card**	**MECF**	**Card**
1	840	840	✕
2	840	840	✕

Humidity Test Voltage
Test Voltage= 840

Pin to Pin			
Mated		**Unmated**	
Sample#	**MECF/Card**	**MECF**	**Card**
1	840	840	✕
2	840	840	✕

DATA Continued

CONTACT GAPS:

MECF-50 pos   2.12 mm thick edge card (Min)

Pos.#	Initial Units: mm									
	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
1	1.1249	1.1207	1.1011	1.1178	1.1070	1.1091	1.1041	1.1047	1.1181	1.1094
2	1.1618	1.1655	1.1565	1.1593	1.1692	1.1533	1.1670	1.1626	1.1566	1.1675
3	1.1803	1.1829	1.1812	1.1856	1.1838	1.1854	1.1801	1.1892	1.1830	1.1713
4	1.1792	1.1855	1.1826	1.1621	1.1810	1.1724	1.1617	1.1866	1.1862	1.1749
5	1.1614	1.1639	1.1704	1.1562	1.1608	1.1556	1.1543	1.1850	1.1662	1.1533
6	1.1656	1.1706	1.1806	1.1622	1.1671	1.1675	1.1728	1.1702	1.1744	1.1736
7	1.1701	1.1647	1.1663	1.1597	1.1568	1.1617	1.1666	1.1689	1.1649	1.1607
8	1.1744	1.1623	1.1810	1.1629	1.1672	1.1576	1.1675	1.1712	1.1727	1.1578
9	1.1739	1.1695	1.1678	1.1576	1.1549	1.1593	1.1665	1.1700	1.1671	1.1774
10	1.1775	1.1868	1.1867	1.1599	1.1692	1.1678	1.1730	1.1770	1.1854	1.1684
11	1.1890	1.1869	1.1768	1.1706	1.1692	1.1637	1.1773	1.1682	1.1848	1.1732
12	1.1847	1.1808	1.1925	1.1820	1.1745	1.1650	1.1753	1.1852	1.1810	1.1683
13	1.1902	1.1834	1.1902	1.1821	1.1786	1.1740	1.1881	1.1895	1.1890	1.1765
14	1.1767	1.1787	1.1911	1.1698	1.1768	1.1680	1.1803	1.1830	1.2004	1.1716
15	1.1819	1.1862	1.1889	1.1774	1.1875	1.1757	1.1788	1.1843	1.1990	1.1834
16	1.1892	1.1878	1.1954	1.1840	1.1993	1.1800	1.1868	1.1750	1.1952	1.1795
17	1.1895	1.1813	1.1741	1.1839	1.1787	1.1620	1.1815	1.1809	1.1804	1.1739
18	1.1892	1.1870	1.1928	1.1835	1.1741	1.1706	1.1954	1.1869	1.1923	1.1808
19	1.1912	1.2068	1.2040	1.1953	1.1988	1.1938	1.1990	1.2098	1.2061	1.1965
20	1.2000	1.2083	1.2103	1.2006	1.2096	1.2038	1.1985	1.2090	1.2037	1.1986
21	1.1535	1.1473	1.1549	1.1354	1.1340	1.1457	1.1303	1.1314	1.1486	1.1317
22	1.1732	1.1691	1.1804	1.1765	1.1787	1.1690	1.1725	1.1762	1.1843	1.1694
23	1.1770	1.1685	1.1835	1.1748	1.1880	1.1762	1.1822	1.1942	1.1761	1.1748
24	1.1734	1.1679	1.1726	1.1720	1.1652	1.1482	1.1727	1.1648	1.1688	1.1627
25	1.1413	1.1446	1.1507	1.1414	1.1566	1.1353	1.1551	1.1613	1.1648	1.1468
26	1.1460	1.1554	1.1422	1.1555	1.1626	1.1453	1.1580	1.1512	1.1626	1.1502
27	1.1543	1.1705	1.1624	1.1507	1.1666	1.1542	1.1596	1.1574	1.1742	1.1569
28	1.1479	1.1538	1.1466	1.1554	1.1504	1.1454	1.1446	1.1486	1.1573	1.1306
29	1.1437	1.1546	1.1503	1.1541	1.1539	1.1485	1.1492	1.1521	1.1682	1.1473
30	1.1522	1.1526	1.1468	1.1603	1.1589	1.1418	1.1402	1.1541	1.1643	1.1541
31	1.1393	1.1403	1.1446	1.1433	1.1415	1.1312	1.1380	1.1464	1.1490	1.1361
32	1.1416	1.1470	1.1551	1.1518	1.1554	1.1388	1.1333	1.1487	1.1564	1.1374
33	1.1453	1.1426	1.1544	1.1417	1.1489	1.1511	1.1367	1.1449	1.1511	1.1339
34	1.1409	1.1423	1.1431	1.1537	1.1448	1.1433	1.1408	1.1502	1.1454	1.1530
35	1.1512	1.1447	1.1563	1.1467	1.1389	1.1429	1.1422	1.1543	1.1550	1.1427
36	1.1611	1.1526	1.1582	1.1670	1.1525	1.1657	1.1574	1.1722	1.1548	1.1530
37	1.1501	1.1569	1.1534	1.1639	1.1524	1.1595	1.1584	1.1694	1.1579	1.1418
38	1.1628	1.1794	1.1701	1.1715	1.1621	1.1714	1.1716	1.1865	1.1637	1.1594
39	1.1614	1.1704	1.1691	1.1637	1.1655	1.1672	1.1571	1.1760	1.1679	1.1634
40	1.1585	1.1666	1.1649	1.1745	1.1615	1.1640	1.1600	1.1815	1.1575	1.1535
41	1.1769	1.1721	1.1740	1.1715	1.1736	1.1819	1.1694	1.1829	1.1763	1.1758
42	1.1610	1.1722	1.1661	1.1750	1.1646	1.1792	1.1609	1.1792	1.1660	1.1687
43	1.1545	1.1702	1.1734	1.1800	1.1724	1.1748	1.1617	1.1790	1.1748	1.1683

44	1.1626	1.1626	1.1581	1.1650	1.1508	1.1661	1.1525	1.1653	1.1600	1.1545
45	1.1464	1.1571	1.1533	1.1553	1.1636	1.1690	1.1407	1.1596	1.1681	1.1562
46	1.1418	1.1610	1.1624	1.1745	1.1651	1.1701	1.1570	1.1675	1.1681	1.1647
47	1.1727	1.1840	1.1798	1.1766	1.1772	1.1879	1.1857	1.1952	1.2036	1.1845
48	1.1701	1.1714	1.1593	1.1772	1.1747	1.1727	1.1736	1.1753	1.1820	1.1689
49	1.1894	1.2010	1.1654	1.1889	1.1755	1.2042	1.1982	1.1751	1.1891	1.2093

After 100 Cycles

Units: mm

Pos.#	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
1	1.287	1.376	1.315	1.302	1.330	1.349	1.306	1.311	1.346	1.308
2	1.308	1.378	1.317	1.311	1.337	1.357	1.318	1.326	1.359	1.335
3	1.305	1.370	1.319	1.323	1.331	1.355	1.304	1.322	1.357	1.322
4	1.297	1.360	1.308	1.311	1.310	1.350	1.305	1.311	1.342	1.314
5	1.270	1.339	1.298	1.299	1.304	1.325	1.285	1.298	1.325	1.292
6	1.282	1.335	1.298	1.295	1.297	1.319	1.286	1.287	1.325	1.288
7	1.266	1.317	1.293	1.284	1.287	1.318	1.282	1.279	1.315	1.286
8	1.269	1.314	1.286	1.276	1.278	1.301	1.289	1.273	1.297	1.278
9	1.263	1.296	1.281	1.284	1.294	1.305	1.273	1.263	1.304	1.271
10	1.266	1.307	1.280	1.278	1.285	1.300	1.272	1.270	1.296	1.277
11	1.267	1.303	1.284	1.276	1.284	1.297	1.275	1.254	1.296	1.275
12	1.265	1.304	1.279	1.283	1.273	1.290	1.272	1.257	1.290	1.277
13	1.267	1.305	1.293	1.298	1.278	1.287	1.273	1.268	1.296	1.296
14	1.264	1.291	1.285	1.297	1.274	1.277	1.279	1.266	1.289	1.280
15	1.274	1.296	1.282	1.287	1.282	1.290	1.280	1.266	1.283	1.283
16	1.278	1.288	1.283	1.283	1.278	1.283	1.271	1.264	1.289	1.288
17	1.262	1.286	1.280	1.281	1.278	1.280	1.268	1.264	1.290	1.280
18	1.258	1.290	1.279	1.283	1.282	1.276	1.273	1.266	1.290	1.289
19	1.286	1.302	1.301	1.296	1.296	1.295	1.286	1.280	1.309	1.304
20	1.289	1.308	1.304	1.296	1.304	1.307	1.291	1.283	1.299	1.314
21	1.255	1.272	1.266	1.282	1.256	1.267	1.259	1.246	1.269	1.268
22	1.256	1.281	1.271	1.280	1.273	1.287	1.269	1.251	1.277	1.284
23	1.259	1.281	1.270	1.289	1.269	1.284	1.274	1.259	1.272	1.280
24	1.256	1.270	1.264	1.274	1.253	1.281	1.267	1.261	1.279	1.279
25	1.241	1.254	1.248	1.262	1.248	1.272	1.257	1.249	1.263	1.263
26	1.248	1.251	1.261	1.258	1.246	1.274	1.254	1.247	1.262	1.270
27	1.249	1.249	1.266	1.265	1.251	1.274	1.265	1.258	1.263	1.267
28	1.240	1.244	1.263	1.260	1.260	1.275	1.252	1.250	1.264	1.268
29	1.249	1.246	1.260	1.264	1.249	1.277	1.257	1.246	1.258	1.265
30	1.244	1.247	1.265	1.261	1.253	1.277	1.260	1.256	1.259	1.264
31	1.236	1.239	1.259	1.264	1.244	1.275	1.255	1.251	1.255	1.258
32	1.236	1.237	1.273	1.263	1.254	1.274	1.270	1.260	1.262	1.262
33	1.237	1.239	1.263	1.259	1.246	1.279	1.263	1.258	1.258	1.254
34	1.237	1.243	1.263	1.269	1.253	1.284	1.260	1.259	1.256	1.257
35	1.245	1.244	1.263	1.261	1.251	1.278	1.262	1.255	1.261	1.263
36	1.246	1.260	1.285	1.276	1.261	1.294	1.264	1.278	1.265	1.268
37	1.251	1.256	1.276	1.272	1.255	1.288	1.266	1.279	1.261	1.271
38	1.253	1.281	1.288	1.285	1.270	1.310	1.276	1.288	1.267	1.286
39	1.261	1.277	1.291	1.280	1.268	1.305	1.270	1.283	1.271	1.277
40	1.262	1.273	1.294	1.287	1.261	1.309	1.274	1.291	1.265	1.276

Pos.#										
41	1.272	1.283	1.296	1.282	1.269	1.318	1.277	1.288	1.270	1.282
42	1.270	1.289	1.302	1.293	1.271	1.319	1.290	1.300	1.279	1.284
43	1.267	1.289	1.300	1.289	1.277	1.316	1.292	1.303	1.276	1.286
44	1.276	1.292	1.306	1.286	1.273	1.312	1.288	1.304	1.274	1.286
45	1.274	1.293	1.316	1.290	1.275	1.316	1.295	1.300	1.281	1.285
46	1.288	1.302	1.321	1.301	1.274	1.322	1.300	1.307	1.280	1.303
47	1.307	1.320	1.336	1.319	1.294	1.337	1.328	1.323	1.296	1.319
48	1.320	1.345	1.349	1.333	1.301	1.337	1.345	1.319	1.312	1.341
49	1.341	1.336	1.363	1.343	1.310	1.354	1.354	1.336	1.341	1.363

After Thermal

Units: mm

Pos.#	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
1	1.4153	1.4912	1.4405	1.4177	1.4401	1.4705	1.4239	1.4405	1.4673	1.4316
2	1.4449	1.4910	1.4578	1.4417	1.4647	1.4914	1.4330	1.4671	1.4928	1.4646
3	1.4312	1.4865	1.4619	1.4488	1.4557	1.4904	1.4388	1.4598	1.4804	1.4637
4	1.4307	1.4916	1.4598	1.4425	1.4497	1.4838	1.4381	1.4592	1.4769	1.4511
5	1.4144	1.4722	1.4455	1.4241	1.4390	1.4648	1.4180	1.4480	1.4672	1.4382
6	1.4230	1.4704	1.4464	1.4260	1.4366	1.4764	1.4262	1.4443	1.4717	1.4394
7	1.4088	1.4513	1.4474	1.4218	1.4331	1.4553	1.4176	1.4375	1.4587	1.4330
8	1.4043	1.4546	1.4443	1.4134	1.4200	1.4542	1.4131	1.4288	1.4468	1.4279
9	1.3981	1.4359	1.4362	1.4147	1.4328	1.4411	1.4071	1.4214	1.4581	1.4187
10	1.4126	1.4439	1.4341	1.4088	1.4084	1.4411	1.4022	1.4222	1.4519	1.4213
11	1.4083	1.4386	1.4322	1.4095	1.4118	1.4395	1.4035	1.4191	1.4492	1.4272
12	1.4090	1.4413	1.4300	1.4094	1.4021	1.4335	1.4078	1.4147	1.4482	1.4289
13	1.4043	1.4382	1.4285	1.4201	1.4050	1.4295	1.4086	1.4172	1.4459	1.4353
14	1.4062	1.4353	1.4298	1.4170	1.4007	1.4262	1.4022	1.4190	1.4457	1.4210
15	1.4105	1.4312	1.4261	1.4213	1.4235	1.4147	1.4027	1.4179	1.4403	1.4271
16	1.4128	1.4300	1.4255	1.4080	1.3963	1.4257	1.3993	1.4085	1.4398	1.4295
17	1.3954	1.4174	1.4165	1.4010	1.4090	1.4111	1.3889	1.4038	1.4276	1.4111
18	1.3998	1.4295	1.4129	1.3955	1.3965	1.4118	1.3855	1.4003	1.4321	1.4178
19	1.4080	1.4267	1.4243	1.4073	1.4141	1.4183	1.3964	1.4092	1.4251	1.4230
20	1.4160	1.4267	1.4216	1.4047	1.4239	1.4085	1.3931	1.3958	1.4180	1.4228
21	1.3852	1.3945	1.3821	1.3878	1.3853	1.3872	1.3615	1.3640	1.3916	1.3863
22	1.3898	1.4051	1.4048	1.3924	1.3938	1.4007	1.3790	1.3838	1.4082	1.4028
23	1.3936	1.4085	1.4058	1.4084	1.3955	1.4108	1.3945	1.3869	1.4133	1.4104
24	1.3962	1.4090	1.4047	1.4046	1.3891	1.4077	1.3965	1.3871	1.4198	1.4084
25	1.3894	1.3862	1.3933	1.3889	1.3843	1.4004	1.3858	1.3899	1.4029	1.3966
26	1.3930	1.4054	1.4005	1.3910	1.3870	1.4082	1.3884	1.3863	1.4115	1.3999
27	1.3974	1.4017	1.4061	1.3992	1.4001	1.4031	1.3984	1.3932	1.4218	1.4013
28	1.3984	1.4025	1.4072	1.3956	1.3966	1.4022	1.3874	1.3887	1.4181	1.4093
29	1.3927	1.3959	1.4121	1.3982	1.3980	1.4055	1.3928	1.3824	1.4180	1.4111
30	1.4045	1.3992	1.4061	1.3883	1.4010	1.4087	1.3949	1.3859	1.4212	1.4108
31	1.3913	1.3938	1.4006	1.4021	1.3910	1.4068	1.3944	1.3824	1.4143	1.4107
32	1.3892	1.3918	1.4075	1.4038	1.4006	1.4006	1.4058	1.3937	1.4237	1.4140
33	1.3930	1.3932	1.3937	1.4030	1.3962	1.4091	1.3996	1.3866	1.4095	1.4126
34	1.3943	1.3980	1.4131	1.4065	1.4035	1.4086	1.3964	1.3910	1.4167	1.4100
35	1.3978	1.3989	1.3963	1.4056	1.4085	1.4040	1.4005	1.3876	1.4241	1.4091
36	1.4073	1.4138	1.4262	1.4266	1.4144	1.4243	1.4047	1.4062	1.4214	1.4255
37	1.3936	1.4059	1.4128	1.4224	1.4031	1.4123	1.3950	1.4077	1.4180	1.4228

38	1.4074	1.4304	1.4205	1.4283	1.4237	1.4345	1.4171	1.4087	1.4280	1.4344
39	1.4192	1.4204	1.4236	1.4180	1.4113	1.4297	1.4159	1.4081	1.4205	1.4257
40	1.4200	1.4260	1.4257	1.4320	1.4049	1.4328	1.4176	1.4156	1.4132	1.4337
41	1.4252	1.4192	1.4272	1.4298	1.4101	1.4365	1.4157	1.4159	1.4160	1.4357
42	1.4296	1.4374	1.4375	1.4398	1.4199	1.4406	1.4416	1.4330	1.4277	1.4365
43	1.4223	1.4251	1.4353	1.4326	1.4145	1.4399	1.4237	1.4159	1.4329	1.4364
44	1.4303	1.4219	1.4375	1.4392	1.4130	1.4371	1.4332	1.4261	1.4286	1.4415
45	1.4221	1.4284	1.4487	1.4388	1.4251	1.4489	1.4413	1.4233	1.4357	1.4411
46	1.4401	1.4384	1.4573	1.4349	1.4268	1.4435	1.4446	1.4252	1.4413	1.4554
47	1.4521	1.4474	1.4648	1.4470	1.4347	1.4607	1.4592	1.4351	1.4512	1.4664
48	1.4566	1.4523	1.4742	1.4604	1.4368	1.4587	1.4730	1.4372	1.4548	1.4739
49	1.4616	1.4642	1.4743	1.4582	1.4326	1.4652	1.4711	1.4460	1.4676	1.4737

CONTACT GAPS:

MECF-50 pos   2.60 mm thick edge card (Max)

Pos.#	Initial									
	Units: mm									
	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
1	1.1057	1.1070	1.1050	1.1141	1.1093	1.1209	1.1110	1.1041	1.1201	1.1062
2	1.1649	1.1593	1.1480	1.1751	1.1693	1.1670	1.1621	1.1707	1.1699	1.1730
3	1.1803	1.1797	1.1752	1.2057	1.1873	1.1746	1.1683	1.1757	1.1896	1.1774
4	1.1788	1.1861	1.1681	1.1786	1.1717	1.1802	1.1760	1.1734	1.1793	1.1731
5	1.1506	1.1628	1.1516	1.1730	1.1728	1.1461	1.1654	1.1688	1.1613	1.1589
6	1.1695	1.1749	1.1660	1.1803	1.1661	1.1651	1.1688	1.1658	1.1748	1.1685
7	1.1539	1.1553	1.1716	1.1649	1.1659	1.1599	1.1693	1.1596	1.1654	1.1669
8	1.1621	1.1704	1.1611	1.1647	1.1644	1.1626	1.1820	1.1670	1.1565	1.1728
9	1.1650	1.1661	1.1639	1.1708	1.1799	1.1691	1.1699	1.1575	1.1670	1.1636
10	1.1713	1.1788	1.1702	1.1787	1.1764	1.1741	1.1660	1.1769	1.1734	1.1733
11	1.1767	1.1813	1.1746	1.1734	1.1755	1.1865	1.1754	1.1668	1.1756	1.1707
12	1.1720	1.1889	1.1853	1.1863	1.1799	1.1785	1.1746	1.1739	1.1761	1.1772
13	1.1774	1.1944	1.1913	1.2010	1.1789	1.1831	1.1961	1.1815	1.1903	1.2008
14	1.1730	1.1818	1.1838	1.2008	1.1837	1.1712	1.1857	1.1835	1.1797	1.1832
15	1.1910	1.1810	1.1797	1.1914	1.1825	1.1721	1.1842	1.1820	1.1740	1.1836
16	1.1904	1.1763	1.1854	1.1881	1.1777	1.1780	1.1732	1.1796	1.1864	1.1874
17	1.1728	1.1718	1.1783	1.1817	1.1777	1.1672	1.1732	1.1798	1.1781	1.1774
18	1.1724	1.1914	1.1778	1.1824	1.1892	1.1672	1.1834	1.1796	1.1839	1.1851
19	1.1978	1.2028	1.2021	1.2064	1.1985	1.1808	1.2036	1.1913	1.1934	1.1976
20	1.2000	1.2054	1.2033	1.2049	1.2071	1.1939	1.2065	1.1967	1.1931	1.2029
21	1.1455	1.1411	1.1489	1.1630	1.1441	1.1201	1.1432	1.1375	1.1410	1.1309
22	1.1685	1.1730	1.1711	1.1748	1.1777	1.1680	1.1765	1.1683	1.1651	1.1759
23	1.1694	1.1800	1.1673	1.1916	1.1735	1.1663	1.1842	1.1729	1.1734	1.1712
24	1.1660	1.1614	1.1583	1.1743	1.1432	1.1607	1.1700	1.1680	1.1730	1.1685
25	1.1448	1.1459	1.1440	1.1493	1.1410	1.1409	1.1547	1.1512	1.1527	1.1455
26	1.1539	1.1530	1.1574	1.1460	1.1408	1.1468	1.1498	1.1449	1.1472	1.1550
27	1.1585	1.1547	1.1623	1.1534	1.1520	1.1547	1.1698	1.1583	1.1649	1.1571
28	1.1402	1.1502	1.1558	1.1481	1.1605	1.1439	1.1474	1.1537	1.1542	1.1569
29	1.1499	1.1584	1.1495	1.1483	1.1457	1.1531	1.1562	1.1401	1.1572	1.1540
30	1.1526	1.1554	1.1523	1.1459	1.1513	1.1585	1.1577	1.1511	1.1523	1.1510
31	1.1339	1.1365	1.1491	1.1481	1.1407	1.1456	1.1474	1.1431	1.1452	1.1482

32	1.1362	1.1355	1.1514	1.1473	1.1549	1.1440	1.1692	1.1476	1.1502	1.1445
33	1.1380	1.1406	1.1476	1.1525	1.1425	1.1567	1.1633	1.1426	1.1453	1.1399
34	1.1291	1.1412	1.1408	1.1511	1.1446	1.1587	1.1487	1.1410	1.1390	1.1371
35	1.1398	1.1438	1.1398	1.1512	1.1473	1.1545	1.1503	1.1379	1.1466	1.1513
36	1.1434	1.1596	1.1671	1.1674	1.1602	1.1705	1.1537	1.1653	1.1512	1.1493
37	1.1486	1.1571	1.1531	1.1596	1.1588	1.1677	1.1595	1.1642	1.1484	1.1565
38	1.1495	1.1864	1.1692	1.1698	1.1765	1.1969	1.1681	1.1707	1.1530	1.1736
39	1.1580	1.1770	1.1716	1.1663	1.1663	1.1893	1.1643	1.1669	1.1581	1.1618
40	1.1564	1.1668	1.1598	1.1694	1.1540	1.1919	1.1646	1.1725	1.1514	1.1574
41	1.1666	1.1813	1.1720	1.1793	1.1724	1.2019	1.1689	1.1670	1.1616	1.1699
42	1.1595	1.1731	1.1608	1.1697	1.1674	1.1974	1.1735	1.1689	1.1670	1.1502
43	1.1628	1.1762	1.1657	1.1725	1.1869	1.1948	1.1825	1.1767	1.1690	1.1631
44	1.1597	1.1663	1.1589	1.1601	1.1657	1.1754	1.1540	1.1671	1.1518	1.1523
45	1.1451	1.1513	1.1624	1.1580	1.1540	1.1768	1.1520	1.1592	1.1481	1.1470
46	1.1507	1.1643	1.1667	1.1608	1.1560	1.1805	1.1504	1.1561	1.1585	1.1624
47	1.1764	1.1866	1.1814	1.1926	1.1787	1.1942	1.1778	1.1780	1.1705	1.1747
48	1.1598	1.1703	1.1665	1.1744	1.1649	1.1656	1.1621	1.1549	1.1586	1.1600
49	1.1815	1.1710	1.1898	1.1740	1.1689	1.1886	1.1538	1.1779	1.1782	1.1621

After 100 Cycles

Units: mm

Pos.#	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
1	1.5122	1.5458	1.5086	1.5325	1.5658	1.5470	1.5509	1.5293	1.5348	1.5392
2	1.5209	1.5348	1.5164	1.5235	1.5615	1.5329	1.5546	1.5359	1.5252	1.5458
3	1.5047	1.5218	1.5159	1.5136	1.5404	1.5322	1.5338	1.5207	1.5173	1.5264
4	1.5013	1.5127	1.5080	1.5003	1.5363	1.5146	1.5180	1.5112	1.5128	1.5191
5	1.4819	1.4989	1.4976	1.4888	1.5139	1.5016	1.5061	1.5071	1.5005	1.5046
6	1.4829	1.4999	1.5009	1.4925	1.5240	1.5049	1.5164	1.5007	1.5030	1.5082
7	1.4826	1.4965	1.4963	1.4903	1.5130	1.5009	1.5129	1.4938	1.5000	1.5052
8	1.4786	1.4953	1.4949	1.4864	1.5128	1.4910	1.5045	1.4930	1.4999	1.4978
9	1.4753	1.4929	1.4913	1.4836	1.5097	1.4885	1.5134	1.4866	1.5042	1.5007
10	1.4796	1.4961	1.4969	1.4849	1.5115	1.4893	1.5065	1.4884	1.5042	1.4962
11	1.4809	1.4922	1.4954	1.4908	1.5129	1.4817	1.5122	1.4833	1.5087	1.5011
12	1.4848	1.4937	1.4996	1.4918	1.5144	1.4865	1.5018	1.4921	1.5028	1.4996
13	1.4850	1.4987	1.6765	1.4896	1.5211	1.4830	1.5135	1.4948	1.5100	1.4972
14	1.4859	1.4922	1.5037	1.4935	1.5133	1.4765	1.5108	1.4838	1.5143	1.4957
15	1.4887	1.4968	1.5084	1.4881	1.5135	1.4888	1.5214	1.4870	1.5091	1.5039
16	1.4923	1.5019	1.5068	1.5015	1.5271	1.4857	1.5138	1.4948	1.5144	1.5024
17	1.4954	1.5009	1.5000	1.5018	1.5208	1.4790	1.5173	1.4878	1.5068	1.5034
18	1.4994	1.5059	1.5073	1.5114	1.5240	1.4854	1.5194	1.4931	1.5151	1.5072
19	1.5070	1.5193	1.5277	1.5214	1.5448	1.5043	1.5305	1.5125	1.5317	1.5153
20	1.5225	1.5261	1.5396	1.5397	1.5554	1.5204	1.5434	1.5149	1.5419	1.5252
21	1.4878	1.5167	1.5015	1.5273	1.5258	1.4944	1.5250	1.4836	1.5115	1.5015
22	1.4833	1.5029	1.4961	1.5118	1.5180	1.4802	1.5104	1.4791	1.5118	1.4933
23	1.4854	1.5017	1.4952	1.5003	1.5108	1.4790	1.5080	1.4892	1.4910	1.4984
24	1.4807	1.4956	1.4906	1.4957	1.5127	1.4744	1.5112	1.4781	1.4939	1.4853
25	1.4633	1.4869	1.4744	1.4855	1.5027	1.4621	1.4919	1.4769	1.4872	1.4768
26	1.4578	1.4857	1.4669	1.4790	1.4951	1.4593	1.4882	1.4674	1.4797	1.4761
27	1.4623	1.4991	1.4722	1.4811	1.4979	1.4685	1.4941	1.4713	1.4905	1.4824
28	1.4630	1.4797	1.4660	1.4746	1.4899	1.4633	1.4824	1.4743	1.4731	1.4643

Pos.#										
29	1.4585	1.4815	1.4670	1.4796	1.4902	1.4657	1.4846	1.4711	1.4806	1.4758
30	1.4552	1.4779	1.4627	1.4757	1.4761	1.4560	1.4796	1.4729	1.4728	1.4734
31	1.4500	1.4759	1.4641	1.4782	1.4857	1.4611	1.4721	1.4731	1.4795	1.4692
32	1.4513	1.4700	1.4744	1.4740	1.4809	1.4558	1.4715	1.4730	1.4737	1.4656
33	1.4476	1.4782	1.4620	1.4699	1.4881	1.4593	1.4695	1.4695	1.4797	1.4653
34	1.4485	1.4667	1.4701	1.4728	1.4861	1.4562	1.4738	1.4748	1.4686	1.4687
35	1.4598	1.4765	1.4731	1.4723	1.4819	1.4636	1.4737	1.4811	1.4742	1.4676
36	1.4565	1.4801	1.4779	1.4820	1.4849	1.4791	1.4892	1.4940	1.4874	1.4746
37	1.4588	1.4794	1.4746	1.4828	1.4897	1.4744	1.4822	1.4854	1.4773	1.4737
38	1.4629	1.4925	1.4908	1.4818	1.4927	1.4805	1.4957	1.5002	1.4808	1.4782
39	1.4663	1.4929	1.4864	1.4817	1.5001	1.4849	1.4891	1.4987	1.4861	1.4868
40	1.4734	1.4888	1.4977	1.4882	1.4988	1.4899	1.4907	1.5004	1.4908	1.4813
41	1.4746	1.5021	1.4989	1.4858	1.5065	1.4975	1.4981	1.5042	1.4955	1.4963
42	1.4899	1.4970	1.5091	1.4956	1.5132	1.5055	1.5028	1.5057	1.4862	1.4976
43	1.4798	1.4976	1.5101	1.4931	1.5047	1.4968	1.4956	1.5103	1.4964	1.4948
44	1.4879	1.5046	1.5094	1.4844	1.5188	1.5027	1.4991	1.5076	1.4853	1.4988
45	1.4983	1.5075	1.5157	1.4940	1.5353	1.5065	1.4949	1.5031	1.5009	1.5004
46	1.4979	1.5092	1.5196	1.4979	1.5322	1.5009	1.5029	1.5126	1.4974	1.5046
47	1.5203	1.5215	1.5359	1.5072	1.5542	1.5193	1.5240	1.5256	1.5198	1.5174
48	1.5323	1.5329	1.5449	1.5278	1.5780	1.5302	1.5380	1.5234	1.5299	1.5172
49	1.5643	1.5548	1.5564	1.5370	1.5981	1.5463	1.5555	1.5204	1.5334	1.5508

After Thermal

Units: mm

Pos.#	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
1	1.6751	1.7106	1.6715	1.6908	1.7127	1.6899	1.7193	1.6986	1.6904	1.7196
2	1.7109	1.7144	1.7022	1.6841	1.7119	1.7142	1.7071	1.6866	1.7004	1.6934
3	1.6910	1.7123	1.7035	1.6989	1.7184	1.7041	1.6974	1.6919	1.6929	1.7013
4	1.6937	1.7093	1.7031	1.6789	1.7141	1.6938	1.6946	1.6839	1.6828	1.6898
5	1.6825	1.6932	1.6922	1.6701	1.7038	1.6983	1.7041	1.6807	1.6880	1.6897
6	1.6830	1.6978	1.6888	1.6793	1.7147	1.6897	1.6974	1.6845	1.6811	1.6839
7	1.6862	1.6976	1.6970	1.6726	1.7058	1.6839	1.6807	1.6725	1.6786	1.6792
8	1.6769	1.6890	1.6843	1.6822	1.7053	1.6876	1.6932	1.6677	1.6929	1.6777
9	1.6712	1.6858	1.6834	1.6634	1.6998	1.6873	1.6878	1.6630	1.6869	1.6725
10	1.6758	1.6930	1.6852	1.6727	1.6987	1.6839	1.7026	1.6624	1.6794	1.6788
11	1.6792	1.6879	1.6916	1.6697	1.7117	1.7160	1.6862	1.6710	1.6794	1.6774
12	1.6834	1.6811	1.6868	1.6686	1.7059	1.6826	1.6941	1.6598	1.6776	1.6770
13	1.6826	1.6830	1.6909	1.6678	1.7101	1.6806	1.6929	1.6563	1.6769	1.6678
14	1.6819	1.6834	1.6921	1.6632	1.6999	1.6920	1.7083	1.6651	1.6767	1.6764
15	1.6833	1.6830	1.6922	1.6667	1.7034	1.6918	1.6936	1.6683	1.6834	1.6690
16	1.6819	1.6842	1.6908	1.6726	1.7060	1.6852	1.6994	1.6501	1.6678	1.6659
17	1.6896	1.6743	1.6750	1.6761	1.6980	1.6878	1.6833	1.6491	1.6768	1.6667
18	1.6778	1.6763	1.6901	1.6742	1.6959	1.6971	1.6923	1.6597	1.6926	1.6653
19	1.6823	1.6810	1.6908	1.6797	1.7047	1.7130	1.6851	1.6587	1.6788	1.6670
20	1.6832	1.6784	1.6880	1.6824	1.7108	1.6876	1.6841	1.6401	1.6745	1.6563
21	1.6652	1.6763	1.6708	1.6685	1.6814	1.6796	1.6802	1.6390	1.6705	1.6524
22	1.6697	1.6706	1.6802	1.6679	1.6909	1.6822	1.6814	1.6548	1.6703	1.6672
23	1.6684	1.6724	1.6798	1.6659	1.6938	1.6900	1.6858	1.6457	1.6705	1.6590
24	1.6816	1.6682	1.6735	1.6616	1.6935	1.6765	1.6744	1.6485	1.6689	1.6582
25	1.6670	1.6609	1.6654	1.6631	1.6861	1.6753	1.6723	1.6415	1.6706	1.6527

26	1.6649	1.6662	1.6644	1.6533	1.6856	1.6914	1.6883	1.6542	1.6721	1.6526
27	1.6741	1.6902	1.6771	1.6704	1.6987	1.6806	1.6743	1.6489	1.6623	1.6438
28	1.6696	1.6628	1.6667	1.6677	1.6937	1.6839	1.6802	1.6534	1.6701	1.6548
29	1.6631	1.6682	1.6686	1.6645	1.6878	1.6789	1.6645	1.6511	1.6659	1.6555
30	1.6645	1.6633	1.6660	1.6625	1.6780	1.6907	1.6730	1.6520	1.6689	1.6531
31	1.6612	1.6639	1.6651	1.6726	1.6908	1.6828	1.6724	1.6491	1.6659	1.6517
32	1.6679	1.6571	1.6733	1.6653	1.6809	1.6835	1.6685	1.6477	1.6664	1.6487
33	1.6668	1.6634	1.6693	1.6610	1.6847	1.6827	1.6795	1.6512	1.6654	1.6585
34	1.6674	1.6564	1.6696	1.6678	1.6931	1.6852	1.6746	1.6585	1.6629	1.6534
35	1.6765	1.6628	1.6683	1.6720	1.6802	1.7022	1.6937	1.6684	1.6796	1.6637
36	1.6775	1.6653	1.6778	1.6769	1.6905	1.6879	1.6842	1.6680	1.6783	1.6682
37	1.6749	1.6676	1.6775	1.6793	1.6919	1.7017	1.7006	1.6668	1.6732	1.6722
38	1.6812	1.6791	1.6903	1.6710	1.7066	1.6961	1.6955	1.6652	1.6832	1.6754
39	1.6821	1.6838	1.6958	1.6748	1.6968	1.7009	1.6842	1.6661	1.6730	1.6688
40	1.6848	1.6738	1.6866	1.6798	1.6939	1.6996	1.6910	1.6695	1.6786	1.6771
41	1.6935	1.6816	1.6925	1.6766	1.6993	1.7062	1.6953	1.6717	1.6791	1.6856
42	1.7044	1.6890	1.6981	1.6930	1.7139	1.6990	1.6902	1.6737	1.6818	1.6812
43	1.6897	1.6766	1.6911	1.6758	1.6992	1.6975	1.6934	1.6655	1.6770	1.6776
44	1.7044	1.6799	1.6950	1.6826	1.7059	1.7059	1.6807	1.6703	1.6900	1.6836
45	1.6997	1.6907	1.6987	1.6809	1.7140	1.6963	1.6930	1.6767	1.6704	1.6779
46	1.7032	1.6798	1.7008	1.6809	1.7148	1.7142	1.7018	1.6854	1.6962	1.6876
47	1.7122	1.6893	1.7139	1.6909	1.7109	1.7136	1.7140	1.6817	1.6994	1.6800
48	1.7158	1.7063	1.7143	1.7059	1.7132	1.7108	1.7089	1.6679	1.6918	1.7074
49	1.7161	1.7142	1.7075	1.6990	1.7103	1.7008	1.6794	1.6981	1.6943	1.6895

DATA Continued

CONTACT GAPS:

MECF-20 pos   2.36 mm thick edge card (Mid)

	Units:	mm				
Pos.#	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**
1	1.3433	1.3125	1.3627	1.3051	1.2987	1.3523
2	1.2527	1.2573	1.2530	1.2499	1.2252	1.1967
3	1.2857	1.2773	1.2825	1.2779	1.2557	1.3125
4	1.2873	1.2733	1.2832	1.2642	1.2460	1.2299
5	1.2860	1.2749	1.2911	1.2684	1.2498	1.3011
6	1.3018	1.2974	1.3115	1.2883	1.2772	1.2486
7	1.3043	1.3061	1.3057	1.2895	1.2865	1.3310
8	1.2552	1.2620	1.2677	1.2519	1.2432	1.2886
9	1.2823	1.2856	1.2867	1.2827	1.2632	1.2503
10	1.2828	1.2765	1.2726	1.2776	1.2637	1.3119
11	1.2905	1.2959	1.2699	1.2778	1.2690	1.2429
12	1.2613	1.2572	1.2495	1.2639	1.2483	1.2950
13	1.2814	1.2691	1.2589	1.2689	1.2541	1.2320
14	1.2723	1.2759	1.2592	1.2686	1.2419	1.2969
15	1.2638	1.2770	1.2601	1.2650	1.2191	1.2104
16	1.2574	1.2731	1.2557	1.2775	1.2242	1.2780
17	1.2697	1.2680	1.2573	1.2740	1.2245	1.2085
18	1.2788	1.2850	1.2661	1.2876	1.2387	1.3069
19	1.2504	1.2695	1.2372	1.2504	1.2333	1.2240

After 100 Cycles						
	Units:	mm				
Pos.#	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**
1	1.4903	1.4982	1.5100	1.4608	1.4606	1.4941
2	1.4778	1.5112	1.4753	1.4612	1.4570	1.4760
3	1.4815	1.5071	1.4850	1.4968	1.4494	1.4883
4	1.4942	1.5005	1.4785	1.4701	1.4565	1.4725
5	1.4916	1.5045	1.4825	1.4677	1.4610	1.4753
6	1.5009	1.4999	1.4894	1.4814	1.4710	1.4797
7	1.5072	1.5039	1.4864	1.4847	1.4804	1.4968
8	1.4927	1.4964	1.4792	1.4773	1.4868	1.4806
9	1.4983	1.4977	1.4744	1.4899	1.4744	1.4764
10	1.4834	1.4869	1.4633	1.4688	1.4618	1.4704
11	1.4895	1.4953	1.4597	1.4682	1.4728	1.4599
12	1.4717	1.4739	1.4506	1.4516	1.4655	1.4609
13	1.4843	1.4794	1.4582	1.4634	1.4726	1.4593
14	1.4858	1.4885	1.4618	1.4686	1.4685	1.4698
15	1.4737	1.4858	1.4675	1.4649	1.4547	1.4556
16	1.4922	1.5018	1.4767	1.4870	1.4762	1.4701
17	1.4993	1.5006	1.4850	1.4916	1.4778	1.4725
18	1.5163	1.5192	1.5024	1.5075	1.4986	1.4956
19	1.5072	1.5153	1.4886	1.4908	1.4862	1.4872

DATA Continued

CONTACT GAPS:

MECF-08 pos   2.36 mm thick edge card (Mid)

Initial					
Units: mm					
Pos.#	B1	B2	B3	B4	B5	B6
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1	1.2994	1.2813	1.2886	1.2505	1.2906	1.2569
2	1.2575	1.3088	1.2567	1.2804	1.2566	1.2906
3	1.3273	1.2946	1.3154	1.2936	1.3326	1.2907
4	1.2678	1.3071	1.2690	1.3042	1.3069	1.3052
5	1.3045	1.2690	1.3028	1.2775	1.3153	1.2757
6	1.3227	1.2921	1.3162	1.2760	1.3167	1.2857
7	1.2977	1.3276	1.2859	1.2844	1.2965	1.3144

After 100 Cycles					
Units: mm					
Pos.#	B1	B2	B3	B4	B5	B6
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1	1.5229	1.5326	1.5150	1.5141	1.5162	1.5352
2	1.5145	1.5416	1.5109	1.5167	1.5084	1.5400
3	1.5293	1.5414	1.5168	1.5254	1.5169	1.5389
4	1.5293	1.5438	1.5144	1.5244	1.5096	1.5342
5	1.5226	1.5232	1.5102	1.5303	1.5127	1.5334
6	1.5290	1.5268	1.5163	1.5369	1.4999	1.5280
7	1.5041	1.5008	1.4877	1.4841	1.4927	1.5061

DATA Continued

Mating—Unmating

MECF-50 pos   2.12 mm thick edge card (Min)

Sample#	Initial		After 25 Cycles		After 50 Cycles		After 75 Cycles	
	Mating	Unmating	Mating	Unmating	Mating	Unmating	Mating	Unmating
1	12.40	2.22	10.59	2.22	10.75	2.26	10.68	2.30
2	12.97	2.44	11.77	2.41	11.70	2.41	11.71	2.35
3	13.29	2.57	11.78	2.54	11.83	2.38	11.65	2.35
4	12.80	2.70	11.55	2.48	11.45	2.49	11.28	2.43
5	13.19	2.47	10.98	2.31	11.11	2.34	11.30	2.37
6	12.92	2.49	11.18	2.49	10.83	2.42	10.88	2.48
7	13.35	2.52	10.95	2.46	11.17	2.56	11.25	2.68
8	13.13	2.51	10.93	2.58	10.92	2.53	10.90	2.47
9	13.21	2.44	10.78	2.49	10.62	2.43	10.81	2.56
10	13.04	2.45	11.15	2.41	11.59	2.60	11.34	2.54

Sample#	After 100 Cycles		After Thermals		After Humidity	
	Mating	Unmating	Mating	Unmating	Mating	Unmating
1	10.64	2.40	8.28	2.84	8.14	2.54
2	11.57	2.38	9.16	2.73	8.23	2.65
3	11.43	2.48	9.44	2.52	8.94	2.71
4	11.55	2.52	9.51	2.39	8.71	2.52
5	10.97	2.33	8.39	2.57	8.19	2.44
6	10.83	2.51	9.35	2.84	8.76	2.51
7	11.45	2.50	8.29	2.62	8.33	2.56
8	10.66	2.55	9.15	2.81	8.76	2.72
9	10.82	2.49	8.55	2.59	8.15	2.35
10	11.22	2.43	9.36	2.73	8.84	2.61

DATA Continued

Mating—Unmating

MECF-50 pos   2.60 mm thick edge card (Max)

Sample#	Initial		After 25 Cycles		After 50 Cycles		After 75 Cycles	
	Mating	Unmating	Mating	Unmating	Mating	Unmating	Mating	Unmating
1	15.95	3.75	15.13	3.16	14.81	3.25	14.79	3.43
2	16.53	4.30	15.79	4.05	15.09	3.57	13.84	3.50
3	17.45	3.73	15.73	3.60	15.83	3.73	14.23	3.95
4	18.03	4.13	16.61	3.99	16.31	3.62	14.26	3.83
5	16.48	4.81	16.03	4.05	14.90	3.97	14.46	4.04
6	16.27	4.24	16.35	3.78	15.82	3.64	15.12	3.66
7	17.14	3.96	15.55	4.02	15.56	3.75	14.78	4.23
8	16.84	3.97	15.49	3.89	15.51	3.60	14.45	3.71
9	17.04	4.34	15.84	4.15	15.57	3.93	14.38	3.83
10	16.48	4.19	15.63	3.69	15.51	3.90	14.41	3.75

Sample#	After 100 Cycles		After Thermals		After Humidity	
	Mating	Unmating	Mating	Unmating	Mating	Unmating
1	14.30	3.06	11.55	3.15	9.91	3.09
2	13.84	3.56	12.60	3.86	11.65	3.47
3	14.31	3.50	11.87	3.22	10.22	3.04
4	14.47	3.61	11.59	3.20	10.52	3.07
5	14.14	3.85	12.51	3.75	11.25	3.26
6	14.72	3.57	11.59	3.41	10.93	3.17
7	13.95	3.86	12.31	3.54	10.28	3.47
8	14.41	3.66	11.83	3.65	10.53	3.11
9	14.06	3.94	12.22	3.79	11.29	3.57
10	14.23	3.71	11.80	3.21	10.87	3.04

DATA Continued

Mating—Unmating

MECF-20 pos   2.36 mm thick edge card (Mid)

Sample#	Initial		After 25 Cycles		After 50 Cycles		After 75 Cycles		After 100 Cycles	
	Mating	Unmating	Mating	Unmating	Mating	Unmating	Mating	Unmating	Mating	Unmating
1	5.05	1.50	4.90	1.21	5.56	1.41	4.83	1.23	4.81	1.15
2	4.85	1.43	4.61	1.28	5.49	1.32	5.64	1.35	4.54	1.23
3	5.49	1.46	5.31	1.32	5.36	1.37	5.31	1.26	4.63	1.23
4	5.23	1.32	4.74	1.30	5.84	1.30	5.12	1.19	4.28	1.19
5	5.25	1.26	5.16	1.23	5.49	1.32	5.40	1.19	4.28	1.23
6	5.34	1.32	5.47	1.37	5.56	1.28	6.06	1.23	5.18	1.19

Mating—Unmating

MECF-08 pos   2.36 mm thick edge card (Mid)

Sample#	Initial		After 25 Cycles		After 50 Cycles		After 75 Cycles		After 100 Cycles	
	Mating	Unmating	Mating	Unmating	Mating	Unmating	Mating	Unmating	Mating	Unmating
1	1.76	0.49	1.63	0.49	1.52	0.51	1.35	0.40	1.35	0.46
2	1.70	0.55	1.52	0.44	1.50	0.49	1.48	0.46	1.48	0.46
3	1.76	0.51	1.54	0.42	1.48	0.44	1.54	0.44	1.48	0.37
4	1.61	0.55	1.70	0.44	1.74	0.51	1.76	0.53	1.50	0.46
5	1.68	0.60	1.63	0.42	1.39	0.46	1.41	0.46	1.37	0.44
6	2.09	0.51	1.87	0.49	2.03	0.46	1.98	0.49	2.01	0.49

DATA Continued

NORMAL FORCE:
Initial

Initial	Deflections in mm Forces in Grams			
Sample #	0.340	0.510	0.680	SET
1	59.00	84.00	100.00	0.08000
2	59.00	84.00	100.00	0.09000
3	58.00	84.00	100.00	0.08000
4	58.00	83.00	101.00	0.08000
5	58.00	83.00	99.00	0.08000
6	58.00	83.00	101.00	0.09000
7	58.00	83.00	100.00	0.08000
8	58.00	83.00	101.00	0.09000
9	59.00	83.00	101.00	0.08000
10	60.00	84.00	102.00	0.08000
11	58.00	83.00	100.00	0.08000
12	59.00	85.00	102.00	0.08000
13	58.00	83.00	101.00	0.08000

After thermal

Thermal	Deflections in mm Forces in Grams			
Sample #	0.340	0.510	0.680	SET
1	57.40	81.70	100.50	0.09000
2	57.70	82.70	100.10	0.08000
3	56.80	82.00	100.81	0.08000
4	58.40	83.30	101.47	0.07000
5	58.70	83.70	101.18	0.08000
6	58.40	84.30	102.49	0.08500
7	58.40	84.00	101.71	0.08000
8	59.00	85.00	101.67	0.08000
9	59.70	84.00	102.85	0.08000
10	58.40	84.30	102.26	0.09000
11	59.70	85.30	103.86	0.08500
12	58.70	85.60	103.73	0.09000
13	58.40	86.00	105.14	0.08000

DATA Continued

LLCR:

MECF-50 pos   2.12mm thick edge card (Min)

Board	mOhm values Position	Actual Initial	Delta 100 Cycles	Delta Thermal	Delta Humidity
1	P1	6.3	0.1	0.7	-0.2
1	P2	5.6	0.2	1.3	-0.5
1	P3	5.6	0.1	1.6	0.9
1	P4	5.2	0.4	1.6	3.1
1	P5	6.0	-0.3	2.6	-0.2
1	P6	5.7	0.0	3.6	1.0
1	P7	5.8	0.0	2.5	4.5
1	P8	5.7	-0.7	1.8	0.2
1	P9	5.2	0.6	3.7	1.1
1	P10	5.7	-0.7	3.2	4.3
1	P11	5.2	0.1	2.6	4.9
1	P12	5.1	0.0	1.6	2.8
1	P13	5.6	-0.2	4.1	5.2
1	P14	5.8	-0.3	4.8	0.7
1	P15	5.2	-0.2	2.1	0.9
1	P16	5.4	-0.3	2.0	0.7
1	P17	5.4	-0.1	2.4	0.7
1	P18	5.1	0.0	1.2	4.6
1	P19	5.5	-0.6	2.2	-0.3
1	P20	5.4	-0.7	1.3	1.3
1	P21	5.3	-0.6	0.0	2.9
1	P22	6.0	-0.7	0.6	1.6
1	P23	5.9	-0.7	1.7	5.1
1	P24	5.5	-0.2	2.1	0.8
2	P1	6.5	-1.0	0.0	-0.9
2	P2	5.9	1.1	1.5	-0.3
2	P3	6.4	2.4	1.7	1.4
2	P4	5.3	1.4	1.6	3.4
2	P5	5.2	1.5	1.2	2.9
2	P6	4.9	0.4	1.6	2.9
2	P7	5.1	0.5	1.7	3.3
2	P8	5.2	0.3	3.1	3.1
2	P9	5.1	1.1	2.3	2.5
2	P10	5.2	0.2	1.3	3.4
2	P11	5.2	0.3	3.0	2.1
2	P12	5.2	0.1	1.8	2.1
2	P13	5.3	0.9	3.0	5.0
2	P14	5.7	1.2	4.4	5.8
2	P15	5.4	1.3	1.5	5.1
2	P16	5.3	-0.1	0.9	2.8
2	P17	5.6	-0.7	2.1	0.9
2	P18	5.6	-0.4	1.4	1.3
2	P19	5.2	0.4	2.4	3.1
2	P20	5.3	0.3	3.3	0.2

2	P21	5.3	0.0	3.4	1.9
2	P22	5.4	-0.4	1.6	2.2
2	P23	5.4	0.3	2.8	1.9
2	P24	5.7	0.4	2.1	0.5
3	P1	5.3	0.3	3.0	3.7
3	P2	5.2	0.4	3.2	0.2
3	P3	5.1	0.1	2.2	1.2
3	P4	5.2	0.5	1.8	2.9
3	P5	5.3	0.6	3.6	2.4
3	P6	4.9	0.3	2.7	4.6
3	P7	4.9	0.6	1.9	1.2
3	P8	5.6	-0.3	2.0	2.8
3	P9	5.1	0.2	0.9	5.4
3	P10	5.2	-0.2	1.3	2.7
3	P11	5.0	0.1	2.3	4.4
3	P12	5.0	0.4	1.3	3.4
3	P13	5.2	-0.2	1.0	1.3
3	P14	4.9	0.5	2.7	2.7
3	P15	5.3	-0.4	2.1	3.8
3	P16	5.1	-0.2	1.7	2.7
3	P17	5.1	-0.1	3.1	3.3
3	P18	5.2	0.7	0.7	5.4
3	P19	5.0	0.4	2.9	2.8
3	P20	5.1	0.2	2.7	6.0
3	P21	5.1	-0.1	3.4	1.6
3	P22	4.9	-0.1	1.9	4.1
3	P23	5.4	0.2	2.1	7.0
3	P24	5.5	0.1	5.2	1.8
4	P1	6.8	-1.1	1.9	2.5
4	P2	7.3	-1.4	0.1	-1.8
4	P3	5.6	0.3	2.7	0.7
4	P4	6.5	-1.2	1.7	-0.9
4	P5	6.1	0.0	4.6	-0.3
4	P6	6.0	0.5	1.0	1.5
4	P7	6.5	-0.6	0.1	1.8
4	P8	6.5	0.2	0.9	0.3
4	P9	5.8	0.3	4.9	2.2
4	P10	5.7	0.2	0.1	3.9
4	P11	6.2	-0.1	0.7	2.6
4	P12	5.9	-0.5	0.3	3.9
4	P13	5.8	-0.1	1.6	2.9
4	P14	5.7	-0.6	1.4	1.7
4	P15	5.9	-0.6	1.7	1.4
4	P16	6.3	-0.9	1.1	0.6
4	P17	6.4	-0.8	1.1	3.1
4	P18	5.7	-0.6	0.7	5.2
4	P19	5.9	-0.2	1.2	3.2
4	P20	6.1	-0.6	1.1	1.4
4	P21	5.5	-0.4	0.9	2.8

4	P22	6.4	-0.8	0.7	1.8
4	P23	7.8	-2.3	-2.2	-0.4
4	P24	7.4	-1.4	2.2	2.0
5	P1	5.6	1.9	4.7	0.9
5	P2	5.2	1.6	2.3	2.4
5	P3	5.3	2.0	1.6	3.9
5	P4	5.0	3.7	3.1	3.4
5	P5	5.2	0.2	1.4	2.5
5	P6	5.5	1.1	0.7	3.7
5	P7	5.0	0.3	0.4	5.0
5	P8	4.8	1.9	3.6	2.7
5	P9	4.9	0.5	1.5	3.5
5	P10	5.1	0.2	2.9	0.9
5	P11	5.0	0.2	1.4	0.9
5	P12	4.8	0.2	3.0	1.9
5	P13	5.1	2.0	4.4	3.3
5	P14	4.6	0.0	0.3	1.1
5	P15	4.7	0.3	1.6	2.1
5	P16	5.0	0.0	3.9	4.4
5	P17	5.0	0.3	1.3	1.6
5	P18	4.7	0.3	1.8	2.0
5	P19	5.1	0.6	2.3	4.3
5	P20	5.1	0.0	0.5	0.7
5	P21	5.1	0.3	1.6	1.2
5	P22	5.0	0.0	2.0	0.1
5	P23	5.5	0.1	2.4	6.2
5	P24	5.6	0.2	2.5	3.8
6	P1	5.5	-0.1	3.7	1.9
6	P2	5.5	0.5	0.3	3.6
6	P3	5.9	0.1	3.6	1.3
6	P4	5.2	1.0	1.7	3.9
6	P5	6.0	0.2	4.3	2.5
6	P6	5.4	-0.1	2.0	2.2
6	P7	5.5	0.4	1.9	4.7
6	P8	5.7	0.5	1.2	1.8
6	P9	5.3	0.0	3.1	0.9
6	P10	5.5	-0.1	1.3	3.1
6	P11	5.3	-0.2	2.2	3.6
6	P12	5.8	0.2	4.7	0.5
6	P13	5.5	-0.2	1.8	1.7
6	P14	5.8	-0.3	2.0	1.1
6	P15	5.7	-0.6	1.1	0.6
6	P16	5.5	-0.1	2.0	0.0
6	P17	5.4	0.0	2.9	0.5
6	P18	5.5	-0.5	0.3	1.3
6	P19	5.1	0.3	2.3	0.2
6	P20	5.0	0.2	1.9	0.7
6	P21	5.2	-0.1	1.4	1.3
6	P22	5.0	0.3	2.1	2.4

6	P23	5.2	1.1	4.6	1.1
6	P24	5.9	-0.4	3.8	1.7
7	P1	5.1	0.5	4.0	1.3
7	P2	5.7	0.4	2.1	2.5
7	P3	5.4	0.4	4.2	4.4
7	P4	5.1	1.0	2.1	3.6
7	P5	5.6	0.9	2.5	1.6
7	P6	5.2	0.4	2.3	1.3
7	P7	5.2	0.3	3.3	1.1
7	P8	5.1	0.0	1.3	3.3
7	P9	5.3	-0.2	4.0	1.0
7	P10	5.1	-0.1	5.4	5.0
7	P11	5.2	-0.1	2.3	4.6
7	P12	5.2	-0.2	1.7	2.3
7	P13	5.4	0.0	2.0	2.0
7	P14	5.0	-0.2	2.8	3.5
7	P15	5.1	0.4	3.1	3.0
7	P16	4.9	0.6	3.0	4.5
7	P17	5.0	0.0	3.1	4.9
7	P18	4.9	0.0	2.7	2.3
7	P19	4.9	0.1	4.1	0.7
7	P20	5.0	0.1	3.7	4.0
7	P21	5.2	-0.2	2.2	2.2
7	P22	4.8	0.5	4.7	2.4
7	P23	5.1	0.3	5.2	0.4
7	P24	5.7	-0.3	2.2	0.8
8	P1	5.6	0.4	1.0	4.0
8	P2	5.5	0.2	4.0	3.0
8	P3	5.6	1.8	4.5	0.7
8	P4	4.9	2.3	2.6	3.3
8	P5	5.4	0.3	0.9	1.2
8	P6	5.6	-0.3	1.0	1.5
8	P7	5.1	0.4	0.8	1.3
8	P8	5.2	0.6	2.2	4.2
8	P9	5.4	0.2	2.9	4.8
8	P10	5.2	-0.2	1.2	3.2
8	P11	5.4	0.1	4.7	1.7
8	P12	5.2	-0.5	0.5	3.0
8	P13	5.2	-0.2	0.6	5.4
8	P14	5.0	1.5	2.8	2.8
8	P15	5.3	1.1	2.5	3.6
8	P16	5.3	1.5	4.4	3.9
8	P17	5.3	1.1	2.4	1.0
8	P18	5.1	0.2	1.3	1.8
8	P19	5.0	1.8	4.3	0.5
8	P20	5.3	0.3	1.3	1.1
8	P21	5.7	0.1	1.4	1.6
8	P22	5.1	0.2	1.4	0.7
8	P23	5.6	1.6	2.9	2.0

	8	P24	5.4	3.2	0.8	3.1

MECF-50 pos 2.60mm thick edge card (Max)

Board	mOhm values Position	Actual Initial	Delta 100 Cycles	Delta Thermal	Delta Humidity
1	P1	5.2	0.9	1.8	1.9
1	P2	5.4	0.9	2.3	2.9
1	P3	5.2	1.2	2.1	1.0
1	P4	5.5	0.5	1.4	0.8
1	P5	5.2	1.2	1.3	0.9
1	P6	5.2	0.6	1.6	0.9
1	P7	5.4	0.1	1.9	5.2
1	P8	5.5	0.1	0.6	2.1
1	P9	5.4	0.1	0.6	1.0
1	P10	5.4	0.0	1.8	1.0
1	P11	5.5	-0.4	0.8	1.0
1	P12	5.2	0.3	1.3	0.9
1	P13	5.1	0.5	4.5	1.3
1	P14	5.6	-0.1	2.2	1.1
1	P15	5.1	0.1	1.4	1.4
1	P16	5.1	0.1	3.3	4.2
1	P17	5.2	0.1	1.2	2.3
1	P18	5.1	0.3	3.1	2.1
1	P19	5.1	0.2	0.7	4.2
1	P20	5.2	0.5	0.6	3.3
1	P21	5.1	0.2	1.4	2.1
1	P22	5.3	0.2	1.4	4.4
1	P23	5.1	0.3	1.9	1.3
1	P24	5.4	0.8	3.6	1.0
2	P1	5.2	0.2	4.9	5.1
2	P2	5.2	0.3	4.3	3.0
2	P3	5.4	0.1	2.3	3.3
2	P4	5.4	0.2	2.7	2.3
2	P5	5.3	0.6	1.5	0.6
2	P6	5.4	0.0	1.1	1.6
2	P7	5.4	0.0	1.4	0.1
2	P8	5.3	0.1	1.1	3.0
2	P9	5.3	0.1	1.9	2.1
2	P10	5.4	0.4	0.9	0.6
2	P11	5.4	0.3	0.6	2.1
2	P12	5.3	0.2	1.2	3.3
2	P13	5.4	0.3	0.6	0.8
2	P14	5.3	0.1	4.1	3.4
2	P15	5.2	0.6	1.5	4.0
2	P16	5.0	0.5	1.8	3.6
2	P17	5.2	0.3	3.3	4.3
2	P18	5.3	0.3	1.6	2.6
2	P19	4.9	0.8	2.5	2.1
2	P20	5.2	0.4	1.4	1.9
2	P21	5.3	0.5	0.7	0.8

2	P22	5.2	1.1	1.2	3.5
2	P23	4.8	0.4	1.7	2.6
2	P24	5.8	-0.3	0.4	1.1
3	P1	5.2	0.6	2.9	2.1
3	P2	5.3	0.4	3.2	3.7
3	P3	5.1	1.3	4.1	2.4
3	P4	5.6	0.5	1.8	1.8
3	P5	4.9	0.5	1.8	2.9
3	P6	5.3	0.6	0.2	1.3
3	P7	5.6	0.2	0.3	2.5
3	P8	5.7	0.3	0.7	2.3
3	P9	5.7	0.3	0.8	1.5
3	P10	5.6	1.0	0.7	3.2
3	P11	5.2	0.7	0.7	0.6
3	P12	5.6	0.2	1.0	2.9
3	P13	5.5	0.9	0.9	2.1
3	P14	5.5	0.3	1.4	5.8
3	P15	5.2	0.4	0.2	3.0
3	P16	5.3	0.8	0.8	5.2
3	P17	5.2	0.1	0.2	4.2
3	P18	5.5	0.0	0.2	1.1
3	P19	5.4	0.2	1.0	2.7
3	P20	5.0	0.3	1.0	2.0
3	P21	5.6	-0.1	0.2	2.0
3	P22	5.1	0.4	0.9	2.9
3	P23	5.2	0.6	0.2	4.1
3	P24	5.0	1.2	1.5	4.1
4	P1	5.4	0.8	2.4	0.8
4	P2	5.1	0.8	2.4	3.6
4	P3	5.3	0.9	2.8	5.3
4	P4	5.2	0.0	2.0	3.0
4	P5	5.5	0.3	2.4	2.6
4	P6	5.3	0.8	1.3	2.8
4	P7	5.5	0.3	1.8	2.0
4	P8	5.5	1.1	1.8	3.4
4	P9	5.8	0.1	2.1	0.8
4	P10	5.4	0.5	3.3	2.1
4	P11	5.9	0.0	1.2	0.6
4	P12	5.5	0.1	0.7	1.5
4	P13	5.8	-0.1	1.7	2.6
4	P14	5.4	0.2	2.4	1.9
4	P15	5.2	0.2	2.3	3.6
4	P16	5.3	0.1	2.6	4.3
4	P17	5.2	0.6	4.8	3.9
4	P18	5.7	0.2	2.8	4.5
4	P19	5.6	0.9	3.5	3.3
4	P20	5.7	0.7	3.9	2.2
4	P21	5.5	0.9	1.8	1.9
4	P22	5.3	0.5	2.4	2.9

4	P23	4.9	0.7	3.2	2.4
4	P24	5.0	2.0	2.3	1.4
5	P1	5.5	4.6	2.3	1.6
5	P2	5.7	0.4	0.9	2.4
5	P3	5.1	1.8	2.4	1.3
5	P4	5.7	1.4	1.0	0.8
5	P5	5.5	3.1	3.9	1.2
5	P6	5.7	-0.1	0.1	0.1
5	P7	5.4	0.3	1.0	1.1
5	P8	5.6	-0.2	0.2	-0.3
5	P9	5.7	0.0	-0.1	-0.5
5	P10	5.7	-0.3	0.2	3.4
5	P11	5.6	-0.3	0.2	0.2
5	P12	5.7	0.4	0.5	4.0
5	P13	5.5	0.0	0.6	4.3
5	P14	6.0	-0.2	0.1	1.1
5	P15	6.0	0.3	0.1	3.8
5	P16	5.8	0.5	-0.1	1.1
5	P17	5.9	-0.1	0.3	1.3
5	P18	5.8	0.3	0.7	0.2
5	P19	5.8	0.3	1.4	1.1
5	P20	5.8	0.0	0.6	0.3
5	P21	5.9	0.2	0.0	-0.3
5	P22	5.4	0.9	0.4	0.4
5	P23	5.5	0.3	0.5	1.1
5	P24	5.9	0.6	0.4	1.2
6	P1	5.1	0.4	2.5	4.9
6	P2	5.1	0.9	2.1	3.6
6	P3	5.1	0.8	3.8	2.3
6	P4	5.8	-0.1	2.0	5.1
6	P5	5.3	0.8	2.0	1.0
6	P6	5.2	0.6	1.3	1.9
6	P7	5.5	0.5	0.6	5.9
6	P8	5.6	0.2	1.0	2.8
6	P9	5.5	-0.1	0.8	2.8
6	P10	5.2	0.7	1.4	5.0
6	P11	5.5	0.5	0.8	3.1
6	P12	5.2	0.4	1.6	3.3
6	P13	5.5	0.3	3.0	6.0
6	P14	5.1	0.5	1.2	3.3
6	P15	5.4	0.3	0.8	3.0
6	P16	5.1	0.1	0.2	4.4
6	P17	5.4	0.6	1.2	2.1
6	P18	5.5	0.3	0.6	1.7
6	P19	5.4	0.8	1.1	6.4
6	P20	5.5	0.0	0.2	0.9
6	P21	5.2	0.5	1.3	0.7
6	P22	5.3	0.4	0.6	3.4
6	P23	5.4	0.2	0.9	-0.2

6	P24	5.6	1.2	4.1	0.7
7	P1	5.3	0.2	1.9	1.7
7	P2	5.2	0.2	1.2	2.6
7	P3	5.6	0.6	0.5	5.2
7	P4	5.6	0.4	1.2	1.1
7	P5	5.4	0.1	1.1	3.4
7	P6	5.2	0.7	1.4	3.3
7	P7	6.0	0.2	-0.1	4.8
7	P8	5.7	0.3	0.0	4.6
7	P9	5.4	1.1	0.9	4.5
7	P10	5.3	0.4	0.7	3.2
7	P11	5.4	0.6	0.6	2.5
7	P12	5.3	0.2	0.6	4.6
7	P13	5.7	0.0	0.7	3.7
7	P14	5.6	0.1	2.2	2.6
7	P15	5.3	0.5	0.9	2.5
7	P16	5.1	0.5	0.7	0.9
7	P17	5.5	0.3	0.7	1.1
7	P18	5.3	0.5	0.4	1.8
7	P19	5.4	0.5	0.9	0.6
7	P20	5.5	0.6	0.6	1.2
7	P21	5.6	0.1	0.1	0.9
7	P22	5.4	1.0	2.2	1.2
7	P23	5.1	0.4	0.8	2.9
7	P24	5.3	0.3	0.4	2.6
8	P1	5.1	0.6	2.1	2.6
8	P2	5.2	1.4	1.2	6.0
8	P3	5.2	0.7	0.7	1.7
8	P4	5.3	0.7	0.7	1.4
8	P5	5.1	2.4	2.1	1.2
8	P6	5.4	0.4	0.7	0.7
8	P7	5.5	1.0	1.0	0.9
8	P8	5.4	0.7	0.6	1.9
8	P9	5.7	-0.1	0.1	0.9
8	P10	5.5	0.2	0.0	-0.2
8	P11	5.7	0.4	0.4	0.5
8	P12	5.5	0.3	0.6	1.5
8	P13	5.7	-0.1	0.0	3.4
8	P14	5.7	-0.1	0.5	3.0
8	P15	5.3	0.0	0.3	0.9
8	P16	5.5	0.0	0.6	1.0
8	P17	5.4	0.3	0.4	1.5
8	P18	5.6	-0.1	0.3	1.4
8	P19	5.2	0.3	1.1	1.4
8	P20	5.2	0.6	1.1	1.8
8	P21	5.9	-0.4	0.0	0.2
8	P22	5.8	-0.5	-0.1	0.4
8	P23	5.1	0.6	0.8	1.3
8	P24	5.2	0.6	1.0	1.1

DATA Continued

GAS TIGHT

Board	mOhm values Position	Actual Initial	Delta Gas Tight
1	P1	5.3	0.7
1	P2	5.3	1.4
1	P3	6.0	-0.5
1	P4	6.0	-0.2
1	P5	5.4	-0.1
1	P6	5.0	0.9
1	P7	5.2	0.9
1	P8	5.0	1.5
1	P9	5.3	0.7
1	P10	4.9	0.1
1	P11	5.0	1.8
1	P12	5.0	2.5
1	P13	5.4	1.3
1	P14	5.2	0.8
1	P15	4.8	0.4
1	P16	5.2	0.5
1	P17	4.9	0.8
1	P18	5.0	0.8
1	P19	5.1	0.5
1	P20	5.2	-0.1
1	P21	4.8	0.3
1	P22	5.0	0.0
1	P23	5.4	0.1
1	P24	5.6	0.0
2	P1	5.2	0.7
2	P2	4.7	0.6
2	P3	4.7	1.4
2	P4	4.9	0.6
2	P5	5.1	1.3
2	P6	5.4	0.5
2	P7	5.1	-0.1
2	P8	5.2	0.3
2	P9	5.1	0.4
2	P10	4.9	1.2
2	P11	5.0	0.7
2	P12	4.9	0.5
2	P13	5.1	2.1
2	P14	5.2	-0.1
2	P15	5.3	-0.4
2	P16	4.9	0.1
2	P17	5.2	0.2
2	P18	4.7	0.1
2	P19	5.0	0.4
2	P20	4.8	0.8

2	P21	5.1	0.4
2	P22	5.0	0.3
2	P23	5.4	0.2
2	P24	5.0	0.8
3	P1	5.7	1.6
3	P2	4.4	2.7
3	P3	5.9	1.9
3	P4	4.8	2.4
3	P5	4.9	1.9
3	P6	5.1	1.4
3	P7	5.1	0.8
3	P8	5.2	0.8
3	P9	4.6	1.8
3	P10	5.0	1.1
3	P11	4.9	1.2
3	P12	4.7	1.3
3	P13	5.4	2.9
3	P14	5.2	2.3
3	P15	5.0	2.0
3	P16	4.9	1.9
3	P17	4.8	3.1
3	P18	4.7	0.8
3	P19	4.7	1.5
3	P20	4.8	0.8
3	P21	4.9	0.8
3	P22	5.1	0.7
3	P23	5.1	1.0
3	P24	5.0	1.4
4	P1	5.8	-0.2
4	P2	5.1	0.3
4	P3	5.2	0.4
4	P4	5.6	-0.4
4	P5	5.5	-0.3
4	P6	5.1	0.6
4	P7	5.2	0.5
4	P8	5.1	0.4
4	P9	4.9	0.6
4	P10	4.8	0.3
4	P11	5.6	-0.2
4	P12	5.0	0.5
4	P13	5.6	0.4
4	P14	5.1	0.5
4	P15	5.4	0.1
4	P16	5.0	0.1
4	P17	5.4	0.5
4	P18	5.3	0.3
4	P19	5.1	0.7
4	P20	5.4	0.0
4	P21	5.3	0.3

4	P22	5.3	0.1
4	P23	5.5	-0.6
4	P24	5.6	-0.3
5	P1	5.4	1.0
5	P2	5.3	0.3
5	P3	5.2	0.9
5	P4	5.5	0.3
5	P5	5.2	-0.1
5	P6	5.0	0.4
5	P7	5.3	0.1
5	P8	4.9	0.4
5	P9	5.5	0.2
5	P10	5.0	0.4
5	P11	5.1	0.9
5	P12	4.7	0.9
5	P13	5.2	2.7
5	P14	4.9	0.7
5	P15	5.4	0.8
5	P16	5.1	1.9
5	P17	5.1	0.8
5	P18	4.9	1.5
5	P19	4.9	0.7
5	P20	4.7	0.6
5	P21	4.9	0.5
5	P22	5.4	0.4
5	P23	5.3	0.2
5	P24	5.5	0.4
6	P1	6.0	0.1
6	P2	5.9	-0.3
6	P3	5.5	-0.1
6	P4	5.2	0.7
6	P5	6.0	-0.3
6	P6	5.6	0.8
6	P7	5.4	1.2
6	P8	5.4	0.2
6	P9	5.5	0.6
6	P10	5.2	-0.2
6	P11	6.0	-0.6
6	P12	4.9	0.2
6	P13	5.4	1.1
6	P14	5.0	0.1
6	P15	5.8	0.8
6	P16	5.2	0.0
6	P17	5.0	0.2
6	P18	5.2	0.3
6	P19	5.5	-0.1
6	P20	5.3	-0.1
6	P21	5.9	0.0
6	P22	5.5	0.4

6	P23	6.2	-0.6
6	P24	6.0	-0.5
7	P1	5.4	0.7
7	P2	5.1	0.0
7	P3	5.0	1.1
7	P4	5.0	0.6
7	P5	5.7	0.9
7	P6	5.5	0.4
7	P7	4.8	0.3
7	P8	5.0	0.4
7	P9	5.5	0.2
7	P10	5.4	0.2
7	P11	5.4	0.1
7	P12	5.6	-0.1
7	P13	5.5	1.5
7	P14	5.1	-0.1
7	P15	5.2	0.1
7	P16	5.5	-0.1
7	P17	5.3	0.1
7	P18	5.0	-0.2
7	P19	5.5	0.1
7	P20	5.4	0.2
7	P21	5.1	0.3
7	P22	5.2	0.4
7	P23	5.3	0.9
7	P24	5.9	0.3
8	P1	5.6	-0.1
8	P2	5.5	0.4
8	P3	5.3	0.3
8	P4	5.2	0.3
8	P5	5.3	0.6
8	P6	5.1	0.3
8	P7	5.0	0.1
8	P8	5.3	0.3
8	P9	5.3	1.3
8	P10	5.2	-0.1
8	P11	5.5	1.2
8	P12	4.9	0.2
8	P13	5.4	0.3
8	P14	5.0	0.1
8	P15	4.9	0.4
8	P16	5.0	0.6
8	P17	5.2	3.3
8	P18	5.0	0.4
8	P19	5.3	0.2
8	P20	5.6	0.2
8	P21	5.3	0.0
8	P22	5.1	0.2
8	P23	5.1	0.2

8	P24	5.4	0.4

EQUIPMENT AND CALIBRATION SCHEDULES

Equipment #: HZ-MO-03
Description: Micro-ohmmeter
Manufacturer: Keithley
Model: 580
Serial #: 297288
Accuracy: Last Cal: 2010-8-06, Next Cal: 2011-8-05

Equipment #: HZ-TCT-01
Description: Normal force analyzer
Manufacturer: Mecmesin Multitester
Model: Mecmesin Multitester 2.5-i
Serial #: 08-1049-04
Accuracy: Last Cal: 2010-4-28, Next Cal: 2011-4-27

Equipment #: HZ-OV-01
Description: Oven
Manufacturer: Huida
Model: CS101-1E
Serial #: CS101-1E-B
Accuracy: Last Cal: 2009-12-15, Next Cal: 2010-12-14

Equipment #: HZ-THC-01
Description: Humidity transmitter
Manufacturer: Thermtron
Model: HMM30C
Serial #: D0240037
Accuracy: Last Cal: 2010-3-3, Next Cal: 2011-3-2

Equipment #: HZ-OGP-01
Description: Video measurement system
Manufacturer: OGP
Model: SMARTSCOPE FLASH 200
Serial #: SVW2003632
Accuracy: Last Cal: 2010-6-10, Next Cal: 2011-6-9

Equipment #: HZ-MO-01
Description: Micro-ohmmeter
Manufacturer: Keithley
Model: 2700
Serial #: 1199807
Accuracy: Last Cal: 2010-4-28, Next Cal: 2011-4-27

EQUIPMENT AND CALIBRATION SCHEDULES

Equipment #: HZ-PS-01
Description: Power Supply
Manufacturer: Agilent
Model: 6031A
Serial #: MY41000982
Accuracy: Last Cal: 2010-4-28, Next Cal: 2011-4-27