Project Number:	Tracking Code: 173219_Report_Rev_1		
Requested by: Vision Liu	Date: 1/17/2012	Product Rev: N/A	
Part #: SFPC-SL	Lot #: N/A	Tech: Kason He	Eng: Vico Zhao
Part description: SFPC-SL			Qty to test: 20
Test Start: 11/30/2011	Test Completed: 11/30/2011		

Cage Retention Force Test report

SFPC-SL

CERTIFICATION

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

SCOPE

To perform the following tests:

APPLICABLE DOCUMENTS

Standards: EIA Publication 364

TEST SAMPLES AND PREPARATION

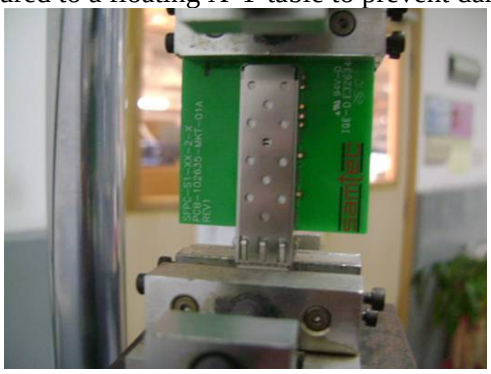
1) All materials were manufactured in accordance with the applicable product specification.
2) All test samples were identified and encoded to maintain traceability throughout the test sequences.
3) Any additional preparation will be noted in the individual test sequences.

ATTRIBUTE DEFINITIONS

The following is a brief, simplified description of attributes.

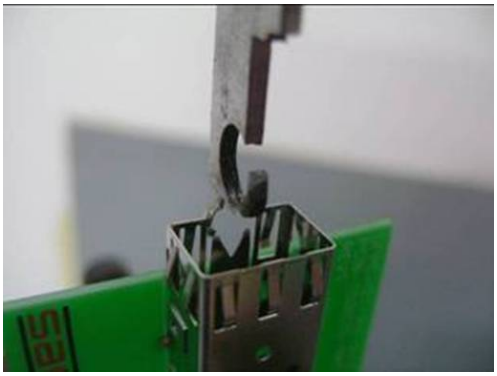
Mating/Unmating:

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.



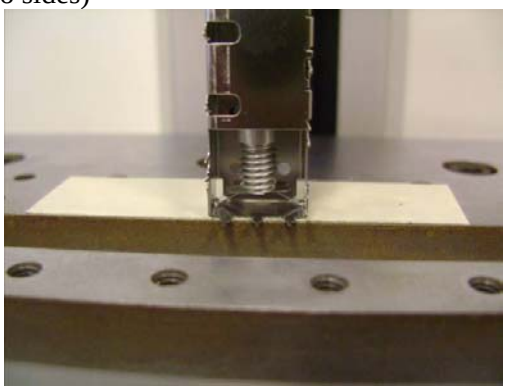
Cage Retention Force:

Test the latch break force



Kickout Spring Force:

Test the cage spring force (two sides)



RESULTS

Mating\Unmating force:

- **Initial**
  - **Mating**
    - **Min ---------- 2.81 N**
    - **Max---------- 4.77 N**
  - **Unmating**
    - **Min ---------- 1.20 N**
    - **Max---------- 2.23 N**
- **After 50 Cycles**
  - **Mating**
    - **Min ---------- 3.39 N**
    - **Max---------- 4.81 N**
  - **Unmating**
    - **Min ---------- 1.78 N**
    - **Max---------- 2.41 N**
- **After 100 Cycles**
  - **Mating**
    - **Min ---------- 3.34 N**
    - **Max---------- 4.86 N**
  - **Unmating**
    - **Min ---------- 2.41 N**
    - **Max---------- 3.07 N**

Cage Retention force:

- **Min---------- 247.38 N**
- **Max ---------- 265.04 N**

Kickout Spring force:

- **Min----------11.90 N**
- **Max ----------13.40 N**

DATA SUMMARIES

Mating\Unmating force:

	Force (N)					
	Initial		After 50 cycles		After 100 cycles	
	Mating	Unmating	Mating	Unmating	Mating	Unmating
Minimum	2.81	1.20	3.39	1.78	3.34	2.41
Maximum	4.77	2.23	4.81	2.41	4.85	3.07
Average	**3.78**	**1.70**	**4.18**	**2.04**	**4.03**	**2.74**

Cage Retention force:

	Force (N)
Minimum	247.38
Maximum	265.04
Average	**253.33**

Kickout Spring force:

	Force (N)
Minimum	11.90
Maximum	13.40
Average	**12.75**

EQUIPMENT AND CALIBRATION SCHEDULES

Equipment #: HZ-TCT-01
Description: Normal force analyzer
Manufacturer: Mecmesin Multitester
Model: Mecmesin Multitester 2.5-i
Serial #: 08-1049-04
Accuracy: Last Cal: 4/27/2011, Next Cal: 4/26/2012