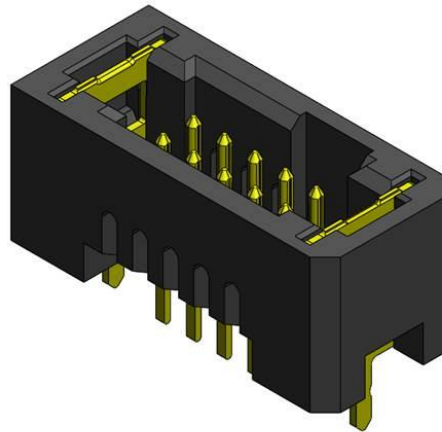
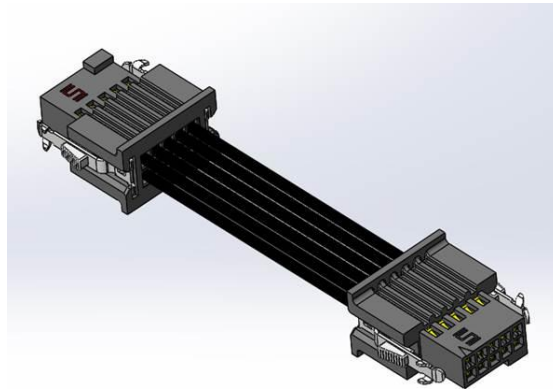




Project Number: Design Qualification Test Report	Tracking Code: 985453_Report_Rev_1
Requested by: John Crawford	Date: 10/28/2016
Part #: TFM-105-01-F-D-WT/SFSD-05-28-F-03.25-DR-NDS	
Part description: TFM/SFSD	Tech: Tony Wagoner
Test Start: 09/29/2016	Test Completed: 09/29/2016



DESIGN QUALIFICATION TEST REPORT

TFM/SFSD

TFM-105-01-F-D-WT/SFSD-05-28-F-03.25-DR-NDS

REVISION HISTORY

DATA	REV.NUM.	DESCRIPTION	ENG
10/25/2016	1	Initial Issue	PC

CERTIFICATION

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

All contents contained herein are the property of Samtec. No portion of this report, in part or in full shall be reproduced without prior written approval of Samtec.

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) Either an automated cleaning procedure or an ultrasonic cleaning procedure may be used.
- 4) The automated procedure is used with aqueous compatible soldering materials.
- 5) Any additional preparation will be noted in the individual test sequences.
- 6) Solder Information: Lead Free
- 7) Samtec Test PCBs used: PCB-100675-TST.

FLOWCHARTS

Cable Pull

5 Position

Group 1

TFM-105-01-F-D-WT
SFSD-05-28-F-03.25-DR-NDS
5 Assemblies
0 Degrees

Step	Description
1.	Cable Pull ⁽¹⁾ - Non Standard

Group 2

TFM-105-01-F-D-WT
SFSD-05-28-F-03.25-DR-NDS
5 Assemblies
45 Degrees

*Note: Cable to be pulled toward the end
of the part*

Step	Description
1.	Cable Pull ⁽¹⁾ - Non Standard

20 Position

Group 3

TFM-120-01-F-D-WT
SFSD-20-28-F-03.25-DR-NDS
5 Assemblies
0 Degrees

Step	Description
1.	Cable Pull ⁽¹⁾ - Non Standard

Group 4

TFM-120-01-F-D-WT
SFSD-20-28-F-03.25-DR-NDS
5 Assemblies
45 Degrees

*Note: Cable to be pulled toward the end
of the part*

Step	Description
1.	Cable Pull ⁽¹⁾ - Non Standard

(1) Cable Pull = Other

Measure and Record Force Required to Failure
Failure = Latch disengages
EIA-364-38

ATTRIBUTE DEFINITIONS

The following is a brief, simplified description of attributes

CONNECTOR PULL:

- 1) Secure cable near center and pull on connector
 - a. At 45° , right angle to cable
 - b. At 0° , in-line with cable

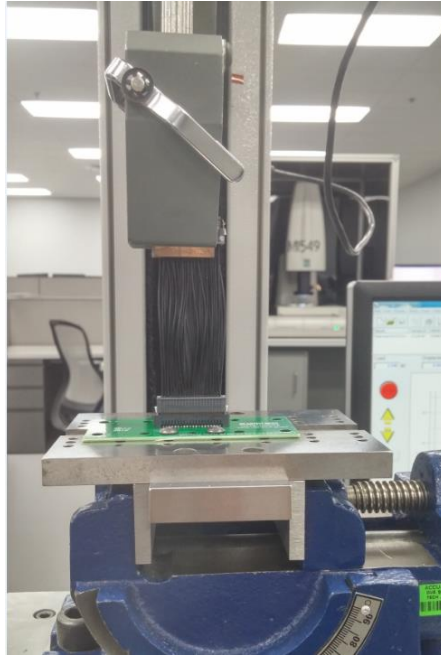


Fig. 1
 0° Connector pull.

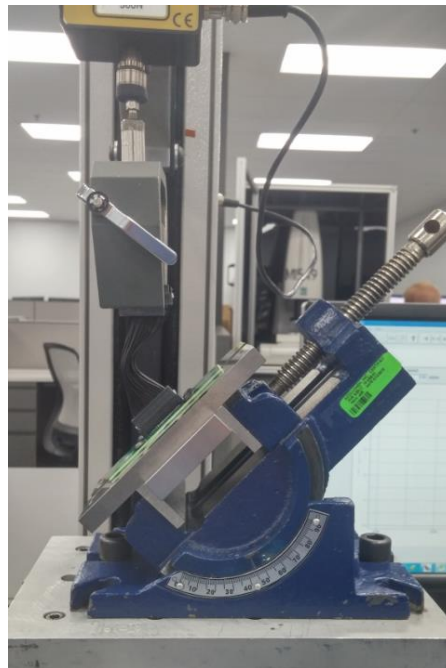


Fig. 2
 45° Connector pull.

RESULTS

Cable Pull

5 Positions

- **0 ° Pull force**
 - **Min**-----22.89 Lbs
 - **Max**-----24.92 Lbs
- **45 ° Pull force**
 - **Min**-----14.32 Lbs
 - **Max**-----15.49 Lbs

20 Positions

- **0 ° Pull force**
 - **Min**-----27.51 Lbs
 - **Max**-----29.41 Lbs
- **45 ° Pull force**
 - **Min**-----18.31 Lbs
 - **Max**-----19.46 Lbs

DATA SUMMARIES**Cable Pull****5 Positions****0 ° Pull force**

	Force (lbs)
Minimum	22.89
Maximum	24.92
Average	23.84

45 ° Pull force

	Force (lbs)
Minimum	14.32
Maximum	15.49
Average	15.02

20 Positions**0 ° Pull force**

	Force (lbs)
Minimum	27.51
Maximum	29.41
Average	28.60

45 ° Pull force

	Force (lbs)
Minimum	18.31
Maximum	19.46
Average	18.83

EQUIPMENT AND CALIBRATION SCHEDULES

Equipment #: TCT-04

Description: Dillon Quantrol TC21 25-1000 mm/min series test stand

Manufacturer: Dillon Quantrol

Model: TC2 I series test stand

Serial #: 04-1041-04

Accuracy: Speed Accuracy: +/- 5% of indicated speed; Speed Accuracy: +/- 5% of indicated speed;
... Last Cal: 05/29/2016, Next Cal: 05/29/2017