



GT-14-39

SuperSeal D38999 Series RJ45

233-303 Series, Low Temp CAT5e RJ45 W/Solder Cup Performance Test Report

233-303M07G195LN3





SuperSeal Series D38999 RJ45
Performance Evaluation Test Report

Rev	Date	Approved	Description
A	5/20/2014	T.Yohannes	Initial Release



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PURPOSE

The purpose of the test was to perform performance evaluation of SuperSeal Series D38999 RJ45 connectors, 233-303 Series, Low Temp version. Sample connectors were subjected to sealing test, thermal shock, electrical and Ethernet compliance tests per specified requirements.

TEST SAMPLES

Three sample connectors (S1, S2, S3) were used for the test.

233-303M07G195LN3 - Receptacle, D38999 Series III, Shell size 19, with Low temp RJ45 Jack-PC Tail Coupler (PN 990-25065)

233-300MG6-195LN3 - Plug, D38999 Series III, Shell size 19, with Low temp RJ45 Plug-Jack Coupler (PN 990-25056)

TEST EQUIPMENT

Thermal Shock: Temney Thermal Shock Equipment
Thermal Product Solutions
Calibration Due date: 03/11/2015

Sealing Test: Helium Leak Testing, Inc.
Calibration Due date: 09/24/14

Ethernet Compliance Test: LanTEK II Cable Certifier
IDEAL INDUSTRIES, INC.
Calibration Due Date: 10/14/14

DWV & IR: QuadTech Guardian 1030s AC/DC/IR Hi Pot Tester
Calibration Due Date: 02/24/15



TEST PARAMETERS

Visual, Mechanical & Workmanship Exam

Connectors and contacts shall be visually and mechanically examined to ensure conformance with Glenair sales drawings and associated specs.

Specification: The individual item requirements shall be specified herein and in accordance with MIL-DTL-38999/24 & /26 and Glenair Sales.

Materials: Materials shall be in accordance with Glenair Sales drawings.

Configuration Interface and Features: Connectors and contacts shall be Configured to withstand normal handling incident to installation and maintenance in service.

Marking Requirements: Marking shall be verified per Glenair sales drawings. At minimum, marking shall include cage code, part number and lot date code.

Inspection: Connectors and contacts shall be inspected for cracks, dents, Discontinuities or scratches that may impair the function of the connector, Specifically connector and contact defects.

Thermal Shock

The connectors shall be tested in the mated condition in accordance with MIL-DTL-D8999 paragraphs 3.9, 4.5.4, and EIA-364-32, Test Condition A, with the following exceptions:

- a) Temperature for step 1 shall be -20°C +0/-5°C
- b) Temperature for step 3 shall be +85°C +5/-0°C
- c) Steps 2 & 4 shall be 2 minutes maximum in duration.

Durability

The assembly shall be fully mated and unmated with assembled, wired counterparts a total of 300 cycles. No mechanical damage allowed.

Vibration

Per EIA-364-28, Test Condition V, letter E with exception:
20g (196 m/s²), 10-2000 Hz, 4 hrs on each axis (X, Y & Z) for a total of 12 hrs.

Mechanical Shock

Per EIA-364-27 following details apply:

- a) Pulse shall be an approximate half sine wave of 300 G $\pm$ 15% magnitude with duration of 3 $\pm$ 1 milliseconds.



- b) Wire bundle shall be clamped to fixed points @ least 8 inches from the rear of the connector.

SEALING TEST : A helium leak tester was used to perform sealing of sample connectors to meet IP67 sealing requirement unmated condition. Sealing level of 1×10^{-3} or better is considered a pass for IP67 sealing requirement

ETHERNET COMPLIANCE TEST : RJ45 connector performance to be verified using Lantek II Series Cable Certifier per TIA standard for Category 5e for the following characteristics: (Setup for Channel Link Test)
Insertion Loss, Return Loss, Impedance, Crosstalk (Next & Power Sum Next), ACR-N, Wiremap & Resistance.

DIELECTRIC WITHSTANDING VOLTAGE (DWV) : The dielectric withstanding voltage shall be tested in accordance with IEC 60512-4-1, Test 4a, Method C, test voltage of 1000 VDC, with exception that test voltage shall be applied for 2 sec. The leakage current between adjacent contacts shall not be greater than 2 mA and there shall be no evidence of arcing, material breakdown, or any evidence of damage. Test can be performed in mated or unmated conditions.

INSULATION RESISTANCE (IR) : The insulation resistance shall be measured in accordance with IEC 60512-3-1, Test 3a, Method C, test voltage 500 VDC, with exception that test voltage shall be applied for 2 sec. The insulation resistance between adjacent contacts shall be at least 500 MΩ. Test can be performed in mated or unmated conditions.

TEST SETUP

Test samples (S1, S2, S3) are shown on Figure 1. Test setup for thermal shock, DWV/IR, Sealing & Ethernet compliance test are shown on figures 2, 3, 4 & 5, respectively



Figure 1. Test samples S1, S2, S3.



Figure 2. Thermal shock test setup.



Figure 3. DWV/IR test setup



Figure 4. Leak Test setup



Figure 5. Ethernet Compliance Test.



TEST RESULTS

Visual, Mechanical & Workmanship Exam

Sample connectors passed visual & mechanical exams.

Thermal Shock & Durability

All Sample connectors passed both thermal shock & durability tests. Sample connectors passed Ethernet Compliance, DWV & IR tests performed both before & after each tests. Ethernet Compliance test results for both thermal & durability tests are shown on pages 12 thru 45.

Vibration

Connectors meet vibration requirements by similarity per Glenair Test Report **GT-14-30 & GT-14-38** for RJ45 Series 300 Low Temp Qualification Test.

Mechanical Shock

Connectors meet mechanical shock requirements by similarity per Glenair Test Report **GT-14-30** for RJ45 Series 300 Low Temp Qualification Test.

Conclusion

Glenair Super Seal part number 233-301M07G195LN3 meets thermal shock & durability tests as well as Ethernet compliance and DWV & IR tests as specified in this document. Connector meets vibration and mechanical shock requirements by similarity per Glenair Test Report **GT-14-30 & GT-14-38** for RJ45 Series 300 Low Temp Qualification Test.

IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:37 AM
Version: 1.3.2

Summary:

All Cables	Twisted Pair	Coax/Twinax	Fiber
Total: 1	Total: 1	Total: 0	Total: 0
Pass: 1	Pass: 1	Pass: 0	Pass: 0
Fail: 0	Fail: 0	Fail: 0	Fail: 0
Tot. Length: 20.0ft	Tot. Length: 20.0ft	Tot. Length: 0ft	Tot. Length: 0ft

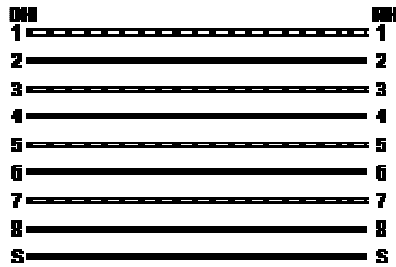
Pass

Test Name: S1 Before thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/14/2014
Test Time: 10:36:52
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

Wiremap: Pass

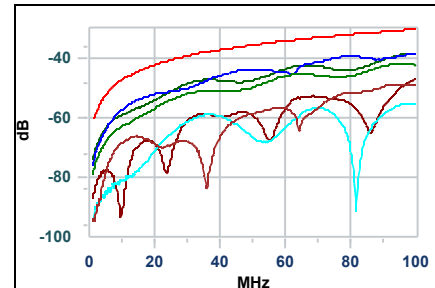


Test	7,8(0.72)	3,6(0.72)	5,4(0.72)	1,2(0.72)	Limit	Result
Length	20.3 ft.	21.3 ft.	21.7 ft.	20.0 ft.	< 328.1 ft.	✓
Propagation Delay	28.6 ns	30.2 ns	30.6 ns	28.4 ns	< 555.0 ns	✓
Delay Skew	0.2 ns	1.8 ns	2.2 ns	0.0 ns	< 50.0 ns	✓
Headroom	59.1 dB					✓

NEXT: Pass

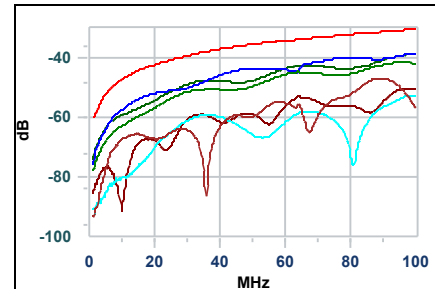
DH

Pairs	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	48.7dB @ 92.5MHz	30.7dB	18.0dB	48.5dB @ 95.3MHz	30.4dB	18.1dB
7,8-5,4	41.6dB @ 93.8MHz	30.6dB	11.0dB	41.5dB @ 96.8MHz	30.3dB	11.2dB
7,8-1,2	58.8dB @ 35.5MHz	37.8dB	21.0dB	55.2dB @ 98.3MHz	30.2dB	25.0dB
3,6-5,4	39.2dB @ 77.5MHz	32.0dB	7.2dB	38.2dB @ 100.0MHz	30.1dB	8.1dB
3,6-1,2	46.7dB @ 100.0MHz	30.1dB	16.6dB	46.7dB @ 100.0MHz	30.1dB	16.6dB
5,4-1,2	38.7dB @ 95.0MHz	30.5dB	8.2dB	38.4dB @ 98.3MHz	30.2dB	8.2dB



RH

Pairs	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	46.7dB @ 87.8MHz	31.1dB	15.6dB	46.6dB @ 89.3MHz	30.9dB	15.7dB
7,8-5,4	41.2dB @ 93.5MHz	30.6dB	10.6dB	41.1dB @ 96.5MHz	30.3dB	10.8dB
7,8-1,2	59.1dB @ 35.0MHz	37.9dB	21.2dB	52.6dB @ 99.3MHz	30.1dB	22.5dB
3,6-5,4	39.5dB @ 77.8MHz	32.0dB	7.5dB	38.4dB @ 100.0MHz	30.1dB	8.3dB
3,6-1,2	52.9dB @ 63.8MHz	33.4dB	19.5dB	49.8dB @ 99.8MHz	30.1dB	19.7dB
5,4-1,2	38.8dB @ 96.0MHz	30.4dB	8.4dB	38.7dB @ 100.0MHz	30.1dB	8.6dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:37 AM
Version: 1.3.2

Pass

Test Name: S1 Before thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

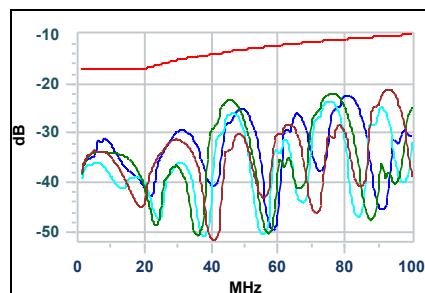
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/14/2014
Test Time: 10:36:52
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

Return Loss: Pass

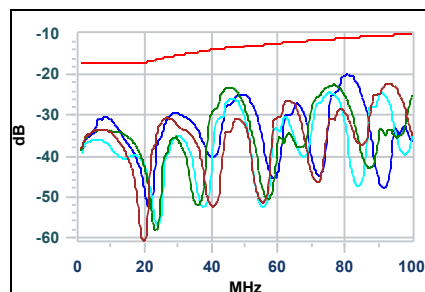
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	21.3dB @ 92.3MHz	10.4dB	10.9dB	21.2dB @ 93.3MHz	10.3dB	10.9dB
3,6	✓	23.3dB @ 45.3MHz	13.5dB	9.8dB	21.9dB @ 77.0MHz	11.1dB	10.8dB
5,4	✓	23.5dB @ 74.5MHz	11.3dB	12.2dB	23.5dB @ 75.8MHz	11.2dB	12.3dB
1,2	✓	22.4dB @ 80.3MHz	11.0dB	11.4dB	22.4dB @ 81.0MHz	10.9dB	11.5dB



RH

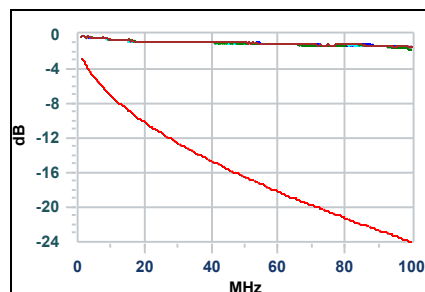
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	22.4dB @ 92.3MHz	10.4dB	12.0dB	22.3dB @ 93.5MHz	10.3dB	12.0dB
3,6	✓	23.1dB @ 45.3MHz	13.5dB	9.6dB	22.5dB @ 76.8MHz	11.2dB	11.3dB
5,4	✓	26.1dB @ 45.8MHz	13.4dB	12.7dB	24.4dB @ 91.0MHz	10.4dB	14.0dB
1,2	✓	20.1dB @ 80.5MHz	11.0dB	9.1dB	20.1dB @ 81.3MHz	10.9dB	9.2dB



Insertion Loss: Pass

DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	0.3dB @ 1.9MHz	3.1dB	2.8dB	1.5dB @ 100.0MHz	24.0dB	22.5dB
3,6	✓	0.3dB @ 1.9MHz	3.1dB	2.8dB	1.7dB @ 100.0MHz	24.0dB	22.3dB
5,4	✓	0.3dB @ 1.9MHz	3.1dB	2.8dB	1.6dB @ 100.0MHz	24.0dB	22.4dB
1,2	✓	0.3dB @ 1.9MHz	3.1dB	2.8dB	1.5dB @ 100.0MHz	24.0dB	22.5dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:37 AM
Version: 1.3.2

Pass

Test Name: S1 Before thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

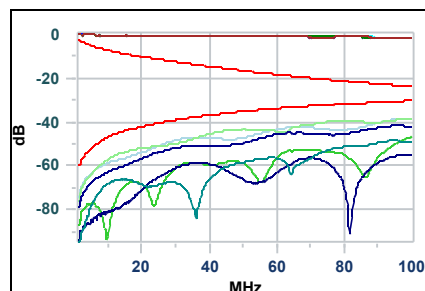
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/14/2014
Test Time: 10:36:52
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

ACR-N: Pass

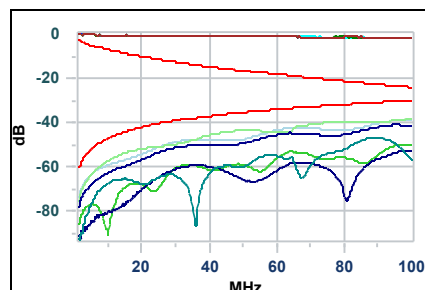
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	68.3dB @ 9.3MHz	40.8dB	27.5dB	47.0dB @ 94.3MHz	7.3dB	39.7dB
7,8-5,4	✓	75.7dB @ 1.8MHz	56.4dB	19.3dB	40.0dB @ 94.8MHz	7.2dB	32.8dB
7,8-1,2	✓	89.4dB @ 1.8MHz	56.4dB	33.0dB	53.8dB @ 97.5MHz	6.6dB	47.2dB
3,6-5,4	✓	69.0dB @ 2.5MHz	53.4dB	15.6dB	36.5dB @ 99.8MHz	6.1dB	30.4dB
3,6-1,2	✓	80.2dB @ 2.5MHz	53.4dB	26.8dB	45.0dB @ 100.0MHz	6.1dB	38.9dB
5,4-1,2	✓	71.5dB @ 1.6MHz	57.0dB	14.5dB	36.8dB @ 98.3MHz	6.4dB	30.4dB



RH

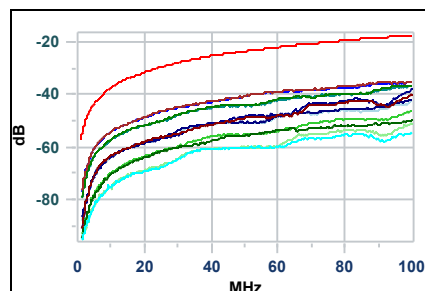
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	70.2dB @ 7.0MHz	43.7dB	26.5dB	45.2dB @ 88.3MHz	8.6dB	36.6dB
7,8-5,4	✓	75.3dB @ 1.8MHz	56.4dB	18.9dB	39.6dB @ 94.5MHz	7.2dB	32.4dB
7,8-1,2	✓	90.0dB @ 1.5MHz	57.0dB	33.0dB	51.1dB @ 99.3MHz	6.2dB	44.9dB
3,6-5,4	✓	71.1dB @ 1.9MHz	55.7dB	15.4dB	36.7dB @ 99.5MHz	6.2dB	30.5dB
3,6-1,2	✓	78.7dB @ 2.8MHz	52.4dB	26.3dB	48.1dB @ 99.5MHz	6.2dB	41.9dB
5,4-1,2	✓	71.4dB @ 1.6MHz	57.0dB	14.4dB	37.1dB @ 97.8MHz	6.5dB	30.6dB



ACR-F: Pass

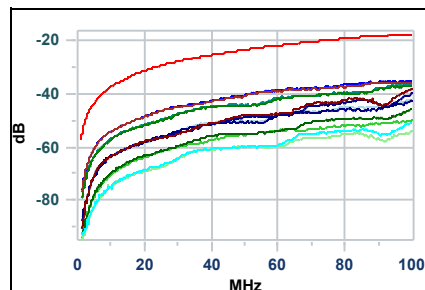
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Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	59.8dB @ 5.1MHz	43.3dB	16.5dB	35.1dB @ 92.8MHz	18.1dB	17.0dB
7,8-5,4	✓	36.7dB @ 95.3MHz	17.8dB	18.9dB	36.7dB @ 99.8MHz	17.4dB	19.3dB
7,8-1,2	✓	61.3dB @ 35.5MHz	26.4dB	34.9dB	54.1dB @ 99.8MHz	17.4dB	36.7dB
3,6-7,8	✓	60.0dB @ 5.1MHz	43.3dB	16.7dB	35.4dB @ 100.0MHz	17.4dB	18.0dB
3,6-5,4	✓	39.6dB @ 99.8MHz	17.4dB	22.2dB	39.6dB @ 99.8MHz	17.4dB	22.2dB
3,6-1,2	✓	56.3dB @ 42.8MHz	24.8dB	31.5dB	49.5dB @ 100.0MHz	17.4dB	32.1dB
5,4-7,8	✓	36.9dB @ 95.5MHz	17.8dB	19.1dB	36.7dB @ 99.8MHz	17.4dB	19.3dB
5,4-3,6	✓	37.8dB @ 99.8MHz	17.4dB	20.4dB	37.8dB @ 99.8MHz	17.4dB	20.4dB
5,4-1,2	✓	42.0dB @ 99.3MHz	17.5dB	24.5dB	42.0dB @ 99.8MHz	17.4dB	24.6dB
1,2-7,8	✓	51.0dB @ 99.8MHz	17.4dB	33.6dB	51.0dB @ 99.8MHz	17.4dB	33.6dB
1,2-3,6	✓	46.2dB @ 100.0MHz	17.4dB	28.8dB	46.2dB @ 100.0MHz	17.4dB	28.8dB
1,2-5,4	✓	42.5dB @ 99.8MHz	17.4dB	25.1dB	42.5dB @ 99.8MHz	17.4dB	25.1dB



RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	60.0dB @ 5.1MHz	43.3dB	16.7dB	35.6dB @ 100.0MHz	17.4dB	18.2dB
7,8-5,4	✓	37.0dB @ 95.5MHz	17.8dB	19.2dB	36.9dB @ 99.8MHz	17.4dB	19.5dB
7,8-1,2	✓	51.0dB @ 99.8MHz	17.4dB	33.6dB	51.0dB @ 99.8MHz	17.4dB	33.6dB
3,6-7,8	✓	59.8dB @ 5.1MHz	43.3dB	16.5dB	35.1dB @ 99.0MHz	17.5dB	17.6dB
3,6-5,4	✓	37.7dB @ 99.8MHz	17.4dB	20.3dB	37.7dB @ 99.8MHz	17.4dB	20.3dB
3,6-1,2	✓	46.0dB @ 99.8MHz	17.4dB	28.6dB	46.0dB @ 100.0MHz	17.4dB	28.6dB
5,4-7,8	✓	36.6dB @ 96.0MHz	17.8dB	18.8dB	36.5dB @ 99.8MHz	17.4dB	19.1dB
5,4-3,6	✓	39.7dB @ 99.8MHz	17.4dB	22.3dB	39.7dB @ 99.8MHz	17.4dB	22.3dB
5,4-1,2	✓	42.3dB @ 99.8MHz	17.4dB	24.9dB	42.3dB @ 99.8MHz	17.4dB	24.9dB
1,2-7,8	✓	61.3dB @ 35.5MHz	26.4dB	34.9dB	54.1dB @ 99.8MHz	17.4dB	36.7dB
1,2-3,6	✓	52.8dB @ 64.0MHz	21.3dB	31.5dB	49.7dB @ 100.0MHz	17.4dB	32.3dB
1,2-5,4	✓	42.0dB @ 99.3MHz	17.5dB	24.5dB	42.0dB @ 99.3MHz	17.5dB	24.5dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:37 AM
Version: 1.3.2

Pass

Test Name: S1 Before thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

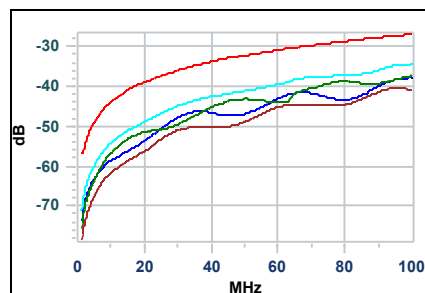
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/14/2014
Test Time: 10:36:52
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

PS NEXT: Pass

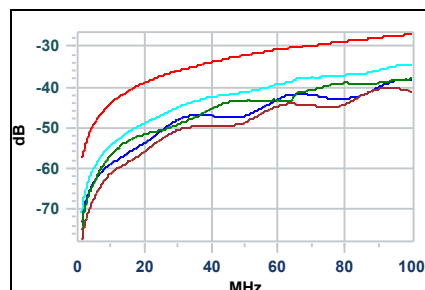
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	40.6dB @ 93.8MHz	27.6dB	13.0dB	40.5dB @ 96.3MHz	27.4dB	13.1dB
3,6	✓	38.8dB @ 77.5MHz	29.0dB	9.8dB	37.3dB @ 100.0MHz	27.1dB	10.2dB
5,4	✓	34.5dB @ 97.5MHz	27.3dB	7.2dB	34.4dB @ 99.8MHz	27.1dB	7.3dB
1,2	✓	37.9dB @ 97.3MHz	27.3dB	10.6dB	37.8dB @ 99.8MHz	27.1dB	10.7dB



RH

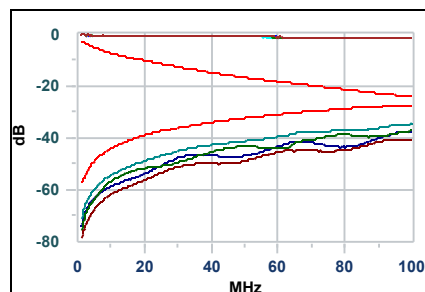
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	40.3dB @ 91.3MHz	27.8dB	12.5dB	40.2dB @ 95.0MHz	27.5dB	12.7dB
3,6	✓	39.2dB @ 77.8MHz	29.0dB	10.2dB	38.0dB @ 100.0MHz	27.1dB	10.9dB
5,4	✓	34.6dB @ 96.0MHz	27.4dB	7.2dB	34.5dB @ 100.0MHz	27.1dB	7.4dB
1,2	✓	38.3dB @ 96.0MHz	27.4dB	10.9dB	38.2dB @ 100.0MHz	27.1dB	11.1dB



PS ACR-N: Pass

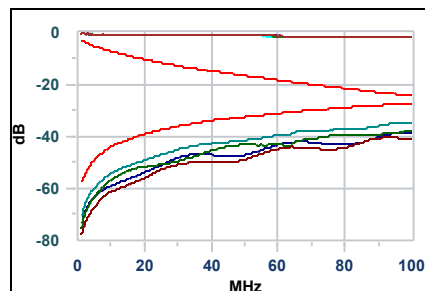
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	75.4dB @ 1.8MHz	53.4dB	22.0dB	39.0dB @ 94.8MHz	4.2dB	34.8dB
3,6	✓	68.6dB @ 2.5MHz	50.4dB	18.2dB	35.6dB @ 99.8MHz	3.1dB	32.5dB
5,4	✓	64.7dB @ 2.5MHz	50.4dB	14.3dB	32.8dB @ 99.8MHz	3.1dB	29.7dB
1,2	✓	70.6dB @ 1.8MHz	53.4dB	17.2dB	36.3dB @ 99.3MHz	3.2dB	33.1dB



RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	75.1dB @ 1.8MHz	53.4dB	21.7dB	38.7dB @ 94.8MHz	4.2dB	34.5dB
3,6	✓	70.7dB @ 1.9MHz	52.7dB	18.0dB	36.3dB @ 99.5MHz	3.2dB	33.1dB
5,4	✓	66.8dB @ 1.9MHz	52.7dB	14.1dB	32.9dB @ 97.8MHz	3.5dB	29.4dB
1,2	✓	71.2dB @ 1.6MHz	54.0dB	17.2dB	36.7dB @ 99.3MHz	3.2dB	33.5dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:37 AM
Version: 1.3.2

Pass

Test Name: S1 Before thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

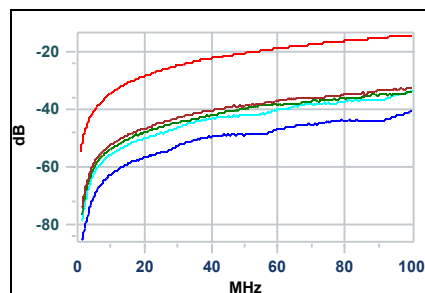
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/14/2014
Test Time: 10:36:52
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

PS ACR-F: Pass

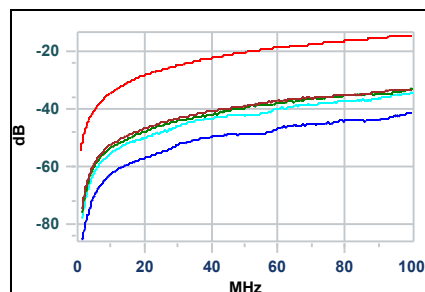
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	58.0dB @ 5.1MHz	40.3dB	17.7dB	32.8dB @ 95.3MHz	14.8dB	18.0dB
3,6	✓	58.0dB @ 6.0MHz	38.9dB	19.1dB	33.9dB @ 99.8MHz	14.4dB	19.5dB
5,4	✓	33.5dB @ 99.8MHz	14.4dB	19.1dB	33.5dB @ 99.8MHz	14.4dB	19.1dB
1,2	✓	40.5dB @ 99.8MHz	14.4dB	26.1dB	40.5dB @ 99.8MHz	14.4dB	26.1dB



RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	58.2dB @ 5.1MHz	40.3dB	17.9dB	33.1dB @ 100.0MHz	14.4dB	18.7dB
3,6	✓	33.0dB @ 99.8MHz	14.4dB	18.6dB	33.0dB @ 99.8MHz	14.4dB	18.6dB
5,4	✓	34.1dB @ 99.8MHz	14.4dB	19.7dB	34.1dB @ 99.8MHz	14.4dB	19.7dB
1,2	✓	41.1dB @ 99.3MHz	14.5dB	26.6dB	41.1dB @ 99.3MHz	14.5dB	26.6dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:14 AM
Version: 1.3.2

Summary:

All Cables	Twisted Pair	Coax/Twinax	Fiber
Total: 1	Total: 1	Total: 0	Total: 0
Pass: 1	Pass: 1	Pass: 0	Pass: 0
Fail: 0	Fail: 0	Fail: 0	Fail: 0
Tot. Length: 20.3ft	Tot. Length: 20.3ft	Tot. Length: 0ft	Tot. Length: 0ft

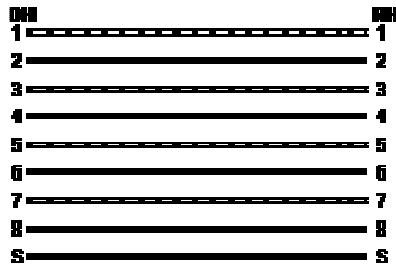
Pass

Test Name: S1 AFTER
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/16/2014
Test Time: 02:44:40
Operator: ENGINEERING
Contractor: CONTRACTOR NAME
Company: GLENAIR INC.

Wiremap: Pass

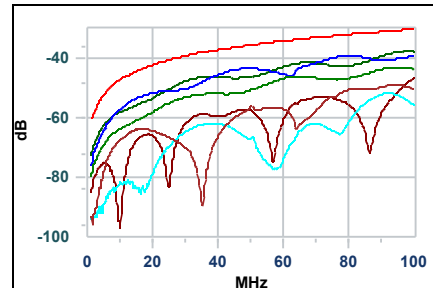


Test	7,8(0.72)	3,6(0.72)	5,4(0.72)	1,2(0.72)	Limit	Result
Length	20.7 ft.	21.7 ft.	22.0 ft.	20.3 ft.	< 328.1 ft.	✓
Propagation Delay	29.0 ns	30.4 ns	31.0 ns	28.6 ns	< 555.0 ns	✓
Delay Skew	0.4 ns	1.8 ns	2.4 ns	0.0 ns	< 50.0 ns	✓
Headroom	63.3 dB					✓

NEXT: Pass

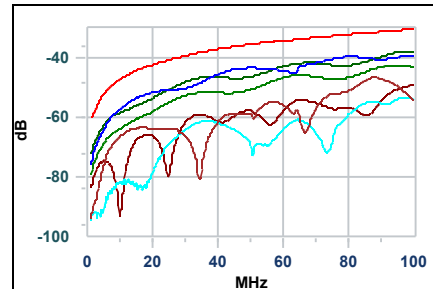
DH

Pairs	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	48.9dB @ 92.5MHz	30.7dB	18.2dB	48.8dB @ 95.5MHz	30.4dB	18.4dB
7,8-5,4	42.7dB @ 93.8MHz	30.6dB	12.1dB	42.7dB @ 96.5MHz	30.3dB	12.4dB
7,8-1,2	51.6dB @ 91.3MHz	30.8dB	20.8dB	51.6dB @ 93.3MHz	30.6dB	21.0dB
3,6-5,4	38.9dB @ 78.5MHz	31.9dB	7.0dB	38.8dB @ 80.8MHz	31.7dB	7.1dB
3,6-1,2	46.5dB @ 100.0MHz	30.1dB	16.4dB	46.5dB @ 100.0MHz	30.1dB	16.4dB
5,4-1,2	37.5dB @ 96.0MHz	30.4dB	7.1dB	37.4dB @ 99.8MHz	30.1dB	7.3dB



RH

Pairs	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	46.5dB @ 87.3MHz	31.1dB	15.4dB	46.4dB @ 88.3MHz	31.0dB	15.4dB
7,8-5,4	42.3dB @ 92.5MHz	30.7dB	11.6dB	42.2dB @ 96.3MHz	30.4dB	11.8dB
7,8-1,2	53.2dB @ 97.5MHz	30.3dB	22.9dB	53.2dB @ 97.8MHz	30.2dB	23.0dB
3,6-5,4	39.3dB @ 78.8MHz	31.9dB	7.4dB	38.8dB @ 100.0MHz	30.1dB	8.7dB
3,6-1,2	48.9dB @ 99.8MHz	30.1dB	18.8dB	48.9dB @ 100.0MHz	30.1dB	18.8dB
5,4-1,2	37.8dB @ 96.0MHz	30.4dB	7.4dB	37.6dB @ 99.5MHz	30.1dB	7.5dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:14 AM
Version: 1.3.2

Pass

Test Name: S1 AFTER
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

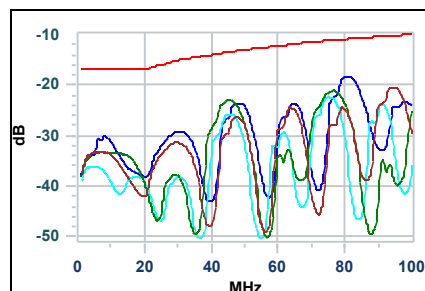
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/16/2014
Test Time: 02:44:40
Operator: ENGINEERING
Contractor: CONTRACTOR NAME
Company: GLENAIR INC.

Return Loss: Pass

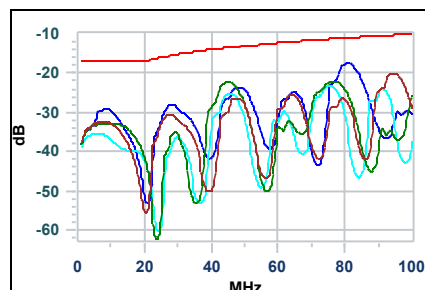
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	20.5dB @ 93.8MHz	10.3dB	10.2dB	20.5dB @ 95.0MHz	10.2dB	10.3dB
3,6	✓	22.8dB @ 45.3MHz	13.5dB	9.3dB	21.1dB @ 77.0MHz	11.1dB	10.0dB
5,4	✓	22.3dB @ 75.0MHz	11.3dB	11.0dB	22.3dB @ 75.3MHz	11.2dB	11.1dB
1,2	✓	18.3dB @ 80.3MHz	11.0dB	7.3dB	18.3dB @ 81.8MHz	10.9dB	7.4dB



RH

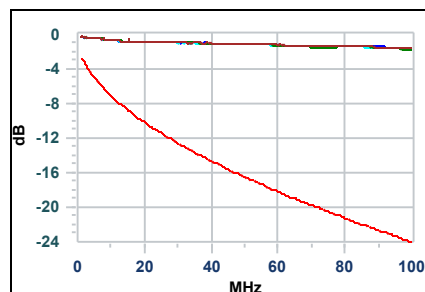
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	20.2dB @ 94.0MHz	10.3dB	9.9dB	20.2dB @ 95.0MHz	10.2dB	10.0dB
3,6	✓	22.1dB @ 45.3MHz	13.5dB	8.6dB	22.1dB @ 77.3MHz	11.1dB	11.0dB
5,4	✓	25.4dB @ 45.0MHz	13.5dB	11.9dB	23.3dB @ 75.8MHz	11.2dB	12.1dB
1,2	✓	17.6dB @ 80.3MHz	11.0dB	6.6dB	17.5dB @ 81.8MHz	10.9dB	6.6dB



Insertion Loss: Pass

DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	0.3dB @ 1.9MHz	3.1dB	2.8dB	1.6dB @ 95.5MHz	23.4dB	21.8dB
3,6	✓	0.3dB @ 1.9MHz	3.1dB	2.8dB	1.8dB @ 100.0MHz	24.0dB	22.2dB
5,4	✓	0.3dB @ 1.9MHz	3.1dB	2.8dB	1.7dB @ 99.0MHz	23.9dB	22.2dB
1,2	✓	0.4dB @ 1.9MHz	3.1dB	2.7dB	1.6dB @ 100.0MHz	24.0dB	22.4dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:14 AM
Version: 1.3.2

Pass

Test Name: S1 AFTER
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

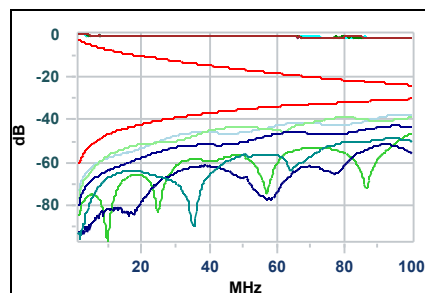
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/16/2014
Test Time: 02:44:40
Operator: ENGINEERING
Contractor: CONTRACTOR NAME
Company: GLENAIR INC.

ACR-N: Pass

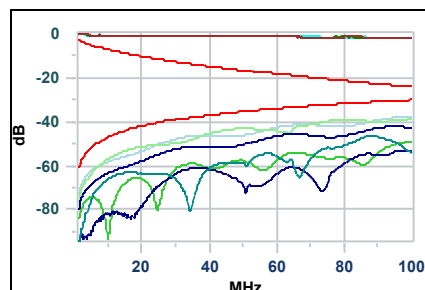
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	66.7dB @ 9.9MHz	40.1dB	26.6dB	47.2dB @ 93.8MHz	7.4dB	39.8dB
7,8-5,4	✓	76.2dB @ 1.8MHz	56.4dB	19.8dB	41.1dB @ 94.3MHz	7.3dB	33.8dB
7,8-1,2	✓	92.7dB @ 1.0MHz	57.0dB	35.7dB	50.1dB @ 91.3MHz	8.0dB	42.1dB
3,6-5,4	✓	71.3dB @ 2.1MHz	55.1dB	16.2dB	37.1dB @ 100.0MHz	6.1dB	31.0dB
3,6-1,2	✓	78.9dB @ 2.2MHz	54.5dB	24.4dB	44.7dB @ 100.0MHz	6.1dB	38.6dB
5,4-1,2	✓	70.6dB @ 1.6MHz	57.0dB	13.6dB	35.7dB @ 98.3MHz	6.4dB	29.3dB



RH

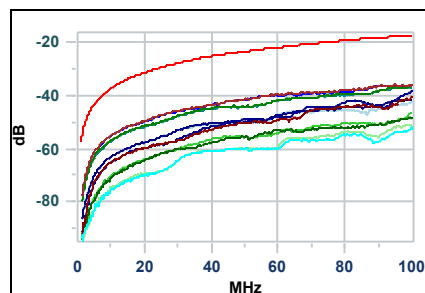
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	65.2dB @ 10.2MHz	39.7dB	25.5dB	44.9dB @ 88.3MHz	8.6dB	36.3dB
7,8-5,4	✓	76.0dB @ 1.8MHz	56.4dB	19.6dB	40.6dB @ 94.3MHz	7.3dB	33.3dB
7,8-1,2	✓	92.2dB @ 1.5MHz	57.0dB	35.2dB	51.7dB @ 97.5MHz	6.6dB	45.1dB
3,6-5,4	✓	72.3dB @ 1.8MHz	56.4dB	15.9dB	37.0dB @ 99.5MHz	6.2dB	30.8dB
3,6-1,2	✓	79.2dB @ 2.1MHz	55.1dB	24.1dB	47.1dB @ 99.8MHz	6.1dB	41.0dB
5,4-1,2	✓	70.0dB @ 1.8MHz	56.4dB	13.6dB	35.9dB @ 98.3MHz	6.4dB	29.5dB



ACR-F: Pass

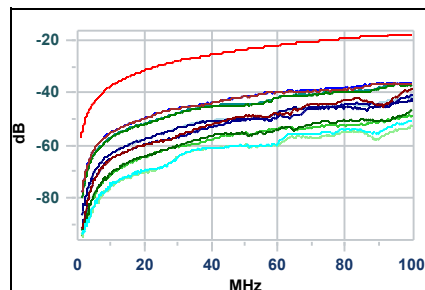
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	60.2dB @ 5.4MHz	42.8dB	17.4dB	36.0dB @ 100.0MHz	17.4dB	18.6dB
7,8-5,4	✓	36.8dB @ 95.3MHz	17.8dB	19.0dB	36.5dB @ 99.8MHz	17.4dB	19.1dB
7,8-1,2	✓	52.0dB @ 99.8MHz	17.4dB	34.6dB	52.0dB @ 99.8MHz	17.4dB	34.6dB
3,6-7,8	✓	60.4dB @ 5.4MHz	42.8dB	17.6dB	36.2dB @ 95.0MHz	17.8dB	18.4dB
3,6-5,4	✓	40.4dB @ 99.8MHz	17.4dB	23.0dB	40.4dB @ 99.8MHz	17.4dB	23.0dB
3,6-1,2	✓	47.9dB @ 100.0MHz	17.4dB	30.5dB	47.9dB @ 100.0MHz	17.4dB	30.5dB
5,4-7,8	✓	37.0dB @ 95.0MHz	17.8dB	19.2dB	36.8dB @ 99.0MHz	17.5dB	19.3dB
5,4-3,6	✓	38.3dB @ 99.8MHz	17.4dB	20.9dB	38.3dB @ 99.8MHz	17.4dB	20.9dB
5,4-1,2	✓	41.2dB @ 99.8MHz	17.4dB	23.8dB	41.2dB @ 99.8MHz	17.4dB	23.8dB
1,2-7,8	✓	50.7dB @ 98.8MHz	17.5dB	33.2dB	50.6dB @ 99.8MHz	17.4dB	33.2dB
1,2-3,6	✓	46.5dB @ 100.0MHz	17.4dB	29.1dB	46.5dB @ 100.0MHz	17.4dB	29.1dB
1,2-5,4	✓	45.6dB @ 64.5MHz	21.2dB	24.4dB	42.2dB @ 99.8MHz	17.4dB	24.8dB



RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	60.7dB @ 5.2MHz	43.1dB	17.6dB	36.2dB @ 94.8MHz	17.9dB	18.3dB
7,8-5,4	✓	37.0dB @ 95.3MHz	17.8dB	19.2dB	37.0dB @ 99.8MHz	17.4dB	19.6dB
7,8-1,2	✓	50.7dB @ 98.8MHz	17.5dB	33.2dB	50.6dB @ 99.8MHz	17.4dB	33.2dB
3,6-7,8	✓	60.2dB @ 5.4MHz	42.8dB	17.4dB	35.7dB @ 100.0MHz	17.4dB	18.3dB
3,6-5,4	✓	38.1dB @ 99.8MHz	17.4dB	20.7dB	38.1dB @ 99.8MHz	17.4dB	20.7dB
3,6-1,2	✓	46.3dB @ 100.0MHz	17.4dB	28.9dB	46.3dB @ 100.0MHz	17.4dB	28.9dB
5,4-7,8	✓	36.8dB @ 95.3MHz	17.8dB	19.0dB	36.4dB @ 99.8MHz	17.4dB	19.0dB
5,4-3,6	✓	40.6dB @ 99.8MHz	17.4dB	23.2dB	40.6dB @ 99.8MHz	17.4dB	23.2dB
5,4-1,2	✓	45.6dB @ 64.5MHz	21.2dB	24.4dB	42.1dB @ 99.8MHz	17.4dB	24.7dB
1,2-7,8	✓	52.0dB @ 99.8MHz	17.4dB	34.6dB	52.0dB @ 99.8MHz	17.4dB	34.6dB
1,2-3,6	✓	48.1dB @ 100.0MHz	17.4dB	30.7dB	48.1dB @ 100.0MHz	17.4dB	30.7dB
1,2-5,4	✓	41.4dB @ 99.3MHz	17.5dB	23.9dB	41.3dB @ 99.8MHz	17.4dB	23.9dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:14 AM
Version: 1.3.2

Pass

Test Name: S1 AFTER
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

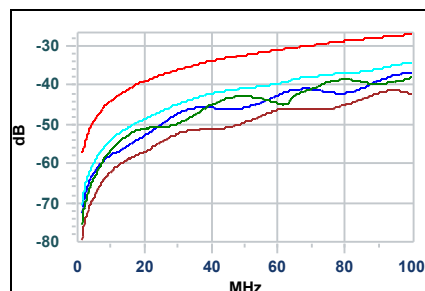
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/16/2014
Test Time: 02:44:40
Operator: ENGINEERING
Contractor: CONTRACTOR NAME
Company: GLENAIR INC.

PS NEXT: Pass

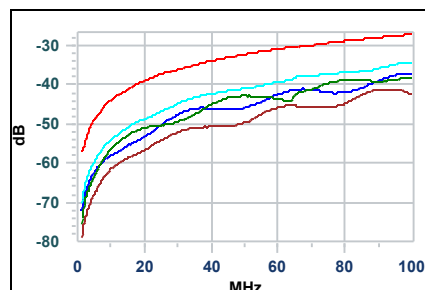
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	41.4dB @ 92.5MHz	27.7dB	13.7dB	41.3dB @ 95.5MHz	27.4dB	13.9dB
3,6	✓	38.5dB @ 78.5MHz	28.9dB	9.6dB	37.9dB @ 100.0MHz	27.1dB	10.8dB
5,4	✓	34.8dB @ 95.0MHz	27.5dB	7.3dB	34.4dB @ 99.5MHz	27.1dB	7.3dB
1,2	✓	36.9dB @ 97.5MHz	27.3dB	9.6dB	36.8dB @ 99.8MHz	27.1dB	9.7dB



RH

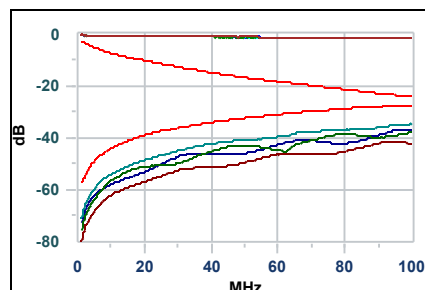
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	41.3dB @ 88.8MHz	28.0dB	13.3dB	41.0dB @ 94.0MHz	27.5dB	13.5dB
3,6	✓	38.9dB @ 78.8MHz	28.9dB	10.0dB	38.2dB @ 100.0MHz	27.1dB	11.1dB
5,4	✓	34.6dB @ 95.8MHz	27.4dB	7.2dB	34.4dB @ 99.5MHz	27.1dB	7.3dB
1,2	✓	37.4dB @ 96.0MHz	27.4dB	10.0dB	37.2dB @ 100.0MHz	27.1dB	10.1dB



PS ACR-N: Pass

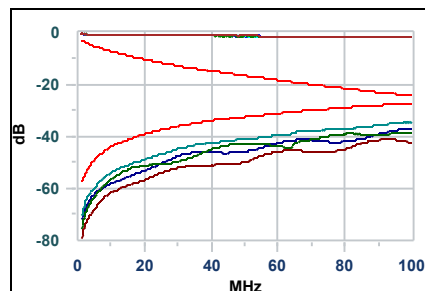
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	76.0dB @ 1.8MHz	53.4dB	22.6dB	39.7dB @ 94.3MHz	4.3dB	35.4dB
3,6	✓	70.7dB @ 2.1MHz	52.1dB	18.6dB	36.1dB @ 100.0MHz	3.1dB	33.0dB
5,4	✓	67.5dB @ 1.8MHz	53.4dB	14.1dB	32.8dB @ 98.3MHz	3.4dB	29.4dB
1,2	✓	70.3dB @ 1.6MHz	54.0dB	16.3dB	35.2dB @ 99.3MHz	3.2dB	32.0dB



RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	75.7dB @ 1.8MHz	53.4dB	22.3dB	39.5dB @ 92.0MHz	4.8dB	34.7dB
3,6	✓	71.7dB @ 1.8MHz	53.4dB	18.3dB	36.4dB @ 99.5MHz	3.2dB	33.2dB
5,4	✓	67.4dB @ 1.8MHz	53.4dB	14.0dB	32.7dB @ 98.3MHz	3.4dB	29.3dB
1,2	✓	68.9dB @ 1.9MHz	52.7dB	16.2dB	35.6dB @ 99.3MHz	3.2dB	32.4dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:14 AM
Version: 1.3.2

Pass

Test Name: S1 AFTER
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

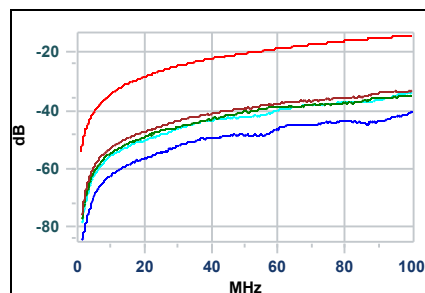
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/16/2014
Test Time: 02:44:40
Operator: ENGINEERING
Contractor: CONTRACTOR NAME
Company: GLENAIR INC.

PS ACR-F: Pass

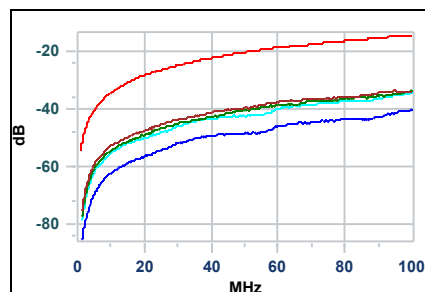
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	58.3dB @ 5.2MHz	40.1dB	18.2dB	33.2dB @ 100.0MHz	14.4dB	18.8dB
3,6	✓	39.8dB @ 54.0MHz	19.8dB	20.0dB	34.9dB @ 100.0MHz	14.4dB	20.5dB
5,4	✓	33.6dB @ 99.8MHz	14.4dB	19.2dB	33.6dB @ 99.8MHz	14.4dB	19.2dB
1,2	✓	40.4dB @ 99.8MHz	14.4dB	26.0dB	40.4dB @ 99.8MHz	14.4dB	26.0dB



RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	58.6dB @ 5.2MHz	40.1dB	18.5dB	33.6dB @ 95.3MHz	14.8dB	18.8dB
3,6	✓	33.6dB @ 99.8MHz	14.4dB	19.2dB	33.6dB @ 99.8MHz	14.4dB	19.2dB
5,4	✓	34.2dB @ 99.8MHz	14.4dB	19.8dB	34.2dB @ 99.8MHz	14.4dB	19.8dB
1,2	✓	40.4dB @ 99.3MHz	14.5dB	25.9dB	40.3dB @ 99.8MHz	14.4dB	25.9dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:33 AM
Version: 1.3.2

Summary:

All Cables	Twisted Pair	Coax/Twinax	Fiber
Total: 1	Total: 1	Total: 0	Total: 0
Pass: 1	Pass: 1	Pass: 0	Pass: 0
Fail: 0	Fail: 0	Fail: 0	Fail: 0
Tot. Length: 20.3ft	Tot. Length: 20.3ft	Tot. Length: 0ft	Tot. Length: 0ft

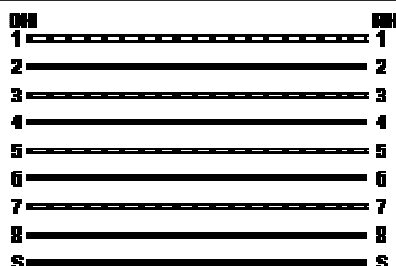
Pass

Test Name: S2 Before Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/14/2014
Test Time: 10:42:12
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

Wiremap: Pass

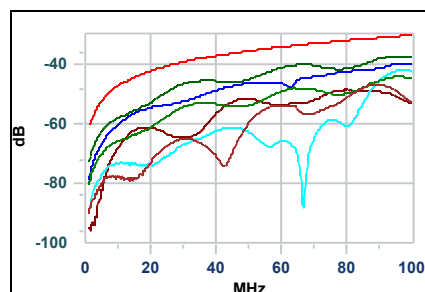


Test	7,8(0.72)	3,6(0.72)	5,4(0.72)	1,2(0.72)	Limit	Result
Length	20.3 ft.	21.3 ft.	22.0 ft.	20.3 ft.	< 328.1 ft.	✓
Propagation Delay	28.8 ns	30.2 ns	30.8 ns	28.6 ns	< 555.0 ns	✓
Delay Skew	0.2 ns	1.6 ns	2.2 ns	0.0 ns	< 50.0 ns	✓
Headroom	63.9 dB					✓

NEXT: Pass

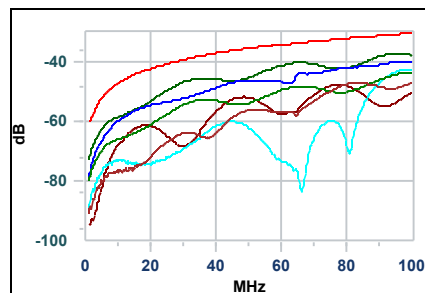
DH

Pairs	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	46.6dB @ 89.0MHz	31.0dB	15.6dB	46.6dB @ 89.8MHz	30.9dB	15.7dB
7,8-5,4	43.9dB @ 94.5MHz	30.5dB	13.4dB	43.8dB @ 96.3MHz	30.4dB	13.4dB
7,8-1,2	41.8dB @ 96.0MHz	30.4dB	11.4dB	41.7dB @ 98.3MHz	30.2dB	11.5dB
3,6-5,4	39.5dB @ 96.3MHz	30.4dB	9.1dB	39.4dB @ 100.0MHz	30.1dB	9.3dB
3,6-1,2	51.5dB @ 47.3MHz	35.7dB	15.8dB	48.4dB @ 81.3MHz	31.6dB	16.8dB
5,4-1,2	37.1dB @ 93.3MHz	30.6dB	6.5dB	36.9dB @ 97.0MHz	30.3dB	6.6dB



RH

Pairs	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	47.0dB @ 80.8MHz	31.7dB	15.3dB	46.7dB @ 100.0MHz	30.1dB	16.6dB
7,8-5,4	43.9dB @ 96.0MHz	30.4dB	13.5dB	43.8dB @ 99.3MHz	30.1dB	13.7dB
7,8-1,2	42.5dB @ 97.5MHz	30.3dB	12.2dB	42.5dB @ 99.5MHz	30.1dB	12.4dB
3,6-5,4	39.7dB @ 94.8MHz	30.5dB	9.2dB	39.5dB @ 100.0MHz	30.1dB	9.4dB
3,6-1,2	47.4dB @ 76.8MHz	32.1dB	15.3dB	47.4dB @ 78.5MHz	31.9dB	15.5dB
5,4-1,2	40.0dB @ 63.5MHz	33.5dB	6.5dB	37.0dB @ 97.3MHz	30.3dB	6.7dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:34 AM
Version: 1.3.2

Pass

Test Name: S2 Before Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

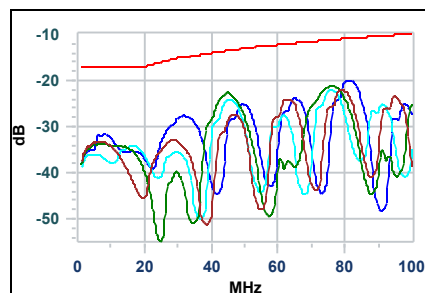
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/14/2014
Test Time: 10:42:12
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

Return Loss: Pass

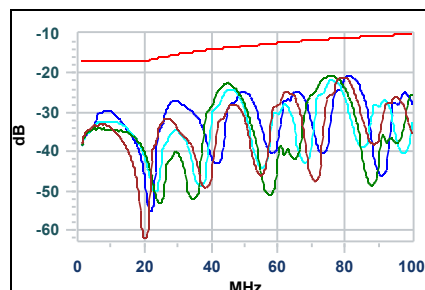
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	22.1dB @ 78.5MHz	11.1dB	11.0dB	22.1dB @ 79.5MHz	11.0dB	11.1dB
3,6	✓	22.7dB @ 44.8MHz	13.5dB	9.2dB	21.2dB @ 76.5MHz	11.2dB	10.0dB
5,4	✓	24.2dB @ 45.3MHz	13.5dB	10.7dB	22.0dB @ 75.8MHz	11.2dB	10.8dB
1,2	✓	20.1dB @ 80.3MHz	11.0dB	9.1dB	20.0dB @ 81.5MHz	10.9dB	9.1dB



RH

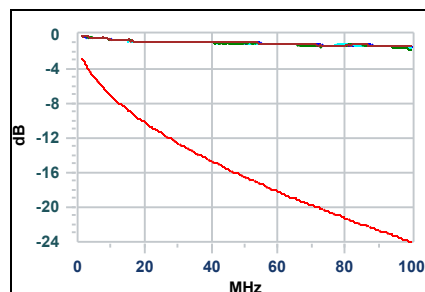
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	21.2dB @ 78.5MHz	11.1dB	10.1dB	21.1dB @ 79.8MHz	11.0dB	10.1dB
3,6	✓	22.5dB @ 45.0MHz	13.5dB	9.0dB	20.7dB @ 76.3MHz	11.2dB	9.5dB
5,4	✓	24.3dB @ 45.0MHz	13.5dB	10.8dB	22.0dB @ 76.5MHz	11.2dB	10.8dB
1,2	✓	21.0dB @ 80.5MHz	11.0dB	10.0dB	20.9dB @ 81.5MHz	10.9dB	10.0dB



Insertion Loss: Pass

DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	0.3dB @ 1.9MHz	3.1dB	2.8dB	1.4dB @ 100.0MHz	24.0dB	22.6dB
3,6	✓	0.3dB @ 1.9MHz	3.1dB	2.8dB	1.7dB @ 100.0MHz	24.0dB	22.3dB
5,4	✓	0.3dB @ 1.9MHz	3.1dB	2.8dB	1.6dB @ 99.0MHz	23.9dB	22.3dB
1,2	✓	0.3dB @ 1.9MHz	3.1dB	2.8dB	1.5dB @ 100.0MHz	24.0dB	22.5dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:34 AM
Version: 1.3.2

Pass

Test Name: S2 Before Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

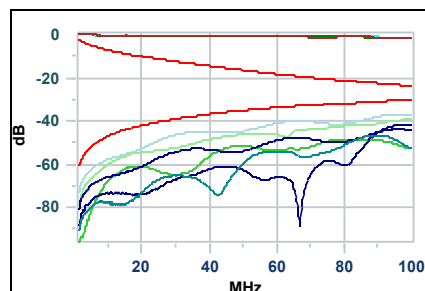
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/14/2014
Test Time: 10:42:12
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

ACR-N: Pass

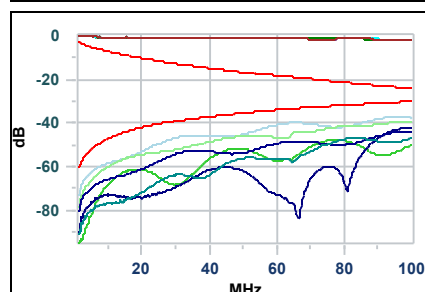
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	85.0dB @ 2.2MHz	54.5dB	30.5dB	45.2dB @ 89.0MHz	8.5dB	36.7dB
7,8-5,4	✓	77.1dB @ 1.8MHz	56.4dB	20.7dB	42.3dB @ 95.8MHz	7.0dB	35.3dB
7,8-1,2	✓	82.3dB @ 2.2MHz	54.5dB	27.8dB	40.2dB @ 97.5MHz	6.6dB	33.6dB
3,6-5,4	✓	71.7dB @ 2.5MHz	53.4dB	18.3dB	37.7dB @ 99.0MHz	6.3dB	31.4dB
3,6-1,2	✓	61.6dB @ 14.7MHz	35.6dB	26.0dB	47.1dB @ 79.5MHz	10.6dB	36.5dB
5,4-1,2	✓	69.6dB @ 1.8MHz	56.4dB	13.2dB	35.4dB @ 95.3MHz	7.0dB	28.4dB



RH

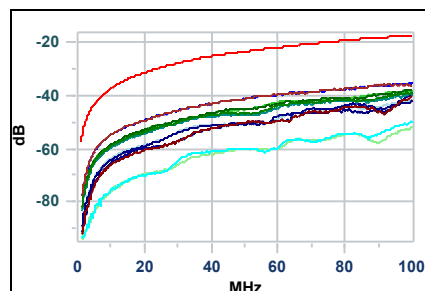
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	88.3dB @ 1.6MHz	57.0dB	31.3dB	45.0dB @ 100.0MHz	6.1dB	38.9dB
7,8-5,4	✓	76.9dB @ 1.8MHz	56.4dB	20.5dB	42.2dB @ 98.8MHz	6.4dB	35.8dB
7,8-1,2	✓	82.5dB @ 2.2MHz	54.5dB	28.0dB	41.0dB @ 97.5MHz	6.6dB	34.4dB
3,6-5,4	✓	71.6dB @ 2.5MHz	53.4dB	18.2dB	37.8dB @ 99.8MHz	6.1dB	31.7dB
3,6-1,2	✓	62.3dB @ 14.2MHz	36.0dB	26.3dB	46.0dB @ 76.8MHz	11.3dB	34.7dB
5,4-1,2	✓	69.9dB @ 1.8MHz	56.4dB	13.5dB	35.5dB @ 95.3MHz	7.0dB	28.5dB



ACR-F: Pass

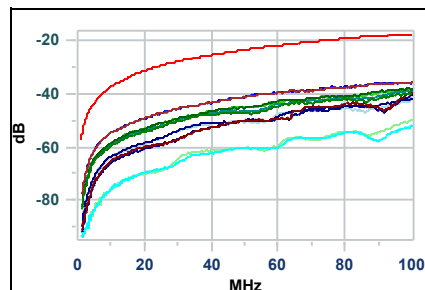
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	59.5dB @ 5.7MHz	42.4dB	17.1dB	35.9dB @ 92.8MHz	18.1dB	17.8dB
7,8-5,4	✓	63.7dB @ 5.5MHz	42.6dB	21.1dB	39.0dB @ 99.8MHz	17.4dB	21.6dB
7,8-1,2	✓	49.3dB @ 99.8MHz	17.4dB	31.9dB	49.3dB @ 99.8MHz	17.4dB	31.9dB
3,6-7,8	✓	60.4dB @ 5.2MHz	43.1dB	17.3dB	34.8dB @ 100.0MHz	17.4dB	17.4dB
3,6-5,4	✓	39.8dB @ 99.8MHz	17.4dB	22.4dB	39.8dB @ 99.8MHz	17.4dB	22.4dB
3,6-1,2	✓	38.1dB @ 99.3MHz	17.5dB	20.6dB	38.1dB @ 99.8MHz	17.4dB	20.7dB
5,4-7,8	✓	64.9dB @ 5.2MHz	43.1dB	21.8dB	39.6dB @ 99.3MHz	17.5dB	22.1dB
5,4-3,6	✓	39.7dB @ 99.8MHz	17.4dB	22.3dB	39.7dB @ 99.8MHz	17.4dB	22.3dB
5,4-1,2	✓	41.8dB @ 99.8MHz	17.4dB	24.4dB	41.8dB @ 99.8MHz	17.4dB	24.4dB
1,2-7,8	✓	51.7dB @ 99.8MHz	17.4dB	34.3dB	51.7dB @ 99.8MHz	17.4dB	34.3dB
1,2-3,6	✓	37.9dB @ 100.0MHz	17.4dB	20.5dB	37.9dB @ 100.0MHz	17.4dB	20.5dB
1,2-5,4	✓	42.2dB @ 97.0MHz	17.7dB	24.5dB	42.0dB @ 100.0MHz	17.4dB	24.6dB



RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	60.4dB @ 5.2MHz	43.1dB	17.3dB	35.1dB @ 100.0MHz	17.4dB	17.7dB
7,8-5,4	✓	64.3dB @ 5.5MHz	42.6dB	21.7dB	39.7dB @ 99.3MHz	17.5dB	22.2dB
7,8-1,2	✓	51.7dB @ 99.8MHz	17.4dB	34.3dB	51.7dB @ 99.8MHz	17.4dB	34.3dB
3,6-7,8	✓	59.5dB @ 5.7MHz	42.4dB	17.1dB	35.7dB @ 99.3MHz	17.5dB	18.2dB
3,6-5,4	✓	39.5dB @ 99.8MHz	17.4dB	22.1dB	39.5dB @ 99.8MHz	17.4dB	22.1dB
3,6-1,2	✓	37.7dB @ 100.0MHz	17.4dB	20.3dB	37.7dB @ 100.0MHz	17.4dB	20.3dB
5,4-7,8	✓	63.8dB @ 5.5MHz	42.6dB	21.2dB	38.8dB @ 98.8MHz	17.5dB	21.3dB
5,4-3,6	✓	40.0dB @ 99.8MHz	17.4dB	22.6dB	40.0dB @ 99.8MHz	17.4dB	22.6dB
5,4-1,2	✓	42.1dB @ 97.0MHz	17.7dB	24.4dB	41.9dB @ 99.8MHz	17.4dB	24.5dB
1,2-7,8	✓	49.3dB @ 99.8MHz	17.4dB	31.9dB	49.3dB @ 99.8MHz	17.4dB	31.9dB
1,2-3,6	✓	62.0dB @ 6.4MHz	41.3dB	20.7dB	38.4dB @ 100.0MHz	17.4dB	21.0dB
1,2-5,4	✓	41.9dB @ 99.8MHz	17.4dB	24.5dB	41.9dB @ 99.8MHz	17.4dB	24.5dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:34 AM
Version: 1.3.2

Pass

Test Name: S2 Before Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

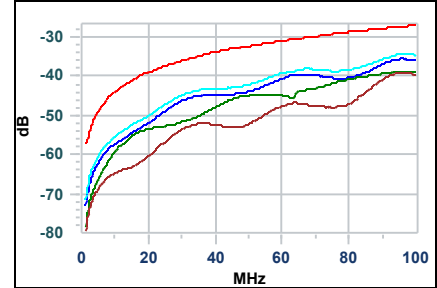
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/14/2014
Test Time: 10:42:12
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

PS NEXT: Pass

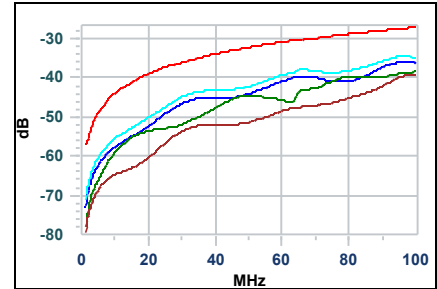
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	39.3dB @ 94.5MHz	27.5dB	11.8dB	39.2dB @ 97.0MHz	27.3dB	11.9dB
3,6	✓	38.9dB @ 93.8MHz	27.6dB	11.3dB	38.8dB @ 97.8MHz	27.2dB	11.6dB
5,4	✓	34.4dB @ 96.3MHz	27.4dB	7.0dB	34.4dB @ 97.0MHz	27.3dB	7.1dB
1,2	✓	35.6dB @ 94.8MHz	27.5dB	8.1dB	35.5dB @ 97.0MHz	27.3dB	8.2dB



RH

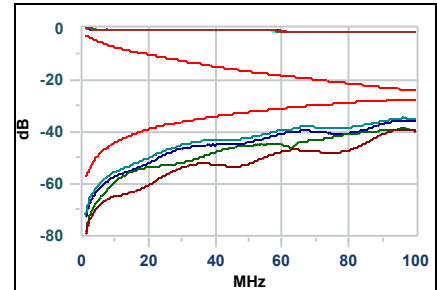
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	39.4dB @ 97.0MHz	27.3dB	12.1dB	39.2dB @ 99.3MHz	27.1dB	12.1dB
3,6	✓	39.8dB @ 78.5MHz	28.9dB	10.9dB	38.4dB @ 100.0MHz	27.1dB	11.3dB
5,4	✓	34.7dB @ 93.5MHz	27.6dB	7.1dB	34.5dB @ 97.3MHz	27.3dB	7.2dB
1,2	✓	35.9dB @ 95.0MHz	27.5dB	8.4dB	35.8dB @ 98.0MHz	27.2dB	8.6dB



PS ACR-N: Pass

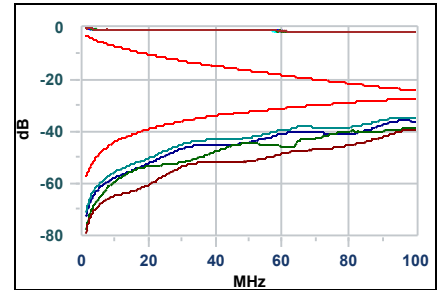
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	76.1dB @ 1.8MHz	53.4dB	22.7dB	37.8dB @ 95.5MHz	4.0dB	33.8dB
3,6	✓	71.4dB @ 2.5MHz	50.4dB	21.0dB	37.2dB @ 96.8MHz	3.7dB	33.5dB
5,4	✓	68.0dB @ 1.8MHz	53.4dB	14.6dB	32.9dB @ 96.3MHz	3.9dB	29.0dB
1,2	✓	69.5dB @ 1.8MHz	53.4dB	16.1dB	34.1dB @ 95.5MHz	4.0dB	30.1dB



RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	76.1dB @ 1.8MHz	53.4dB	22.7dB	37.8dB @ 99.3MHz	3.2dB	34.6dB
3,6	✓	71.4dB @ 2.5MHz	50.4dB	21.0dB	36.7dB @ 99.8MHz	3.1dB	33.6dB
5,4	✓	68.1dB @ 1.8MHz	53.4dB	14.7dB	33.0dB @ 96.0MHz	3.9dB	29.1dB
1,2	✓	69.8dB @ 1.8MHz	53.4dB	16.4dB	34.3dB @ 97.5MHz	3.6dB	30.7dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:34 AM
Version: 1.3.2

Pass

Test Name: S2 Before Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/14/2014
Test Time: 10:42:12
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

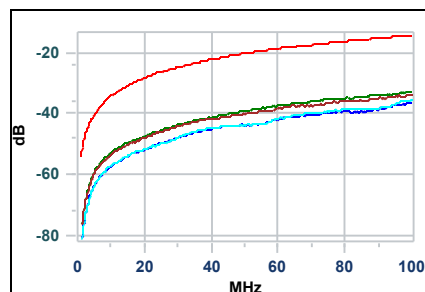
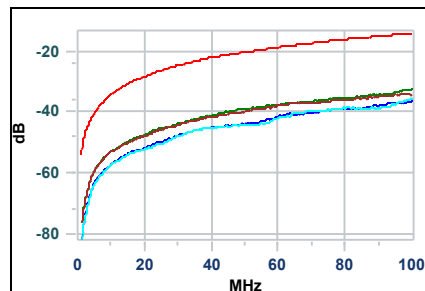
PS ACR-F: Pass

DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	58.3dB @ 5.5MHz	39.6dB	18.7dB	34.1dB @ 98.5MHz	14.5dB	19.6dB
3,6	✓	32.4dB @ 100.0MHz	14.4dB	18.0dB	32.4dB @ 100.0MHz	14.4dB	18.0dB
5,4	✓	35.5dB @ 99.8MHz	14.4dB	21.1dB	35.5dB @ 99.8MHz	14.4dB	21.1dB
1,2	✓	36.3dB @ 100.0MHz	14.4dB	21.9dB	36.3dB @ 100.0MHz	14.4dB	21.9dB

RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	59.0dB @ 5.2MHz	40.1dB	18.9dB	33.8dB @ 100.0MHz	14.4dB	19.4dB
3,6	✓	32.7dB @ 99.3MHz	14.5dB	18.2dB	32.7dB @ 99.3MHz	14.5dB	18.2dB
5,4	✓	35.3dB @ 99.8MHz	14.4dB	20.9dB	35.3dB @ 99.8MHz	14.4dB	20.9dB
1,2	✓	36.5dB @ 99.8MHz	14.4dB	22.1dB	36.5dB @ 99.8MHz	14.4dB	22.1dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:35 AM
Version: 1.3.2

Summary:

All Cables	Twisted Pair	Coax/Twinax	Fiber
Total: 1	Total: 1	Total: 0	Total: 0
Pass: 1	Pass: 1	Pass: 0	Pass: 0
Fail: 0	Fail: 0	Fail: 0	Fail: 0
Tot. Length: 20.0ft	Tot. Length: 20.0ft	Tot. Length: 0ft	Tot. Length: 0ft

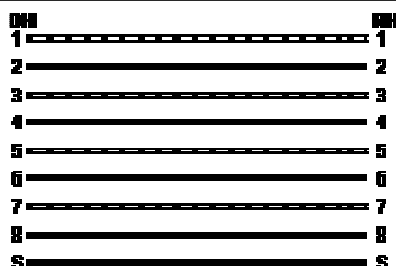
Pass

Test Name: S2 After Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/16/2014
Test Time: 02:39:51
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

Wiremap: Pass

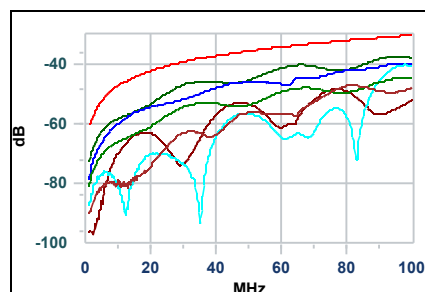


Test	7,8(0.72)	3,6(0.72)	5,4(0.72)	1,2(0.72)	Limit	Result
Length	20.3 ft.	21.7 ft.	21.7 ft.	20.0 ft.	< 328.1 ft.	✓
Propagation Delay	28.8 ns	30.6 ns	30.6 ns	28.4 ns	< 555.0 ns	✓
Delay Skew	0.4 ns	2.2 ns	2.2 ns	0.0 ns	< 50.0 ns	✓
Headroom	63.8 dB					✓

NEXT: Pass

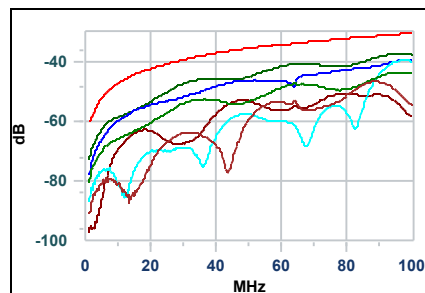
DH

Pairs	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	47.1dB @ 79.8MHz	31.8dB	15.3dB	46.9dB @ 81.8MHz	31.6dB	15.3dB
7,8-5,4	44.1dB @ 96.3MHz	30.4dB	13.7dB	44.1dB @ 99.5MHz	30.1dB	14.0dB
7,8-1,2	40.1dB @ 97.0MHz	30.3dB	9.8dB	40.0dB @ 98.5MHz	30.2dB	9.8dB
3,6-5,4	39.6dB @ 95.0MHz	30.5dB	9.1dB	39.6dB @ 100.0MHz	30.1dB	9.5dB
3,6-1,2	48.2dB @ 76.5MHz	32.1dB	16.1dB	48.2dB @ 77.8MHz	32.0dB	16.2dB
5,4-1,2	40.1dB @ 63.5MHz	33.5dB	6.6dB	37.1dB @ 97.0MHz	30.3dB	6.8dB



RH

Pairs	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	46.5dB @ 87.8MHz	31.1dB	15.4dB	46.5dB @ 90.0MHz	30.9dB	15.6dB
7,8-5,4	43.4dB @ 94.5MHz	30.5dB	12.9dB	43.3dB @ 97.3MHz	30.3dB	13.0dB
7,8-1,2	39.3dB @ 96.3MHz	30.4dB	8.9dB	39.2dB @ 98.8MHz	30.2dB	9.0dB
3,6-5,4	39.3dB @ 95.8MHz	30.4dB	8.9dB	39.2dB @ 99.0MHz	30.2dB	9.0dB
3,6-1,2	52.9dB @ 46.5MHz	35.8dB	17.1dB	50.6dB @ 79.5MHz	31.8dB	18.8dB
5,4-1,2	37.1dB @ 95.0MHz	30.5dB	6.6dB	37.1dB @ 97.5MHz	30.3dB	6.8dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:35 AM
Version: 1.3.2

Pass

Test Name: S2 After Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

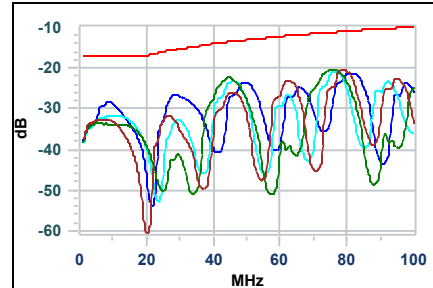
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/16/2014
Test Time: 02:39:51
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

Return Loss: Pass

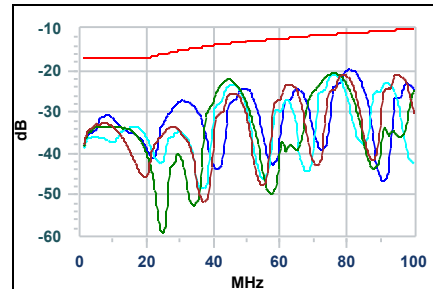
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	20.5dB @ 78.3MHz	11.1dB	9.4dB	20.5dB @ 79.3MHz	11.0dB	9.5dB
3,6	✓	22.5dB @ 44.3MHz	13.6dB	8.9dB	20.2dB @ 76.0MHz	11.2dB	9.0dB
5,4	✓	20.9dB @ 76.0MHz	11.2dB	9.7dB	20.9dB @ 76.3MHz	11.2dB	9.7dB
1,2	✓	21.1dB @ 80.5MHz	11.0dB	10.1dB	21.1dB @ 81.5MHz	10.9dB	10.2dB



RH

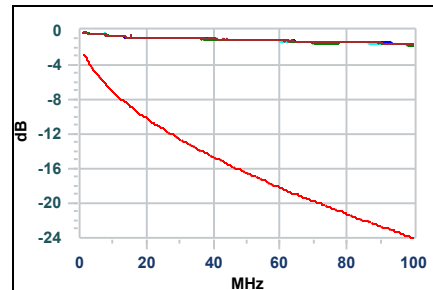
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	21.2dB @ 78.3MHz	11.1dB	10.1dB	20.9dB @ 95.0MHz	10.2dB	10.7dB
3,6	✓	22.1dB @ 44.3MHz	13.6dB	8.5dB	20.6dB @ 76.3MHz	11.2dB	9.4dB
5,4	✓	21.1dB @ 75.5MHz	11.2dB	9.9dB	21.1dB @ 76.0MHz	11.2dB	9.9dB
1,2	✓	19.9dB @ 80.5MHz	11.0dB	8.9dB	19.9dB @ 81.3MHz	10.9dB	9.0dB



Insertion Loss: Pass

DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	0.3dB @ 1.9MHz	3.1dB	2.8dB	1.5dB @ 100.0MHz	24.0dB	22.5dB
3,6	✓	0.3dB @ 1.9MHz	3.1dB	2.8dB	1.8dB @ 100.0MHz	24.0dB	22.2dB
5,4	✓	0.3dB @ 1.9MHz	3.1dB	2.8dB	1.6dB @ 100.0MHz	24.0dB	22.4dB
1,2	✓	0.3dB @ 1.9MHz	3.1dB	2.8dB	1.5dB @ 100.0MHz	24.0dB	22.5dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:35 AM
Version: 1.3.2

Pass

Test Name: S2 After Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

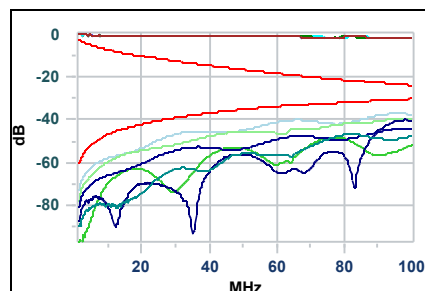
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/16/2014
Test Time: 02:39:51
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

ACR-N: Pass

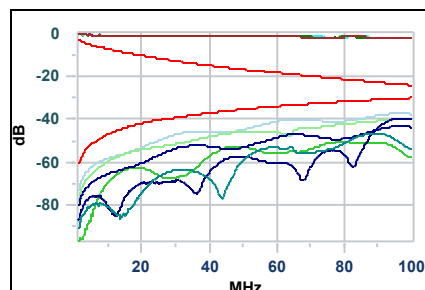
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	88.6dB @ 1.6MHz	57.0dB	31.6dB	45.6dB @ 81.8MHz	10.1dB	35.5dB
7,8-5,4	✓	77.0dB @ 1.9MHz	55.7dB	21.3dB	42.5dB @ 97.8MHz	6.5dB	36.0dB
7,8-1,2	✓	79.9dB @ 2.5MHz	53.4dB	26.5dB	38.5dB @ 97.8MHz	6.5dB	32.0dB
3,6-5,4	✓	71.4dB @ 2.5MHz	53.4dB	18.0dB	37.8dB @ 99.5MHz	6.2dB	31.6dB
3,6-1,2	✓	64.4dB @ 13.5MHz	36.6dB	27.8dB	46.7dB @ 76.5MHz	11.4dB	35.3dB
5,4-1,2	✓	70.7dB @ 1.6MHz	57.0dB	13.7dB	35.6dB @ 94.5MHz	7.2dB	28.4dB



RH

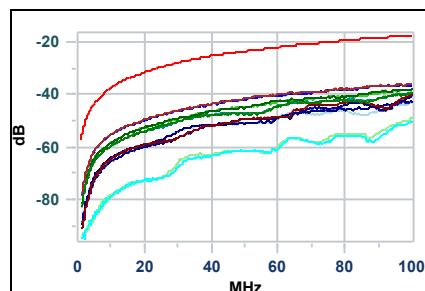
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	84.0dB @ 2.5MHz	53.4dB	30.6dB	45.0dB @ 89.5MHz	8.3dB	36.7dB
7,8-5,4	✓	74.0dB @ 2.5MHz	53.4dB	20.6dB	41.8dB @ 95.3MHz	7.0dB	34.8dB
7,8-1,2	✓	81.8dB @ 2.1MHz	55.1dB	26.7dB	37.7dB @ 97.0MHz	6.7dB	31.0dB
3,6-5,4	✓	70.5dB @ 2.7MHz	52.9dB	17.6dB	37.5dB @ 98.0MHz	6.5dB	31.0dB
3,6-1,2	✓	63.7dB @ 13.9MHz	36.2dB	27.5dB	49.2dB @ 77.3MHz	11.1dB	38.1dB
5,4-1,2	✓	69.9dB @ 1.8MHz	56.4dB	13.5dB	35.6dB @ 95.0MHz	7.2dB	28.4dB



ACR-F: Pass

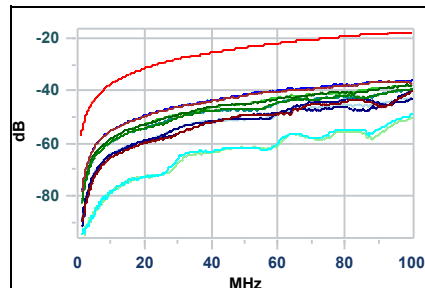
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	60.5dB @ 5.2MHz	43.1dB	17.4dB	35.8dB @ 100.0MHz	17.4dB	18.4dB
7,8-5,4	✓	64.8dB @ 5.1MHz	43.3dB	21.5dB	39.2dB @ 99.8MHz	17.4dB	21.8dB
7,8-1,2	✓	50.0dB @ 99.8MHz	17.4dB	32.6dB	50.0dB @ 99.8MHz	17.4dB	32.6dB
3,6-7,8	✓	60.5dB @ 5.4MHz	42.8dB	17.7dB	36.3dB @ 98.0MHz	17.6dB	18.7dB
3,6-5,4	✓	39.9dB @ 99.8MHz	17.4dB	22.5dB	39.9dB @ 99.8MHz	17.4dB	22.5dB
3,6-1,2	✓	41.4dB @ 64.0MHz	21.3dB	20.1dB	37.6dB @ 100.0MHz	17.4dB	20.2dB
5,4-7,8	✓	38.8dB @ 99.8MHz	17.4dB	21.4dB	38.8dB @ 99.8MHz	17.4dB	21.4dB
5,4-3,6	✓	40.1dB @ 99.8MHz	17.4dB	22.7dB	40.1dB @ 99.8MHz	17.4dB	22.7dB
5,4-1,2	✓	42.4dB @ 99.8MHz	17.4dB	25.0dB	42.4dB @ 99.8MHz	17.4dB	25.0dB
1,2-7,8	✓	48.4dB @ 99.8MHz	17.4dB	31.0dB	48.4dB @ 99.8MHz	17.4dB	31.0dB
1,2-3,6	✓	63.5dB @ 5.2MHz	43.1dB	20.4dB	37.9dB @ 98.8MHz	17.5dB	20.4dB
1,2-5,4	✓	42.4dB @ 99.8MHz	17.4dB	25.0dB	42.4dB @ 99.8MHz	17.4dB	25.0dB



RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	60.8dB @ 5.2MHz	43.1dB	17.7dB	36.3dB @ 93.0MHz	18.0dB	18.3dB
7,8-5,4	✓	64.6dB @ 5.2MHz	43.1dB	21.5dB	38.9dB @ 99.8MHz	17.4dB	21.5dB
7,8-1,2	✓	48.4dB @ 99.8MHz	17.4dB	31.0dB	48.4dB @ 99.8MHz	17.4dB	31.0dB
3,6-7,8	✓	60.6dB @ 5.2MHz	43.1dB	17.5dB	35.5dB @ 100.0MHz	17.4dB	18.1dB
3,6-5,4	✓	40.0dB @ 99.8MHz	17.4dB	22.6dB	40.0dB @ 99.8MHz	17.4dB	22.6dB
3,6-1,2	✓	37.7dB @ 98.8MHz	17.5dB	20.2dB	37.7dB @ 98.8MHz	17.5dB	20.2dB
5,4-7,8	✓	64.8dB @ 5.1MHz	43.3dB	21.5dB	39.1dB @ 99.8MHz	17.4dB	21.7dB
5,4-3,6	✓	40.0dB @ 99.8MHz	17.4dB	22.6dB	40.0dB @ 99.8MHz	17.4dB	22.6dB
5,4-1,2	✓	42.3dB @ 99.8MHz	17.4dB	24.9dB	42.3dB @ 99.8MHz	17.4dB	24.9dB
1,2-7,8	✓	50.0dB @ 99.8MHz	17.4dB	32.6dB	50.0dB @ 99.8MHz	17.4dB	32.6dB
1,2-3,6	✓	41.5dB @ 64.0MHz	21.3dB	20.2dB	37.9dB @ 100.0MHz	17.4dB	20.5dB
1,2-5,4	✓	42.9dB @ 96.0MHz	17.8dB	25.1dB	42.5dB @ 99.8MHz	17.4dB	25.1dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:35 AM
Version: 1.3.2

Pass

Test Name: S2 After Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

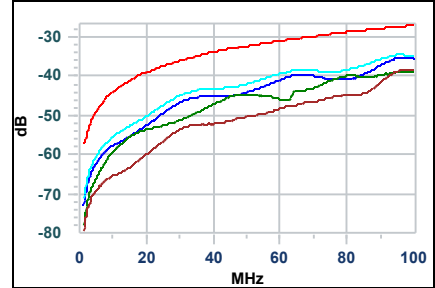
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/16/2014
Test Time: 02:39:51
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

PS NEXT: Pass

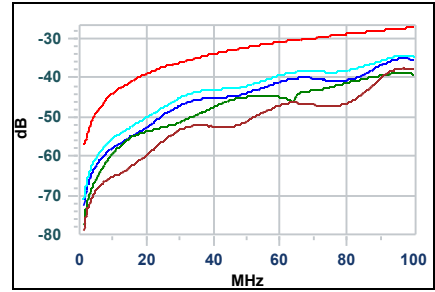
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	38.3dB @ 96.3MHz	27.4dB	10.9dB	38.1dB @ 99.3MHz	27.1dB	11.0dB
3,6	✓	40.1dB @ 78.8MHz	28.9dB	11.2dB	38.7dB @ 100.0MHz	27.1dB	11.6dB
5,4	✓	34.6dB @ 95.0MHz	27.5dB	7.1dB	34.6dB @ 97.0MHz	27.3dB	7.3dB
1,2	✓	35.3dB @ 96.0MHz	27.4dB	7.9dB	35.2dB @ 97.0MHz	27.3dB	7.9dB



RH

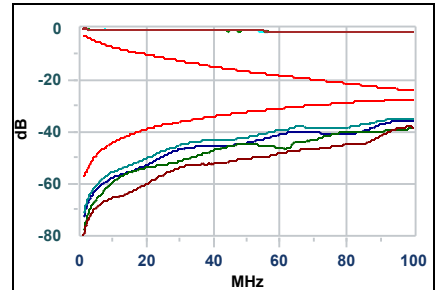
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	37.6dB @ 96.0MHz	27.4dB	10.2dB	37.5dB @ 97.0MHz	27.3dB	10.2dB
3,6	✓	38.9dB @ 93.5MHz	27.6dB	11.3dB	38.8dB @ 97.5MHz	27.3dB	11.5dB
5,4	✓	34.5dB @ 94.8MHz	27.5dB	7.0dB	34.4dB @ 98.0MHz	27.2dB	7.2dB
1,2	✓	35.1dB @ 95.0MHz	27.5dB	7.6dB	34.9dB @ 97.5MHz	27.3dB	7.6dB



PS ACR-N: Pass

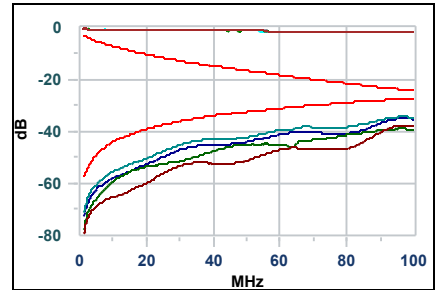
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	73.4dB @ 2.5MHz	50.4dB	23.0dB	36.6dB @ 97.8MHz	3.5dB	33.1dB
3,6	✓	71.2dB @ 2.5MHz	50.4dB	20.8dB	36.9dB @ 99.5MHz	3.2dB	33.7dB
5,4	✓	68.3dB @ 1.8MHz	53.4dB	14.9dB	33.1dB @ 95.0MHz	4.2dB	28.9dB
1,2	✓	70.5dB @ 1.6MHz	54.0dB	16.5dB	33.7dB @ 97.0MHz	3.7dB	30.0dB



RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	72.7dB @ 2.5MHz	50.4dB	22.3dB	36.0dB @ 97.0MHz	3.7dB	32.3dB
3,6	✓	70.8dB @ 2.5MHz	50.4dB	20.4dB	37.2dB @ 95.3MHz	4.0dB	33.2dB
5,4	✓	68.0dB @ 1.8MHz	53.4dB	14.6dB	32.8dB @ 97.8MHz	3.5dB	29.3dB
1,2	✓	69.7dB @ 1.8MHz	53.4dB	16.3dB	33.4dB @ 97.0MHz	3.7dB	29.7dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:35 AM
Version: 1.3.2

Pass

Test Name: S2 After Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

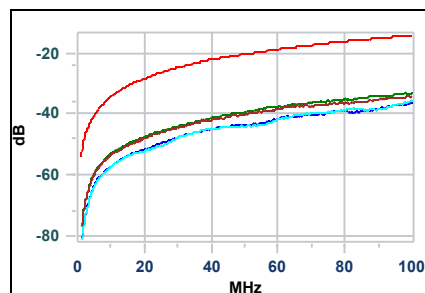
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/16/2014
Test Time: 02:39:51
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

PS ACR-F: Pass

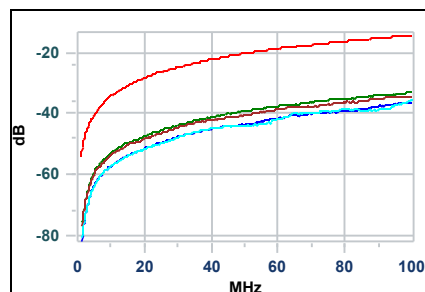
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	59.0dB @ 5.2MHz	40.1dB	18.9dB	34.2dB @ 100.0MHz	14.4dB	19.8dB
3,6	✓	34.0dB @ 88.5MHz	15.5dB	18.5dB	33.1dB @ 100.0MHz	14.4dB	18.7dB
5,4	✓	35.4dB @ 99.8MHz	14.4dB	21.0dB	35.4dB @ 99.8MHz	14.4dB	21.0dB
1,2	✓	36.3dB @ 99.8MHz	14.4dB	21.9dB	36.3dB @ 99.8MHz	14.4dB	21.9dB



RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	59.2dB @ 5.2MHz	40.1dB	19.1dB	34.6dB @ 98.0MHz	14.6dB	20.0dB
3,6	✓	32.7dB @ 100.0MHz	14.4dB	18.3dB	32.7dB @ 100.0MHz	14.4dB	18.3dB
5,4	✓	35.5dB @ 99.8MHz	14.4dB	21.1dB	35.5dB @ 99.8MHz	14.4dB	21.1dB
1,2	✓	40.4dB @ 64.0MHz	18.3dB	22.1dB	36.5dB @ 100.0MHz	14.4dB	22.1dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:22 AM
Version: 1.3.2

Summary:

All Cables	Twisted Pair	Coax/Twinax	Fiber
Total: 1	Total: 1	Total: 0	Total: 0
Pass: 1	Pass: 1	Pass: 0	Pass: 0
Fail: 0	Fail: 0	Fail: 0	Fail: 0
Tot. Length: 20.0ft	Tot. Length: 20.0ft	Tot. Length: 0ft	Tot. Length: 0ft

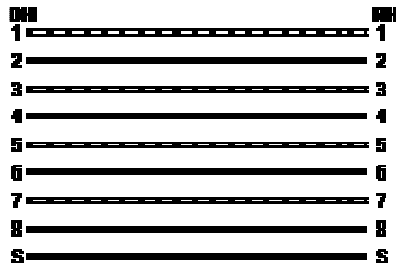
Pass

Test Name: S3 Before Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/14/2014
Test Time: 10:45:57
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

Wiremap: Pass

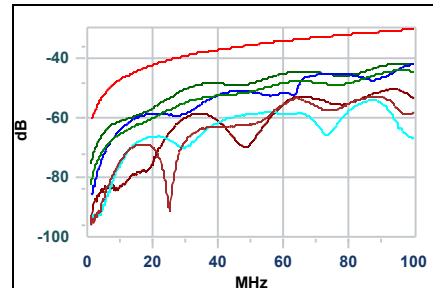


Test	7,8(0.72)	3,6(0.72)	5,4(0.72)	1,2(0.72)	Limit	Result
Length	20.3 ft.	21.3 ft.	22.0 ft.	20.0 ft.	< 328.1 ft.	✓
Propagation Delay	28.6 ns	30.2 ns	30.8 ns	28.2 ns	< 555.0 ns	✓
Delay Skew	0.4 ns	2.0 ns	2.6 ns	0.0 ns	< 50.0 ns	✓
Headroom	52.4 dB					✓

NEXT: Pass

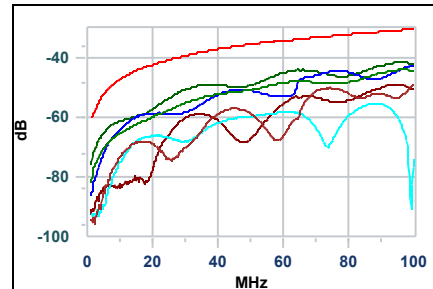
DH

Pairs	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	52.9dB @ 64.3MHz	33.4dB	19.5dB	52.5dB @ 88.3MHz	31.0dB	21.5dB
7,8-5,4	43.9dB @ 93.5MHz	30.6dB	13.3dB	43.7dB @ 95.8MHz	30.4dB	13.3dB
7,8-1,2	54.2dB @ 86.5MHz	31.2dB	23.0dB	54.1dB @ 87.8MHz	31.1dB	23.0dB
3,6-5,4	41.7dB @ 99.8MHz	30.1dB	11.6dB	41.7dB @ 100.0MHz	30.1dB	11.6dB
3,6-1,2	52.7dB @ 63.5MHz	33.5dB	19.2dB	50.2dB @ 94.3MHz	30.5dB	19.7dB
5,4-1,2	48.9dB @ 33.3MHz	38.3dB	10.6dB	41.4dB @ 98.3MHz	30.2dB	11.2dB



RH

Pairs	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	49.7dB @ 73.5MHz	32.4dB	17.3dB	48.6dB @ 100.0MHz	30.1dB	18.5dB
7,8-5,4	43.9dB @ 95.0MHz	30.5dB	13.4dB	43.9dB @ 98.5MHz	30.2dB	13.7dB
7,8-1,2	66.4dB @ 17.5MHz	42.9dB	23.5dB	55.1dB @ 88.8MHz	31.0dB	24.1dB
3,6-5,4	44.2dB @ 75.8MHz	32.2dB	12.0dB	42.1dB @ 100.0MHz	30.1dB	12.0dB
3,6-1,2	48.5dB @ 93.8MHz	30.6dB	17.9dB	48.5dB @ 94.3MHz	30.5dB	18.0dB
5,4-1,2	44.0dB @ 63.3MHz	33.5dB	10.5dB	41.2dB @ 97.8MHz	30.2dB	11.0dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:22 AM
Version: 1.3.2

Pass

Test Name: S3 Before Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

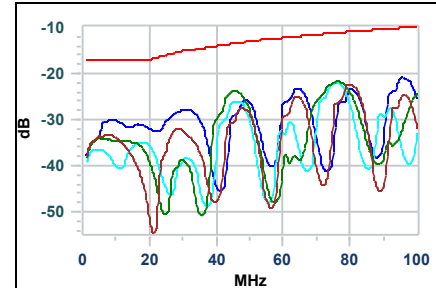
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/14/2014
Test Time: 10:45:57
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

Return Loss: Pass

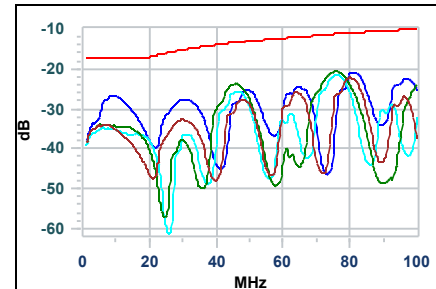
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	22.5dB @ 79.8MHz	11.0dB	11.5dB	22.5dB @ 80.0MHz	11.0dB	11.5dB
3,6	✓	23.7dB @ 45.3MHz	13.5dB	10.2dB	21.8dB @ 77.0MHz	11.1dB	10.7dB
5,4	✓	22.2dB @ 75.0MHz	11.3dB	10.9dB	22.1dB @ 76.0MHz	11.2dB	10.9dB
1,2	✓	21.0dB @ 95.5MHz	10.2dB	10.8dB	21.0dB @ 96.3MHz	10.2dB	10.8dB



RH

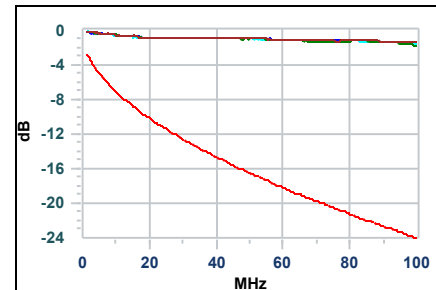
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	22.2dB @ 79.8MHz	11.0dB	11.2dB	22.2dB @ 80.3MHz	11.0dB	11.2dB
3,6	✓	20.8dB @ 75.0MHz	11.3dB	9.5dB	20.7dB @ 76.3MHz	11.2dB	9.5dB
5,4	✓	21.7dB @ 75.5MHz	11.2dB	10.5dB	21.7dB @ 76.8MHz	11.2dB	10.5dB
1,2	✓	26.7dB @ 9.1MHz	17.0dB	9.7dB	20.9dB @ 81.3MHz	10.9dB	10.0dB



Insertion Loss: Pass

DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	0.2dB @ 1.9MHz	3.1dB	2.9dB	1.4dB @ 100.0MHz	24.0dB	22.6dB
3,6	✓	0.2dB @ 1.9MHz	3.1dB	2.9dB	1.7dB @ 100.0MHz	24.0dB	22.3dB
5,4	✓	0.3dB @ 1.9MHz	3.1dB	2.8dB	1.5dB @ 100.0MHz	24.0dB	22.5dB
1,2	✓	0.3dB @ 1.9MHz	3.1dB	2.8dB	1.4dB @ 100.0MHz	24.0dB	22.6dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:22 AM
Version: 1.3.2

Pass

Test Name: S3 Before Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

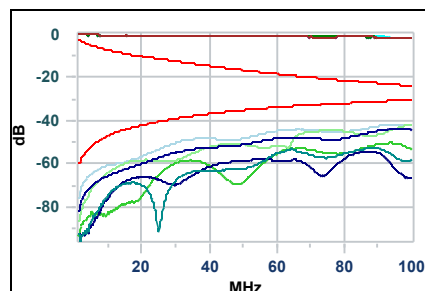
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/14/2014
Test Time: 10:45:57
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

ACR-N: Pass

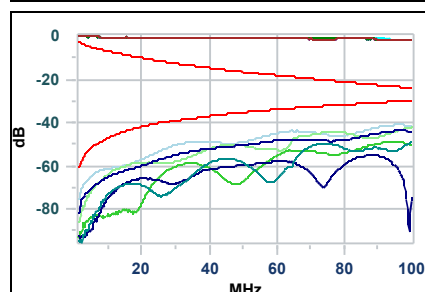
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	70.3dB @ 12.3MHz	37.6dB	32.7dB	51.2dB @ 88.3MHz	8.6dB	42.6dB
7,8-5,4	✓	75.0dB @ 2.5MHz	53.4dB	21.6dB	42.3dB @ 95.8MHz	7.0dB	35.3dB
7,8-1,2	✓	67.6dB @ 14.8MHz	35.5dB	32.1dB	52.9dB @ 86.8MHz	8.9dB	44.0dB
3,6-5,4	✓	60.7dB @ 12.7MHz	37.3dB	23.4dB	40.0dB @ 99.8MHz	6.1dB	33.9dB
3,6-1,2	✓	58.6dB @ 30.1MHz	26.4dB	32.2dB	48.8dB @ 93.3MHz	7.5dB	41.3dB
5,4-1,2	✓	70.9dB @ 2.1MHz	55.1dB	15.8dB	39.9dB @ 96.8MHz	6.7dB	33.2dB



RH

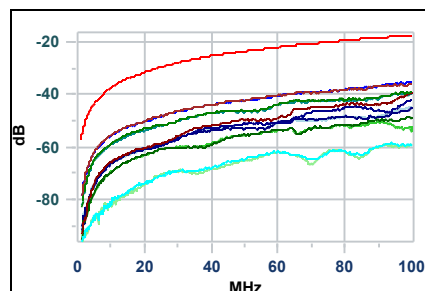
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	71.2dB @ 10.6MHz	39.3dB	31.9dB	46.9dB @ 100.0MHz	6.1dB	40.8dB
7,8-5,4	✓	76.6dB @ 2.1MHz	55.1dB	21.5dB	42.4dB @ 96.8MHz	6.7dB	35.7dB
7,8-1,2	✓	67.8dB @ 14.2MHz	36.0dB	31.8dB	53.8dB @ 88.8MHz	8.5dB	45.3dB
3,6-5,4	✓	61.6dB @ 11.5MHz	38.4dB	23.2dB	40.4dB @ 100.0MHz	6.1dB	34.3dB
3,6-1,2	✓	58.3dB @ 31.5MHz	25.7dB	32.6dB	47.1dB @ 93.8MHz	7.4dB	39.7dB
5,4-1,2	✓	72.8dB @ 1.6MHz	57.0dB	15.8dB	39.7dB @ 96.8MHz	6.7dB	33.0dB



ACR-F: Pass

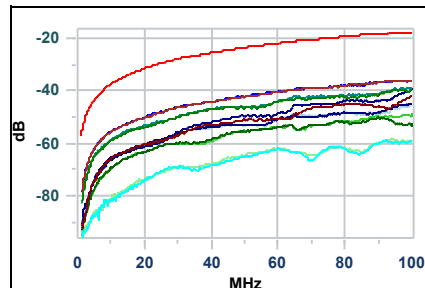
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	60.9dB @ 5.2MHz	43.1dB	17.8dB	35.9dB @ 97.0MHz	17.7dB	18.2dB
7,8-5,4	✓	63.9dB @ 5.2MHz	43.1dB	20.8dB	39.0dB @ 99.8MHz	17.4dB	21.6dB
7,8-1,2	✓	95.8dB @ 1.0MHz	57.4dB	38.4dB	58.3dB @ 93.8MHz	18.0dB	40.3dB
3,6-7,8	✓	35.6dB @ 95.5MHz	17.8dB	17.8dB	35.4dB @ 100.0MHz	17.4dB	18.0dB
3,6-5,4	✓	38.9dB @ 99.8MHz	17.4dB	21.5dB	38.9dB @ 99.8MHz	17.4dB	21.5dB
3,6-1,2	✓	48.3dB @ 100.0MHz	17.4dB	30.9dB	48.3dB @ 100.0MHz	17.4dB	30.9dB
5,4-7,8	✓	64.4dB @ 5.1MHz	43.3dB	21.1dB	39.4dB @ 99.8MHz	17.4dB	22.0dB
5,4-3,6	✓	41.8dB @ 99.8MHz	17.4dB	24.4dB	41.8dB @ 99.8MHz	17.4dB	24.4dB
5,4-1,2	✓	45.1dB @ 99.8MHz	17.4dB	27.7dB	45.1dB @ 99.8MHz	17.4dB	27.7dB
1,2-7,8	✓	93.4dB @ 1.0MHz	57.4dB	36.0dB	58.5dB @ 99.5MHz	17.4dB	41.1dB
1,2-3,6	✓	60.7dB @ 25.2MHz	29.4dB	31.3dB	50.1dB @ 91.0MHz	18.2dB	31.9dB
1,2-5,4	✓	44.6dB @ 99.8MHz	17.4dB	27.2dB	44.6dB @ 99.8MHz	17.4dB	27.2dB



RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	60.8dB @ 5.4MHz	42.8dB	18.0dB	35.7dB @ 100.0MHz	17.4dB	18.3dB
7,8-5,4	✓	63.7dB @ 5.5MHz	42.6dB	21.1dB	39.5dB @ 99.8MHz	17.4dB	22.1dB
7,8-1,2	✓	93.4dB @ 1.0MHz	57.4dB	36.0dB	58.5dB @ 99.5MHz	17.4dB	41.1dB
3,6-7,8	✓	61.1dB @ 5.1MHz	43.3dB	17.8dB	35.7dB @ 99.3MHz	17.5dB	18.2dB
3,6-5,4	✓	41.6dB @ 99.8MHz	17.4dB	24.2dB	41.6dB @ 99.8MHz	17.4dB	24.2dB
3,6-1,2	✓	60.7dB @ 25.2MHz	29.4dB	31.3dB	50.0dB @ 91.0MHz	18.2dB	31.8dB
5,4-7,8	✓	64.1dB @ 5.1MHz	43.3dB	20.8dB	38.9dB @ 99.8MHz	17.4dB	21.5dB
5,4-3,6	✓	39.1dB @ 99.8MHz	17.4dB	21.7dB	39.1dB @ 99.8MHz	17.4dB	21.7dB
5,4-1,2	✓	44.5dB @ 99.8MHz	17.4dB	27.1dB	44.5dB @ 99.8MHz	17.4dB	27.1dB
1,2-7,8	✓	95.8dB @ 1.0MHz	57.4dB	38.4dB	58.2dB @ 93.8MHz	18.0dB	40.2dB
1,2-3,6	✓	49.5dB @ 89.5MHz	18.4dB	31.1dB	48.6dB @ 100.0MHz	17.4dB	31.2dB
1,2-5,4	✓	45.2dB @ 99.8MHz	17.4dB	27.8dB	45.2dB @ 99.8MHz	17.4dB	27.8dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:22 AM
Version: 1.3.2

Pass

Test Name: S3 Before Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

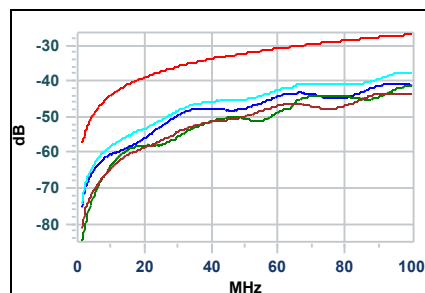
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/14/2014
Test Time: 10:45:57
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

PS NEXT: Pass

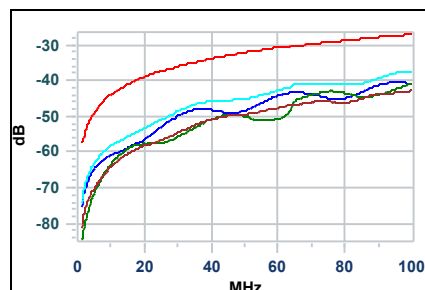
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	43.5dB @ 91.0MHz	27.8dB	15.7dB	43.4dB @ 95.8MHz	27.4dB	16.0dB
3,6	✓	41.4dB @ 99.0MHz	27.2dB	14.2dB	41.3dB @ 100.0MHz	27.1dB	14.2dB
5,4	✓	37.6dB @ 97.3MHz	27.3dB	10.3dB	37.5dB @ 99.5MHz	27.1dB	10.4dB
1,2	✓	43.5dB @ 62.8MHz	30.6dB	12.9dB	40.8dB @ 96.0MHz	27.4dB	13.4dB



RH

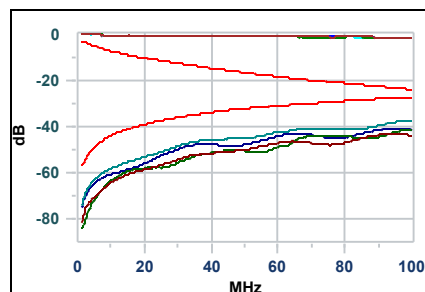
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	42.7dB @ 100.0MHz	27.1dB	15.6dB	42.7dB @ 100.0MHz	27.1dB	15.6dB
3,6	✓	42.9dB @ 74.5MHz	29.3dB	13.6dB	40.7dB @ 100.0MHz	27.1dB	13.6dB
5,4	✓	37.9dB @ 96.3MHz	27.4dB	10.5dB	37.7dB @ 100.0MHz	27.1dB	10.6dB
1,2	✓	43.3dB @ 63.3MHz	30.5dB	12.8dB	40.4dB @ 96.3MHz	27.4dB	13.0dB



PS ACR-N: Pass

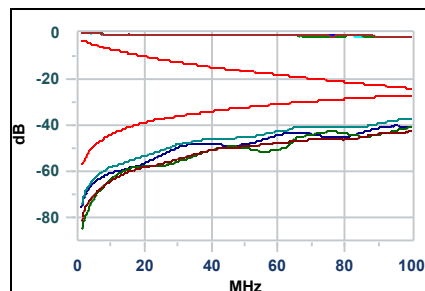
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	74.8dB @ 2.5MHz	50.4dB	24.4dB	42.1dB @ 92.3MHz	4.7dB	37.4dB
3,6	✓	61.0dB @ 11.8MHz	35.1dB	25.9dB	39.6dB @ 99.3MHz	3.2dB	36.4dB
5,4	✓	69.7dB @ 2.1MHz	52.1dB	17.6dB	36.0dB @ 98.3MHz	3.4dB	32.6dB
1,2	✓	71.4dB @ 1.9MHz	52.7dB	18.7dB	39.4dB @ 94.8MHz	4.2dB	35.2dB



RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	76.4dB @ 2.1MHz	52.1dB	24.3dB	41.3dB @ 100.0MHz	3.1dB	38.2dB
3,6	✓	61.0dB @ 11.5MHz	35.4dB	25.6dB	39.0dB @ 100.0MHz	3.1dB	35.9dB
5,4	✓	69.5dB @ 2.1MHz	52.1dB	17.4dB	36.2dB @ 97.8MHz	3.5dB	32.7dB
1,2	✓	72.7dB @ 1.6MHz	54.0dB	18.7dB	39.0dB @ 94.0MHz	4.3dB	34.7dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:22 AM
Version: 1.3.2

Pass

Test Name: S3 Before Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

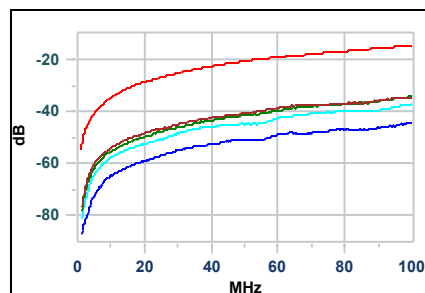
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/14/2014
Test Time: 10:45:57
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

PS ACR-F: Pass

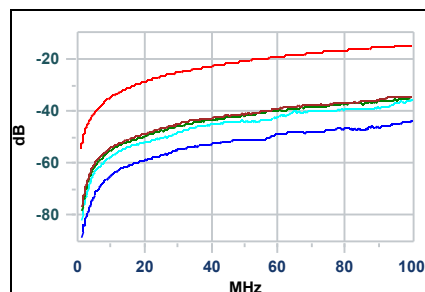
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	59.1dB @ 5.2MHz	40.1dB	19.0dB	34.1dB @ 97.0MHz	14.7dB	19.4dB
3,6	✓	33.6dB @ 99.8MHz	14.4dB	19.2dB	33.6dB @ 99.8MHz	14.4dB	19.2dB
5,4	✓	36.7dB @ 99.8MHz	14.4dB	22.3dB	36.7dB @ 99.8MHz	14.4dB	22.3dB
1,2	✓	47.7dB @ 64.0MHz	18.3dB	29.4dB	44.0dB @ 100.0MHz	14.4dB	29.6dB



RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	59.1dB @ 5.4MHz	39.8dB	19.3dB	34.1dB @ 99.8MHz	14.4dB	19.7dB
3,6	✓	34.7dB @ 99.3MHz	14.5dB	20.2dB	34.7dB @ 100.0MHz	14.4dB	20.3dB
5,4	✓	35.4dB @ 99.8MHz	14.4dB	21.0dB	35.4dB @ 99.8MHz	14.4dB	21.0dB
1,2	✓	43.8dB @ 99.3MHz	14.5dB	29.3dB	43.7dB @ 99.8MHz	14.4dB	29.3dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:26 AM
Version: 1.3.2

Summary:

All Cables	Twisted Pair	Coax/Twinax	Fiber
Total: 1	Total: 1	Total: 0	Total: 0
Pass: 1	Pass: 1	Pass: 0	Pass: 0
Fail: 0	Fail: 0	Fail: 0	Fail: 0
Tot. Length: 19.7ft	Tot. Length: 19.7ft	Tot. Length: 0ft	Tot. Length: 0ft

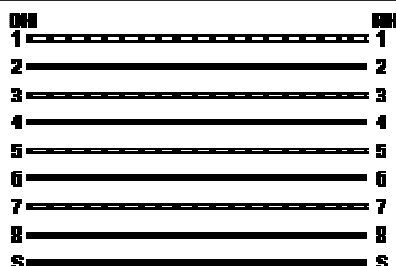
Pass

Test Name: S3 After Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/16/2014
Test Time: 02:48:23
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

Wiremap: Pass

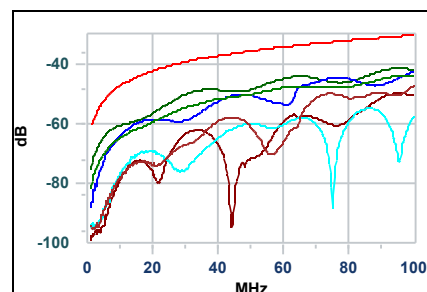


Test	7,8(0.72)	3,6(0.72)	5,4(0.72)	1,2(0.72)	Limit	Result
Length	20.3 ft.	21.7 ft.	22.0 ft.	19.7 ft.	< 328.1 ft.	✓
Propagation Delay	28.8 ns	30.4 ns	30.8 ns	28.0 ns	< 555.0 ns	✓
Delay Skew	0.8 ns	2.4 ns	2.8 ns	0.0 ns	< 50.0 ns	✓
Headroom	49.7 dB					✓

NEXT: Pass

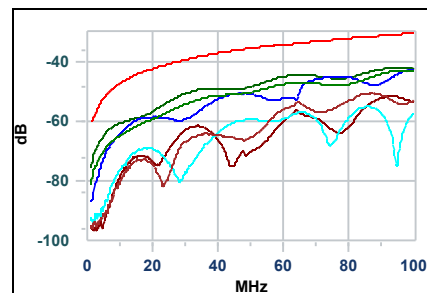
DH

Pairs	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	47.1dB @ 100.0MHz	30.1dB	17.0dB	47.1dB @ 100.0MHz	30.1dB	17.0dB
7,8-5,4	43.6dB @ 94.8MHz	30.5dB	13.1dB	43.4dB @ 99.3MHz	30.1dB	13.3dB
7,8-1,2	54.8dB @ 85.5MHz	31.3dB	23.5dB	54.7dB @ 86.8MHz	31.1dB	23.6dB
3,6-5,4	44.3dB @ 74.5MHz	32.3dB	12.0dB	42.1dB @ 100.0MHz	30.1dB	12.0dB
3,6-1,2	49.7dB @ 93.5MHz	30.6dB	19.1dB	49.5dB @ 95.3MHz	30.4dB	19.1dB
5,4-1,2	43.9dB @ 62.8MHz	33.6dB	10.3dB	41.0dB @ 95.5MHz	30.4dB	10.6dB



RH

Pairs	Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	50.5dB @ 85.5MHz	31.3dB	19.2dB	50.4dB @ 88.3MHz	31.0dB	19.4dB
7,8-5,4	43.0dB @ 93.5MHz	30.6dB	12.4dB	42.8dB @ 97.8MHz	30.2dB	12.6dB
7,8-1,2	56.5dB @ 65.3MHz	33.3dB	23.2dB	54.8dB @ 86.0MHz	31.2dB	23.6dB
3,6-5,4	42.2dB @ 99.8MHz	30.1dB	12.1dB	42.2dB @ 100.0MHz	30.1dB	12.1dB
3,6-1,2	51.5dB @ 92.3MHz	30.7dB	20.8dB	51.5dB @ 94.5MHz	30.5dB	21.0dB
5,4-1,2	44.2dB @ 62.8MHz	33.6dB	10.6dB	41.5dB @ 96.3MHz	30.4dB	11.1dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:26 AM
Version: 1.3.2

Pass

Test Name: S3 After Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

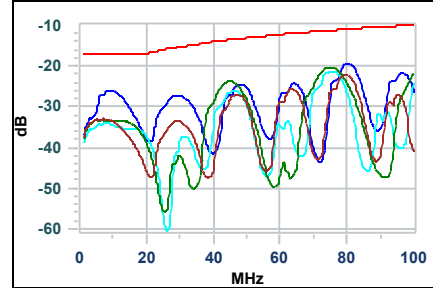
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/16/2014
Test Time: 02:48:23
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

Return Loss: Pass

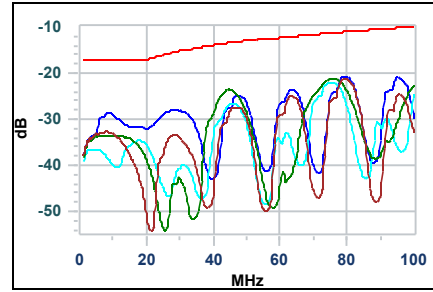
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	22.4dB @ 78.5MHz	11.1dB	11.3dB	22.3dB @ 79.8MHz	11.0dB	11.3dB
3,6	✓	20.2dB @ 74.5MHz	11.3dB	8.9dB	20.2dB @ 75.5MHz	11.2dB	9.0dB
5,4	✓	21.3dB @ 75.0MHz	11.3dB	10.0dB	21.3dB @ 76.3MHz	11.2dB	10.1dB
1,2	✓	19.4dB @ 80.0MHz	11.0dB	8.4dB	19.4dB @ 80.3MHz	11.0dB	8.4dB



RH

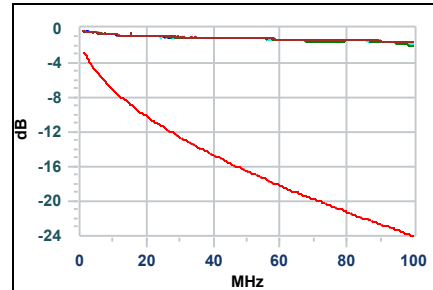
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	21.4dB @ 78.5MHz	11.1dB	10.3dB	21.3dB @ 80.0MHz	11.0dB	10.3dB
3,6	✓	21.1dB @ 75.8MHz	11.2dB	9.9dB	21.1dB @ 76.0MHz	11.2dB	9.9dB
5,4	✓	22.0dB @ 75.0MHz	11.3dB	10.7dB	22.0dB @ 76.0MHz	11.2dB	10.8dB
1,2	✓	20.8dB @ 78.5MHz	11.1dB	9.7dB	20.7dB @ 79.5MHz	11.0dB	9.7dB



Insertion Loss: Pass

DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	0.4dB @ 1.9MHz	3.1dB	2.7dB	1.6dB @ 100.0MHz	24.0dB	22.4dB
3,6	✓	0.4dB @ 1.9MHz	3.1dB	2.7dB	2.0dB @ 100.0MHz	24.0dB	22.0dB
5,4	✓	0.4dB @ 1.9MHz	3.1dB	2.7dB	1.7dB @ 100.0MHz	24.0dB	22.3dB
1,2	✓	0.4dB @ 1.9MHz	3.1dB	2.7dB	1.6dB @ 100.0MHz	24.0dB	22.4dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:26 AM
Version: 1.3.2

Pass

Test Name: S3 After Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

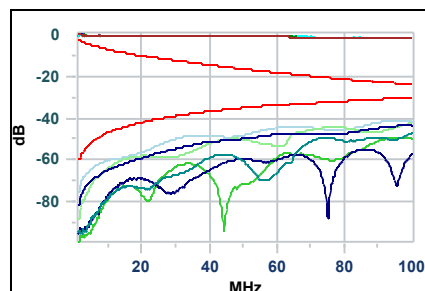
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/16/2014
Test Time: 02:48:23
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

ACR-N: Pass

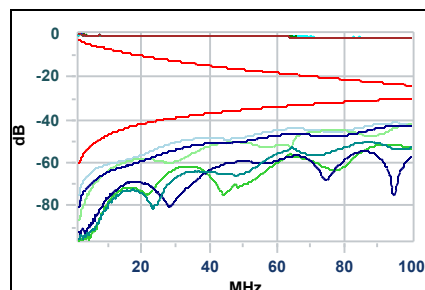
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	56.9dB @ 41.5MHz	21.7dB	35.2dB	45.1dB @ 100.0MHz	6.1dB	39.0dB
7,8-5,4	✓	76.4dB @ 2.1MHz	55.1dB	21.3dB	41.7dB @ 96.8MHz	6.7dB	35.0dB
7,8-1,2	✓	70.1dB @ 13.8MHz	36.3dB	33.8dB	53.3dB @ 86.0MHz	9.1dB	44.2dB
3,6-5,4	✓	61.5dB @ 11.5MHz	38.4dB	23.1dB	40.1dB @ 100.0MHz	6.1dB	34.0dB
3,6-1,2	✓	72.7dB @ 12.7MHz	37.3dB	35.4dB	47.8dB @ 95.3MHz	7.0dB	40.8dB
5,4-1,2	✓	71.0dB @ 1.9MHz	55.7dB	15.3dB	39.4dB @ 95.5MHz	7.0dB	32.4dB



RH

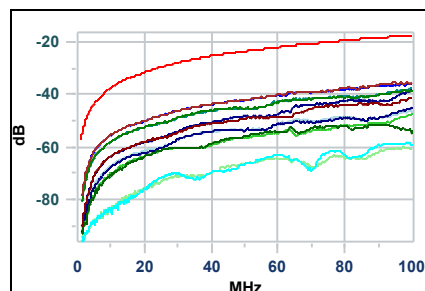
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	74.0dB @ 12.7MHz	37.3dB	36.7dB	48.9dB @ 86.8MHz	8.9dB	40.0dB
7,8-5,4	✓	77.2dB @ 1.8MHz	56.4dB	20.8dB	41.1dB @ 96.5MHz	6.8dB	34.3dB
7,8-1,2	✓	68.4dB @ 15.3MHz	35.1dB	33.3dB	53.4dB @ 85.3MHz	9.3dB	44.1dB
3,6-5,4	✓	61.4dB @ 11.5MHz	38.4dB	23.0dB	40.2dB @ 100.0MHz	6.1dB	34.1dB
3,6-1,2	✓	71.0dB @ 14.1MHz	36.0dB	35.0dB	49.9dB @ 92.3MHz	7.7dB	42.2dB
5,4-1,2	✓	71.7dB @ 1.8MHz	56.4dB	15.3dB	39.9dB @ 94.3MHz	7.3dB	32.6dB



ACR-F: Pass

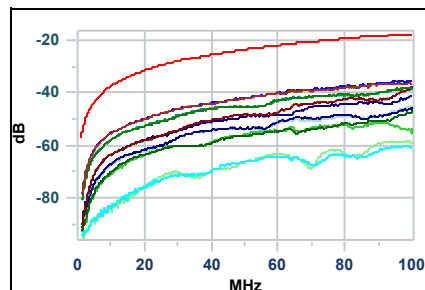
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	39.0dB @ 63.0MHz	21.4dB	17.6dB	35.4dB @ 98.8MHz	17.5dB	17.9dB
7,8-5,4	✓	63.3dB @ 5.1MHz	43.3dB	20.0dB	38.3dB @ 98.5MHz	17.5dB	20.8dB
7,8-1,2	✓	95.6dB @ 1.0MHz	57.4dB	38.2dB	58.3dB @ 99.3MHz	17.5dB	40.8dB
3,6-7,8	✓	61.1dB @ 5.1MHz	43.3dB	17.8dB	35.9dB @ 99.0MHz	17.5dB	18.4dB
3,6-5,4	✓	40.8dB @ 99.8MHz	17.4dB	23.4dB	40.8dB @ 100.0MHz	17.4dB	23.4dB
3,6-1,2	✓	52.4dB @ 63.8MHz	21.3dB	31.1dB	51.1dB @ 91.3MHz	18.2dB	32.9dB
5,4-7,8	✓	63.0dB @ 5.4MHz	42.8dB	20.2dB	37.8dB @ 100.0MHz	17.4dB	20.4dB
5,4-3,6	✓	38.0dB @ 99.8MHz	17.4dB	20.6dB	38.0dB @ 99.8MHz	17.4dB	20.6dB
5,4-1,2	✓	44.8dB @ 99.8MHz	17.4dB	27.4dB	44.8dB @ 99.8MHz	17.4dB	27.4dB
1,2-7,8	✓	93.9dB @ 1.0MHz	57.4dB	36.5dB	59.7dB @ 97.5MHz	17.6dB	42.1dB
1,2-3,6	✓	47.0dB @ 100.0MHz	17.4dB	29.6dB	47.0dB @ 100.0MHz	17.4dB	29.6dB
1,2-5,4	✓	49.3dB @ 64.8MHz	21.2dB	28.1dB	46.0dB @ 99.8MHz	17.4dB	28.6dB



RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8-3,6	✓	61.1dB @ 5.1MHz	43.3dB	17.8dB	36.2dB @ 99.0MHz	17.5dB	18.7dB
7,8-5,4	✓	63.0dB @ 5.4MHz	42.8dB	20.2dB	37.9dB @ 100.0MHz	17.4dB	20.5dB
7,8-1,2	✓	94.0dB @ 1.0MHz	57.4dB	36.6dB	59.8dB @ 97.5MHz	17.6dB	42.2dB
3,6-7,8	✓	35.3dB @ 94.8MHz	17.9dB	17.4dB	35.1dB @ 100.0MHz	17.4dB	17.7dB
3,6-5,4	✓	37.8dB @ 99.8MHz	17.4dB	20.4dB	37.8dB @ 99.8MHz	17.4dB	20.4dB
3,6-1,2	✓	46.6dB @ 100.0MHz	17.4dB	29.2dB	46.6dB @ 100.0MHz	17.4dB	29.2dB
5,4-7,8	✓	63.3dB @ 5.1MHz	43.3dB	20.0dB	38.1dB @ 98.5MHz	17.5dB	20.6dB
5,4-3,6	✓	41.0dB @ 99.8MHz	17.4dB	23.6dB	41.0dB @ 99.8MHz	17.4dB	23.6dB
5,4-1,2	✓	49.3dB @ 64.8MHz	21.2dB	28.1dB	45.8dB @ 99.8MHz	17.4dB	28.4dB
1,2-7,8	✓	95.5dB @ 1.0MHz	57.4dB	38.1dB	58.2dB @ 98.5MHz	17.5dB	40.7dB
1,2-3,6	✓	52.5dB @ 63.8MHz	21.3dB	31.2dB	51.1dB @ 91.3MHz	18.2dB	32.9dB
1,2-5,4	✓	45.0dB @ 99.8MHz	17.4dB	27.6dB	45.0dB @ 99.8MHz	17.4dB	27.6dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:26 AM
Version: 1.3.2

Pass

Test Name: S3 After Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

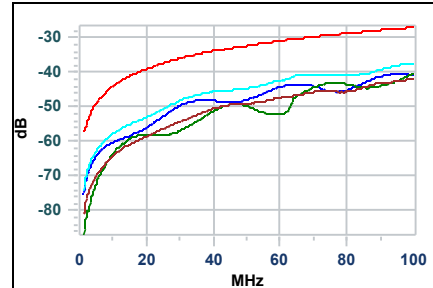
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/16/2014
Test Time: 02:48:23
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

PS NEXT: Pass

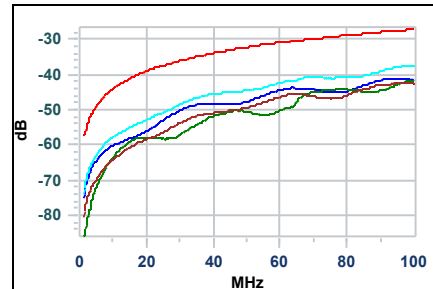
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	41.8dB @ 99.8MHz	27.1dB	14.7dB	41.8dB @ 100.0MHz	27.1dB	14.7dB
3,6	✓	40.4dB @ 100.0MHz	27.1dB	13.3dB	40.4dB @ 100.0MHz	27.1dB	13.3dB
5,4	✓	37.8dB @ 96.3MHz	27.4dB	10.4dB	37.6dB @ 100.0MHz	27.1dB	10.5dB
1,2	✓	43.5dB @ 62.8MHz	30.6dB	12.9dB	40.4dB @ 95.5MHz	27.4dB	13.0dB



RH

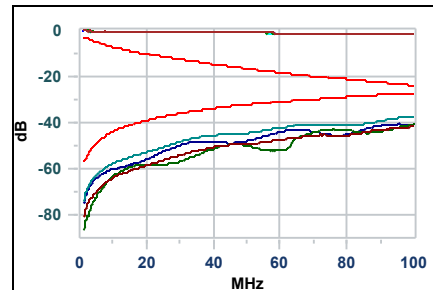
Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	42.7dB @ 91.3MHz	27.8dB	14.9dB	42.4dB @ 99.3MHz	27.1dB	15.3dB
3,6	✓	41.5dB @ 99.8MHz	27.1dB	14.4dB	41.5dB @ 100.0MHz	27.1dB	14.4dB
5,4	✓	37.8dB @ 95.0MHz	27.5dB	10.3dB	37.6dB @ 99.8MHz	27.1dB	10.5dB
1,2	✓	43.6dB @ 63.5MHz	30.5dB	13.1dB	41.0dB @ 94.5MHz	27.5dB	13.5dB



PS ACR-N: Pass

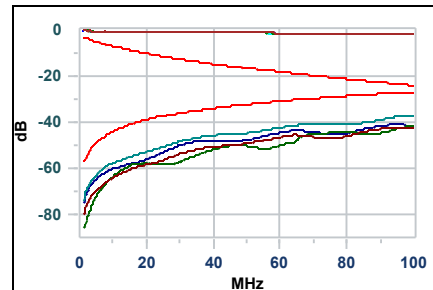
DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	76.2dB @ 2.1MHz	52.1dB	24.1dB	40.2dB @ 100.0MHz	3.1dB	37.1dB
3,6	✓	61.1dB @ 11.5MHz	35.4dB	25.7dB	38.4dB @ 100.0MHz	3.1dB	35.3dB
5,4	✓	69.8dB @ 1.9MHz	52.7dB	17.1dB	35.9dB @ 98.3MHz	3.4dB	32.5dB
1,2	✓	70.9dB @ 1.9MHz	52.7dB	18.2dB	38.8dB @ 95.5MHz	4.0dB	34.8dB



RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	77.0dB @ 1.8MHz	53.4dB	23.6dB	40.8dB @ 99.3MHz	3.2dB	37.6dB
3,6	✓	61.0dB @ 11.5MHz	35.4dB	25.6dB	39.5dB @ 100.0MHz	3.1dB	36.4dB
5,4	✓	70.4dB @ 1.8MHz	53.4dB	17.0dB	35.9dB @ 96.8MHz	3.7dB	32.2dB
1,2	✓	71.6dB @ 1.8MHz	53.4dB	18.2dB	39.4dB @ 94.3MHz	4.3dB	35.1dB



IDEAL INDUSTRIES, Inc. Certified - Test Report

Job Name: RJ303.job
Company: GLENAIR INC.

Report Date: Friday, May 16, 2014 9:26 AM
Version: 1.3.2

Pass

Test Name: S3 After Thermal
Test Limit: CAT 5E STP Chan
MFGDB:
LANTEK II-1000 [1227366/1227378
Adapter ID: 6014, CAT6A,0656,Rev.P
User Notes:

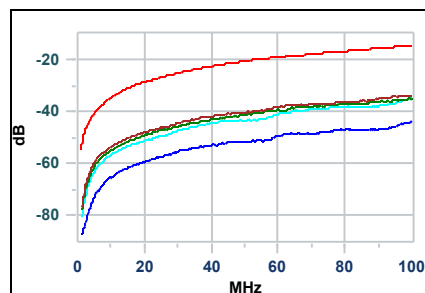
NVP: 72
Standard: TIA 568-C.2
Frequency Range: 1 - 100MHz
Firmware 2.019

Test Date: 5/16/2014
Test Time: 02:48:23
Operator: Tesfu Yohannes
Contractor:
Company: GLENAIR INC.

PS ACR-F: Pass

DH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	58.2dB @ 5.5MHz	39.6dB	18.6dB	33.6dB @ 99.0MHz	14.5dB	19.1dB
3,6	✓	38.2dB @ 64.8MHz	18.2dB	20.0dB	34.7dB @ 99.0MHz	14.5dB	20.2dB
5,4	✓	34.4dB @ 99.8MHz	14.4dB	20.0dB	34.4dB @ 99.8MHz	14.4dB	20.0dB
1,2	✓	43.7dB @ 99.8MHz	14.4dB	29.3dB	43.7dB @ 100.0MHz	14.4dB	29.3dB



RH

Pairs		Worst Case Value	Limit	Margin	Worst Overall Value	Limit	Margin
7,8	✓	58.6dB @ 5.4MHz	39.8dB	18.8dB	33.9dB @ 99.0MHz	14.5dB	19.4dB
3,6	✓	33.1dB @ 99.8MHz	14.4dB	18.7dB	33.1dB @ 100.0MHz	14.4dB	18.7dB
5,4	✓	44.7dB @ 36.5MHz	23.2dB	21.5dB	35.9dB @ 99.8MHz	14.4dB	21.5dB
1,2	✓	44.5dB @ 99.3MHz	14.5dB	30.0dB	44.4dB @ 99.8MHz	14.4dB	30.0dB

