Amphenol

Test Report

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REPORT No.	MPT-8834	TEST DESCRIPTION	Mechanical TEST

1. TEST PURPOSE

To verify the sample whether it can meet the requirement of Mechanical Characteristics.

2. TEST DESCRIPTION

P/N:RCSS29F006 + RCSS29M002 SAS connector push and pull force test report, 5pcs.

3. TEST REQUIREMENT AND PROCEDURE

3.1 Insertion and Withdrawal force test , EIA 364-13 mearsure the force necessay to mate the connector assemblies at maximum rate of 25mm per minute. Insertion force 50N maximum,Withdrawa force 20N minimum

4. TEST EQUIPMENT

4.1 1220S for the Insertion and Withdrawal force test.

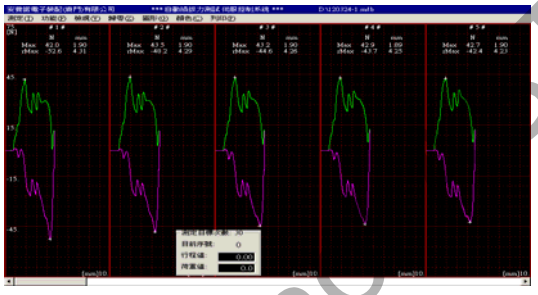
5. TEST RESULT AND RECORD

Temperature:24.1 ℃ Humidity: 50 %

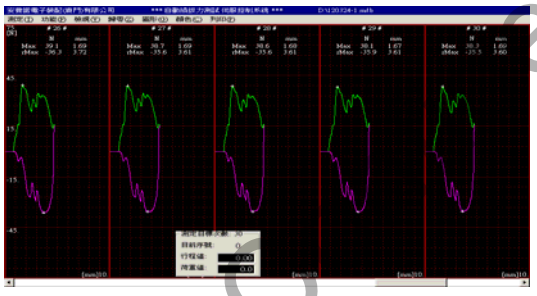
5.1 #1 sample Insertion & withdrawal force test @ 25mm per minute.

Test Item	1 cycle	2 cycle	3 cycle	4 cycle	5 cycle	MAX	MIN	Average
Insertion Force (MAX:50N)	42.0	43.5	43.2	42.9	42.7	43.5	42.0	42.86
Extraction Force (MIN:20N)	52.6	48.2	44.6	43.7	42.4	52.6	42.4	46.30
Test result	PASS	PASS	PASS	PASS	PASS			

Test Item	26 cycle	27 cycle	28 cycle	29 cycle	30 cycle	MAX	MIN	Average
Insertion Force (MAX:50N)	39.1	38.7	38.6	38.1	38.3	39.1	38.1	38.56
Extraction Force (MIN:20N)	36.3	35.6	35.6	35.9	35.5	36.3	35.5	35.78
Test result	PASS	PASS	PASS	PASS	PASS			



#1 sample 1-5cycles test waveform



#1 sample last five cycles test waveform

5.2 #2 sample Insertion & withdrawal force test @ 25mm per minute.

Test Item	1 cycle	2 cycle	3 cycle	4 cycle	5 cycle	MAX	MIN	Average
Insertion Force (MAX:50N)	45.4	44.3	43.7	42.9	42.5	45.4	42.5	43.76
Extraction Force (MIN:20N)	33.9	34.1	34.2	34.4	34.6	34.6	33.9	34.24
Test result	PASS	PASS	PASS	PASS	PASS			

Test Item	26 cycle	27 cycle	28 cycle	29 cycle	30 cycle	MAX	MIN	Average
Insertion Force (MAX:50N)	40.7	40.8	40.8	40.6	40.2	40.8	40.2	40.62
Extraction Force (MIN:20N)	35.7	36.4	36.3	36.0	36.0	36.4	35.7	36.08
Test result	PASS	PASS	PASS	PASS	PASS			

#2 sample 1-5cycles test waveform

#2 sample last five cycles test waveform

5.3 #3 sample Insertion & withdrawal force test @ 25mm per minute.

Test Item	1 cycle	2 cycle	3 cycle	4 cycle	5 cycle	MAX	MIN	Average
Insertion Force (MAX:50N)	37.1	35.7	35.4	35.7	35.9	37.1	35.4	35.96
Extraction Force (MIN:20N)	29.5	30.0	30.2	30.7	31.2	31.2	29.5	30.32
Test result	PASS	PASS	PASS	PASS	PASS			

Test Item	26 cycle	27 cycle	28 cycle	29 cycle	30 cycle	MAX	MIN	Average
Insertion Force (MAX:50N)	35.7	35.8	35.8	35.5	35.9	35.9	35.5	35.74
Extraction Force (MIN:20N)	34.6	34.8	35.1	34.9	34.9	35.1	34.6	34.86
Test result	PASS	PASS	PASS	PASS	PASS			

PREPARED BY	DATE	APPROVED BY	DATE
Chen qiupu	2013-01-18	Illumine Liu	2013-01-18

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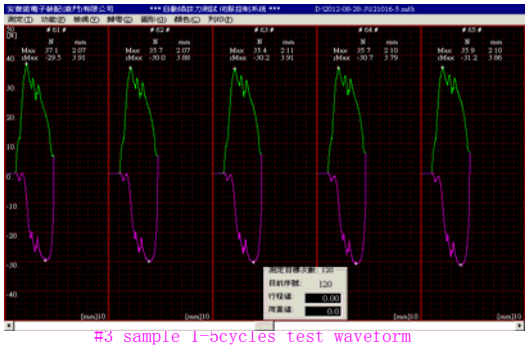
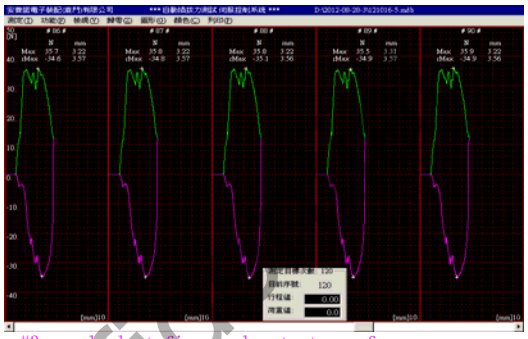


#3 sample 1-5cycles test waveform

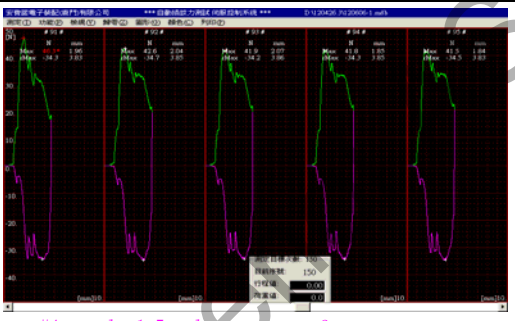


#3 sample last five cycles test waveform

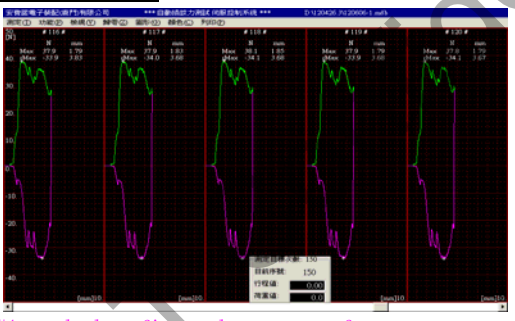
5.4 #4 sample Insertion & withdrawal force test @ 25mm per minute.

Test Item	1 cycle	2 cycle	3 cycle	4 cycle	5 cycle	MAX	MIN	Average
Insertion Force (MAX:50N)	46.3	42.6	41.9	41.8	41.5	46.3	41.5	42.82
Extraction Force (MIN:20N)	34.3	34.7	34.2	34.3	34.5	34.7	34.2	34.40
Test result	PASS	PASS	PASS	PASS	PASS			

Test Item	26 cycle	27 cycle	28 cycle	29 cycle	30 cycle	MAX	MIN	Average
Insertion Force (MAX:50N)	37.9	37.9	38.1	37.9	37.8	38.1	37.8	37.92
Extraction Force (MIN:20N)	33.9	34.0	34.1	33.9	34.1	34.1	33.9	34.00
Test result	PASS	PASS	PASS	PASS	PASS			



#4 sample 1-5cycles test waveform



#4 sample last five cycles test waveform

5.5 #5 sample Insertion & withdrawal force test @ 25mm per minute.

Test Item	1 cycle	2 cycle	3 cycle	4 cycle	5 cycle	MAX	MIN	Average
Insertion Force (MAX:50N)	40.6	39.8	39.7	39.5	39.1	40.6	39.1	39.74
Extraction Force (MIN:20N)	33.5	34.7	35.0	35.5	35.9	35.9	33.5	34.92
Test result	PASS	PASS	PASS	PASS	PASS			

Test Item	26 cycle	27 cycle	28 cycle	29 cycle	30 cycle	MAX	MIN	Average
Insertion Force (MAX:50N)	39.1	39.0	38.6	38.8	38.5	39.1	38.5	38.80
Extraction Force (MIN:20N)	37.9	37.1	37.1	37.0	37.0	37.9	37.0	37.22
Test result	PASS	PASS	PASS	PASS	PASS			

#5 sample 1-5cycles test waveform

#5 sample last five cycles test waveform

6. TEST RESULT

All samples pass the Insertion and withdrawal force test.

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Chen qiupu	2013-01-18	Illumine Liu	2013-01-18

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REPORT No.	FAI-12377	TEST DESCRIPTION	ELECTRICAL TEST

1. TEST PURPOSE

Evaluate the electrical performance of sample cable assembly.

2. TEST DESCRIPTION

P/N: RSS29-0089 SAS 29P to SAS 29P cable ass'y ,2pcs.

3. TEST REQUIREMENT AND PROCEDURE

See the data record table

4. TEST EQUIPMENT

4.1 TEKTRONIX TDS8000 + TEKTRONIX 80E04 for Impedance, Skew and Risetime test
4.2 Agilent N5230A for Insertion Loss and NEXT test

5. TEST RESULT AND RECORD

Temperature:23.0 ℃ Humidity: 55.3%

Sample No.	Signal	Impedance(Risetime=70ps, 20%~80%)								Intra-pair skew (Risetime =70ps, 20%~80%)	Rise time	NEXT (10M~4500 MHz)	Insertion Loss(10M Hz~4500M Hz)	RESULT
		Differential impedance						Cable pair matching	Common mode					
		Termination area				Cable Absolute area								
		Side A		Side B										
	Wire	MAX	MIN	MAX	MIN	MAX	MIN							
	Unit	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	ps	ps	dB	dB	
	High Limit	115	115	115	115	110	110	5	40	10	85	-26	6	
	Lower Limit	85	85	85	85	90	90	0	25	0	0	-100	0	
#1	pair1	102.1	96.8	105.3	92.3	98.1	97.5	0.6	30.9	0.7	63.2	-33.20	2.36	PASS
	pair2	103.6	98.1	105.1	93.2	99.1	98.5	0.9	29.6	0.6	73.1		2.39	
	pair1	104.0	97.0	99.2	95.8	98.9	98.6	1.5	30.5	3.4	68.2	-34.45	2.15	
	pair2	101.7	93.3	103.5	98.0	97.9	96.6	0.6	29.6	1.0	69.1		2.18	
#2	pair1	102.0	96.1	100.5	94.7	98.6	97.9	0.8	30.5	0.4	70.6	-34.21	2.28	PASS
	pair2	105.6	96.4	105.4	94.4	100.8	96.4	1.6	30.1	2.5	65.7		2.47	
	pair1	102.1	97.4	105.2	93.6	98.0	97.4	0.2	29.6	4.8	73.0	-35.58	2.27	
	pair2	102.2	93.0	108.5	96.8	100.3	96.3	0.4	30.5	0.4	71.9		2.34	
								1.6						

6. TEST RESULT

All samples pass the electrical test.

---------- THE END OF REPORT ----------

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Liu Huijuan	2013-03-08	Smith Wu	2013-03-08