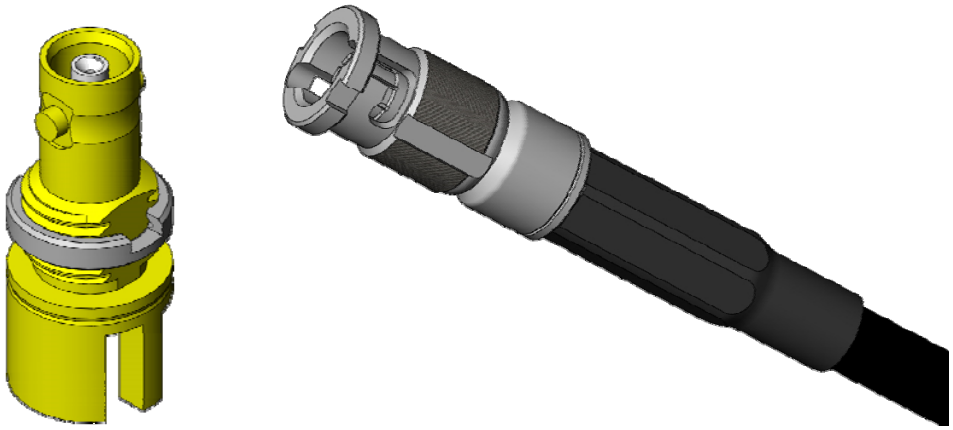
Project Number: Design Qualification Test Report	Tracking Code: 223035_Report_Rev_1
Requested by: Bryon Saylor	Date: 2/13/2015
Part #: HDBNC-J-P-HN-ST-EM1/RFB8T-H4SP2-606060-0150 & Amphenol 34-1026	Tech: Troy Cook
Part description: HDBNC/RFB8T	Qty to test: 20
Test Start: 10/25/2012	Test Completed: 10/25/2012



HDBNC INTERMATABILITY TEST REPORT

HDBNC/ RFB8T
HDBNC-J-P-HN-ST-EM1 / RFB8T-H4SP2-606060-0150 &Amphenol 34-1026

REVISION HISTORY

DATA	REV.NUM.	DESCRIPTION	ENG
2/13/2015	**1**	**Initial Issue**	**VZ**

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: intermatability 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) The automated procedure is used with aqueous compatible soldering materials.
4) Any additional preparation will be noted in the individual test sequences.

FLOWCHARTS

Strength of Coupling Mechanism

TEST STEP	GROUP J1 (5 MIN) HDBNC-J-P-HN-ST-EM1 RFB8T-H4SP2-606060-0150 0 DEG	GROUP J2 (5 MIN) HDBNC-J-P-HN-ST-EM1 Amphenol 34-1026 0 DEG	GROUP K1 (5 MIN) HDBNC-J-P-HN-ST-EM1 RFB8T-H4SP2-606060-0150 90 DEG	GROUP K2 (5 MIN) HDBNC-J-P-HN-ST-EM1 Amphenol 34-1026 90 DEG
01	Visual Inspection	Visual Inspection	Visual Inspection	Visual Inspection
02	Monitor Continuity	Monitor Continuity	Monitor Continuity	Monitor Continuity
03	Mechanical Pull	Mechanical Pull	Mechanical Pull	Mechanical Pull
04	Visual Inspection	Visual Inspection	Visual Inspection	Visual Inspection

The Jack is rigid mounted to a bulkhead and the pull on the Plug is not on the cable but will need to be on the CBDY.
Monitor continuity on both center and outer contactcs and pull; record forces when continuity fails on both the center and outer contacts, or visual breaking of a componet occurs.

ATTRIBUTE DEFINITIONS

The following is a brief, simplified description of attributes.

CONNECTOR PULL:

1) Secure cable near center and pull on connector
    a. At 90°, right angle to cable
    b. At 0°, in-line with cable

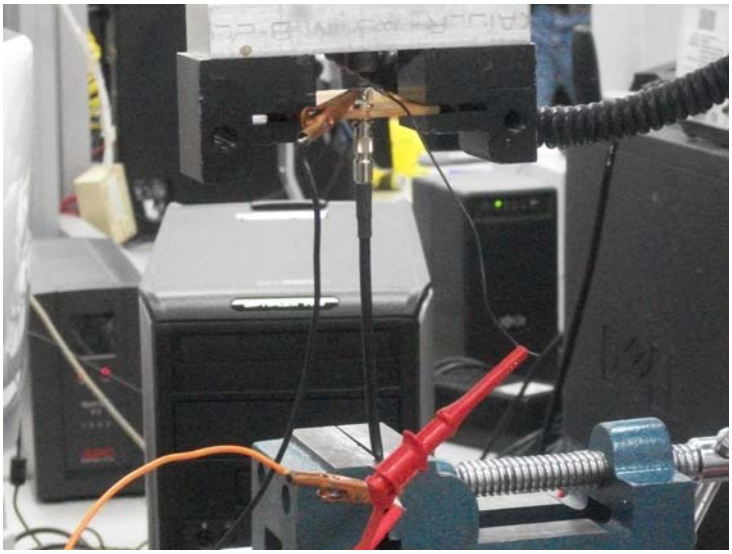


Fig. 1
0 Deg. Pull Testing Setup Photo, notice the electrical continuity hook-up wires.

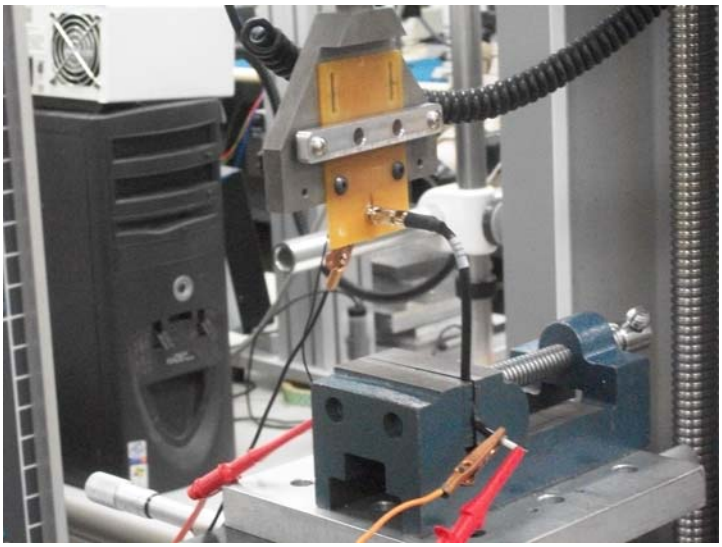


Fig. 2
90 Deg. Pull Testing Setup Photo, notice the electrical continuity hook-up wires.

RESULTS

Cable pull force

HDBNC-J-P-HN-ST-EM1/ RFBST-H4SP2-606060-0150

Signal pull

- **0° Pull**
  - **Min ---------- 2.5 Lbs**
  - **Max ---------- 4.0 Lbs**
- **90° Pull**
  - **Min ---------- 7.0 Lbs**
  - **Max ---------- 18.0 Lbs**

Ground Pull

- **0° Pull**
  - **Min ---------- 41.0 Lbs**
  - **Max ---------- 54.0 Lbs**
- **90° Pull**
  - **Min ---------- 9.5 Lbs**
  - **Max ---------- 20.5 Lbs**

HDBNC-J-P-HN-ST-EM1/ Amphenol 34-1026

Signal pull

- **0° Pull**
  - **Min ---------- 2.0 Lbs**
  - **Max ---------- 4.0 Lbs**
- **90° Pull**
  - **Min ---------- 17.5 Lbs**
  - **Max ---------- 32.0 Lbs**

Ground Pull

- **0° Pull**
  - **Min ---------- 35.0 Lbs**
  - **Max ---------- 54.0 Lbs**
- **90° Pull**
  - **Min ---------- 22.5 Lbs**
  - **Max ---------- 35.5 Lbs**

DATA SUMMARIES

Cable Pull force

Descript.	0 DEGREE PULL		90 DEGREE PULL	
Group:	GROUP J1	GROUP J2	GROUP K1	GROUP K2
Part #:	HDBNC-J-P-HN-ST-EM1	HDBNC-J-P-HN-ST-EM1	HDBNC-J-P-HN-ST-EM1	HDBNC-J-P-HN-ST-EM1
Mating Part #:	RFBST-H4SP2-606060-0150	Amphenol 34-1026	RFBST-H4SP2-606060-0150	Amphenol 34-1026
	Signal Pull (Lbs.)	Signal Pull (Lbs.)	Signal Pull (Lbs.)	Signal Pull (Lbs.)
Minimum	2.5	2.0	7.0	17.5
Maximum	4.0	4.0	18.0	32.0
Average	***3.3***	***2.8***	***12.2***	***23.6***
	Ground Pull (Lbs.)	Ground Pull (Lbs.)	Ground Pull (Lbs.)	Ground Pull (Lbs.)
Minimum	41.0	35.0	9.5	22.5
Maximum	54.0	54.0	20.5	35.5
Average	***47.9***	***47.4***	***13.3***	***30.4***

EQUIPMENT AND CALIBRATION SCHEDULES

Equipment #: TCT-01
Description: Test Stand
Manufacturer: Chatillon
Model: TCD-1000
Serial #: 05 23 00 02
Accuracy: Speed Accuracy: +/-5% of max speed; Displacement: +/-.5% or +/-.005, whichever is greater.
… Last Cal: 08/24/2012, Next Cal: 08/24/2013