



# Connecting Hardware Test Report

Project No.  
20200803

Part No.  
3013ALKVSD65

Version  
A

Prepared By  
Kevin Wu

## Scope:

To perform electrical transmission tests according to **Category 6** Connecting Hardware Limit referenced from cabling standards.

## Test Limits:

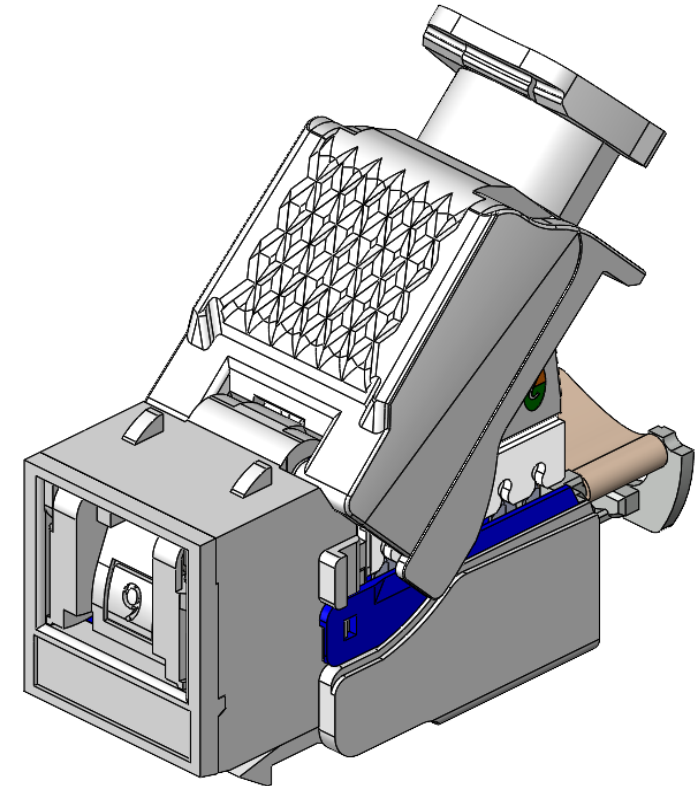
ANSI/TIA-568.2-D

## Tests Performed:

Test Description		Result
1.	Near End Crosstalk - From Plug	Pass
2.	Near End Crosstalk - From IDC	Pass
3.	Return Loss - From Plug	Pass
4.	Return Loss - From IDC	Pass
5.	Far End Crosstalk	Pass
6.	Insertion Loss	Pass
7.	TCL - From Plug	Pass
8.	TCL - From IDC	Pass
9.	TCTL - From Plug	Pass
10.	TCTL - From IDC	Pass

## Equipment Used

1.	Keysight 8753E Network Analyzer
2.	Keysight 8753ES Network Analyzer
3.	Keysight 5071C Network Analyzer



## Conclusion:

The device under test (DUT) is randomly picked up from batch production with date code 2031

The product information can be found with this link: [https://www.hci.com.tw/en/product/Cat-6A-Component-Level-90-STP-Toolless-Keystone-Jack-with-Shutter/Keystone\\_Jacks-LKVASD.html](https://www.hci.com.tw/en/product/Cat-6A-Component-Level-90-STP-Toolless-Keystone-Jack-with-Shutter/Keystone_Jacks-LKVASD.html)

The DUT **complies** with regulated **Category 6** transmission requirement specified in **ANSI/TIA-568.2-D** standard.

The testing was performed at HCI laboratory, Taipei Taiwan.

Tested By:

3rd Aug., 2020

# ANSI/TIA-568.2-D Category 6

		NEXT - From Plug End							
		12-36		36-78		36-54		36-54	
NEXT	12-36 Low	TIA-568.2-D	36-78 Low	TIA-568.2-D	36-54 Lowest	TIA-568.2-D	36-54 Highest	TIA-568.2-D	
	Worst point Freq.	7.00 MHz	Worst point Freq.	249.00 MHz	Worst point Freq.	249.00 MHz	Worst point Freq.	3.00 MHz	
	Margin	3.18 dB	Margin	2.30 dB	Margin	5.47 dB	Margin	2.42 dB	
	12-36 High	TIA-568.2-D	36-78 High	TIA-568.2-D	36-54 Central Low	TIA-568.2-D	36-54 Central High	TIA-568.2-D	
	Worst point Freq.	1.00 MHz	Worst point Freq.	250.00 MHz	Worst point Freq.	3.00 MHz	Worst point Freq.	3.00 MHz	
	Margin	5.68 dB	Margin	7.89 dB	Margin	5.00 dB	Margin	3.73 dB	
	12-54 Low	TIA-568.2-D	54-78 Low	TIA-568.2-D	12-78 Low	TIA-568.2-D	ANSI/TIA-568.2-D OVERALL MARGIN : 1.50 dB		
	Worst point Freq.	4.00 MHz	Worst point Freq.	6.00 MHz	Worst point Freq.	15.00 MHz			
	Margin	6.79 dB	Margin	3.73 dB	Margin	7.62 dB			
	12-54 High	TIA-568.2-D	54-78 High	TIA-568.2-D	12-78 High	TIA-568.2-D			
	Worst point Freq.	8.00 MHz	Worst point Freq.	9.00 MHz	Worst point Freq.	8.00 MHz			
	Margin	1.50 dB	Margin	4.02 dB	Margin	4.09 dB			
		NEXT - From IDC End							
	12-36 Low	TIA-568.2-D	36-78 Low	TIA-568.2-D	36-54 Lowest	TIA-568.2-D	36-54 Highest	TIA-568.2-D	
	Worst point Freq.	9.00 MHz	Worst point Freq.	6.00 MHz	Worst point Freq.	250.00 MHz	Worst point Freq.	7.00 MHz	
	Margin	1.14 dB	Margin	3.96 dB	Margin	2.49 dB	Margin	3.04 dB	
	12-36 High	TIA-568.2-D	36-78 High	TIA-568.2-D	36-54 Central Low	TIA-568.2-D	36-54 Central High	TIA-568.2-D	
	Worst point Freq.	4.00 MHz	Worst point Freq.	250.00 MHz	Worst point Freq.	250.00 MHz	Worst point Freq.	250.00 MHz	
	Margin	7.93 dB	Margin	5.56 dB	Margin	2.55 dB	Margin	2.69 dB	
	12-54 Low	TIA-568.2-D	54-78 Low	TIA-568.2-D	12-78 Low	TIA-568.2-D	ANSI/TIA-568.2-D OVERALL MARGIN : 1.14 dB		
	Worst point Freq.	250.00 MHz	Worst point Freq.	250.00 MHz	Worst point Freq.	21.00 MHz			
	Margin	3.12 dB	Margin	1.72 dB	Margin	7.36 dB			
	12-54 High	TIA-568.2-D	54-78 High	TIA-568.2-D	12-78 High	TIA-568.2-D			
	Worst point Freq.	22.00 MHz	Worst point Freq.	9.00 MHz	Worst point Freq.	5.00 MHz			
	Margin	5.94 dB	Margin	4.30 dB	Margin	4.99 dB			

		RL - From Plug End			
		Pair 12		Pair 36	
Return Loss	Pair 12	TIA-568.2-D	Pair 36	TIA-568.2-D	
	Worst point Freq.	50.00 MHz	Worst point Freq.	50.00 MHz	
	Margin	7.42 dB	Margin	8.91 dB	
	Pair 54	TIA-568.2-D	Pair 78	TIA-568.2-D	
	Worst point Freq.	50.00 MHz	Worst point Freq.	250.00 MHz	
	Margin	6.35 dB	Margin	10.37 dB	
	ANSI/TIA-568.2-D				6.35 dB
	OVERALL MARGIN :				at Pair 54
		RL - From IDC End			
	Pair 12	TIA-568.2-D	Pair 36	TIA-568.2-D	
	Worst point Freq.	250.00 MHz	Worst point Freq.	50.00 MHz	
	Margin	14.87 dB	Margin	14.66 dB	
	Pair 54	TIA-568.2-D	Pair 78	TIA-568.2-D	
	Worst point Freq.	50.00 MHz	Worst point Freq.	250.00 MHz	
	Margin	9.10 dB	Margin	10.76 dB	
	ANSI/TIA-568.2-D				9.10 dB
	OVERALL MARGIN :				at Pair 54

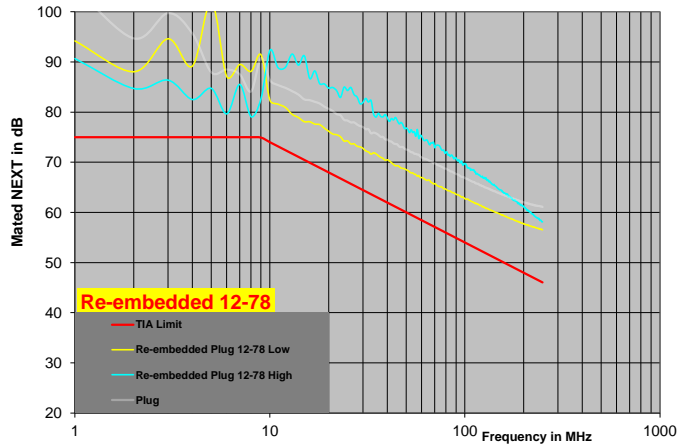
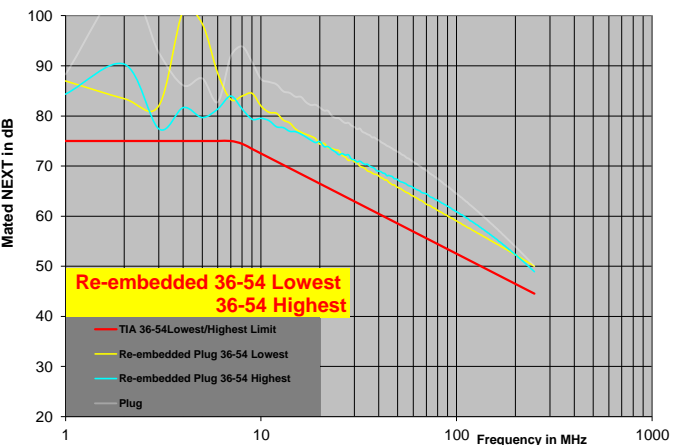
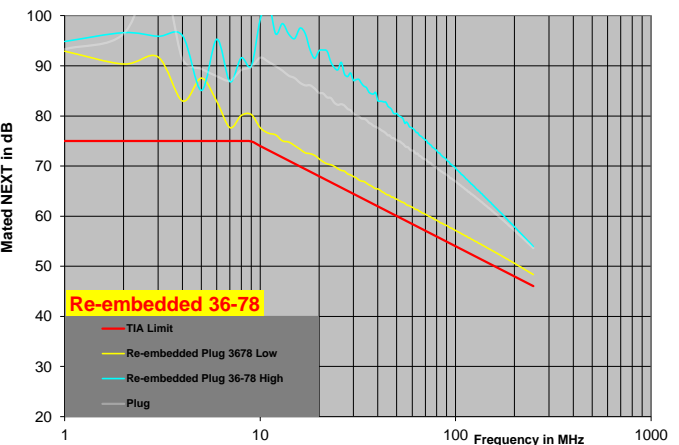
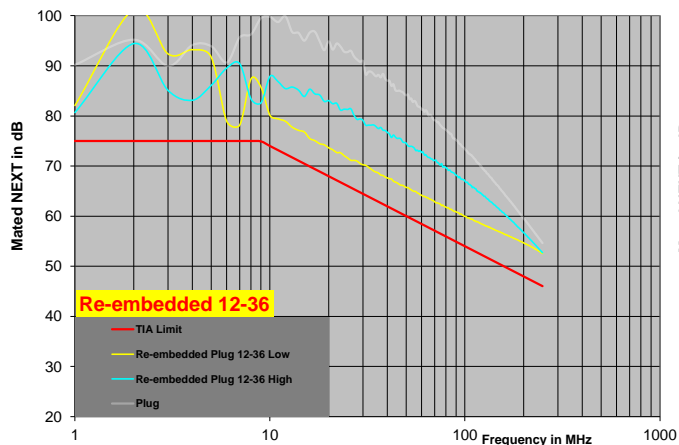
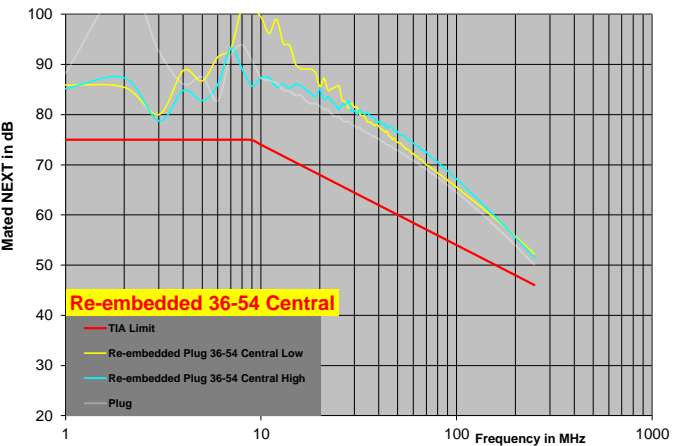
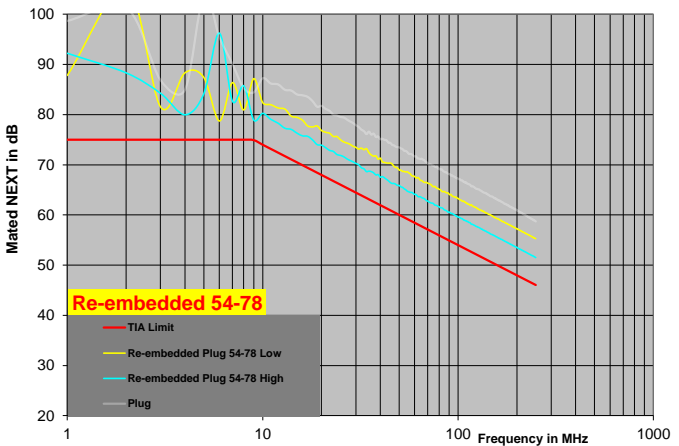
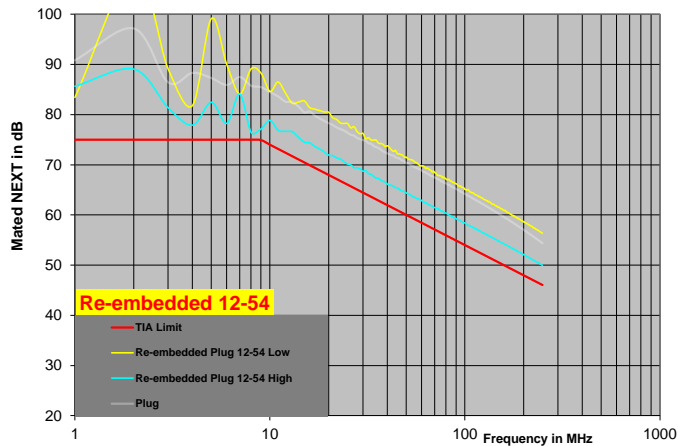
		Insertion Loss			
		Pair 12		Pair 36	
Insertion Loss	Pair 12	TIA-568.2-D	Pair 36	TIA-568.2-D	
	Worst point Freq.	24.00 MHz	Worst point Freq.	24.00 MHz	
	Margin	0.08 dB	Margin	0.07 dB	
	Pair 54	TIA-568.2-D	Pair 78	TIA-568.2-D	
	Worst point Freq.	1.00 MHz	Worst point Freq.	1.00 MHz	
	Margin	0.08 dB	Margin	0.07 dB	
	ANSI/TIA-568.2-D				0.07 dB
	OVERALL MARGIN :				at Pair 78

		FEXT							
		12-36		36-12		54-12		78-12	
FEXT	12-36	TIA-568.2-D	36-12	TIA-568.2-D	54-12	TIA-568.2-D	78-12	TIA-568.2-D	
	Worst point Freq.	3.00 MHz	Worst point Freq.	1.00 MHz	Worst point Freq.	3.00 MHz	Worst point Freq.	3.00 MHz	
	Margin	18.89 dB	Margin	15.51 dB	Margin	4.30 dB	Margin	15.31 dB	
	12-54	TIA-568.2-D	36-54	TIA-568.2-D	54-36	TIA-568.2-D	78-36	TIA-568.2-D	
	Worst point Freq.	3.00 MHz	Worst point Freq.	239.00 MHz	Worst point Freq.	245.00 MHz	Worst point Freq.	213.00 MHz	
	Margin	4.28 dB	Margin	7.69 dB	Margin	7.78 dB	Margin	13.06 dB	
	12-78	TIA-568.2-D	36-78	TIA-568.2-D	54-78	TIA-568.2-D	78-54	TIA-568.2-D	
	Worst point Freq.	1.00 MHz	Worst point Freq.	4.00 MHz	Worst point Freq.	3.00 MHz	Worst point Freq.	3.00 MHz	
	Margin	16.71 dB	Margin	11.20 dB	Margin	13.28 dB	Margin	14.48 dB	
	ANSI/TIA-568.2-D								4.28 dB
	OVERALL MARGIN :								at 12-54

		TCL - Forward							
		Pair 12		Pair 36		Pair 54		Pair 78	
TCL	Pair 12	TIA-568.2-D	Pair 36	TIA-568.2-D	Pair 54	TIA-568.2-D	Pair 78	TIA-568.2-D	
	Worst point Freq.	142.00 MHz	Worst point Freq.	215.00 MHz	Worst point Freq.	165.00 MHz	Worst point Freq.	127.00 MHz	
	Margin	17.52 dB	Margin	26.47 dB	Margin	9.68 dB	Margin	13.85 dB	
	ANSI/TIA-568.2-D								9.68 dB
	OVERALL MARGIN :								at Pair 54
		TCL - Reverse							
	Pair 12	TIA-568.2-D	Pair 36	TIA-568.2-D	Pair 54	TIA-568.2-D	Pair 78	TIA-568.2-D	
	Worst point Freq.	27.00 MHz	Worst point Freq.	250.00 MHz	Worst point Freq.	244.00 MHz	Worst point Freq.	250.00 MHz	
	Margin	17.33 dB	Margin	12.05 dB	Margin	10.13 dB	Margin	17.66 dB	
	ANSI/TIA-568.2-D								10.13 dB
	OVERALL MARGIN :								at Pair 54

		TCTL - Forward							
		Pair 12		Pair 36		Pair 54		Pair 78	
TCTL	Pair 12	TIA-568.2-D	Pair 36	TIA-568.2-D	Pair 54	TIA-568.2-D	Pair 78	TIA-568.2-D	
	Worst point Freq.	250.00 MHz	Worst point Freq.	43.00 MHz	Worst point Freq.	32.00 MHz	Worst point Freq.	244.00 MHz	
	Margin	20.75 dB	Margin	7.71 dB	Margin	16.23 dB	Margin	11.82 dB	
	ANSI/TIA-568.2-D								7.71 dB
	OVERALL MARGIN :								at Pair 36
		TCTL - Reverse							
	Pair 12	TIA-568.2-D	Pair 36	TIA-568.2-D	Pair 54	TIA-568.2-D	Pair 78	TIA-568.2-D	
	Worst point Freq.	154.00 MHz	Worst point Freq.	50.00 MHz	Worst point Freq.	220.00 MHz	Worst point Freq.	217.00 MHz	
	Margin	23.95 dB	Margin	7.85 dB	Margin	8.94 dB	Margin	22.52 dB	
	ANSI/TIA-568.2-D								7.85 dB
	OVERALL MARGIN :								at Pair 36

Freq. (MHz)	ANSI/TIA-568.2-D		ANSI/TIA-568.2-D		ANSI/TIA-568.2-D		ANSI/TIA-568.2-D		ANSI/TIA-568.2-D		ANSI/TIA-568.2-D		ANSI/TIA-568.2-D	
	NEXT 36-54 Highest & Lowest (dB)		NEXT The Other Pairs (dB)		RL (dB)		FEXT (dB)		IL (dB)		TCL (dB)		TCTL (dB)	
	Limit	Min.	Limit	Min.	Limit	Min.	Limit	Min.	Limit	Max	Limit	Min.	Limit	Min.
1	75.00	78.90	75.00	79.40	30.00	40.32	75.00	87.33	0.10	0.01	40.00	74.86	40.00	72.19
4	75.00	81.06	75.00	77.90	30.00	40.24	71.06	75.34	0.10	0.00	40.00	66.20	40.00	62.92
8	74.44	77.98	75.00	78.50	30.00	40.13	65.04	70.51	0.10	0.00	40.00	61.99	40.00	57.88
10	72.50	77.95	74.00	76.85	30.00	40.02	63.10	68.39	0.10	0.01	40.00	61.52	40.00	56.01
16	68.42	74.03	69.92	72.05	30.00	39.70	59.02	63.95	0.10	0.01	40.00	57.42	40.00	51.85
20	66.40	72.43	67.98	70.16	30.00	39.46	57.08	61.92	0.10	0.01	40.00	54.31	40.00	50.05
25	64.54	70.66	66.04	68.28	30.00	39.12	55.14	60.05	0.10	0.01	40.00	51.68	40.00	48.09
31.25	62.40	68.65	63.90	66.17	30.00	38.62	53.00	58.14	0.11	0.01	37.90	48.84	37.90	45.92
62.5	58.51	63.20	58.01	60.21	28.01	34.93	47.11	52.33	0.16	0.02	32.01	41.95	32.01	39.97
100	52.50	58.99	54.00	56.40	24.00	31.81	43.10	48.26	0.20	0.03	28.00	37.79	28.00	36.50
200	46.48	50.30	47.98	50.21	17.98	26.71	37.08	42.11	0.28	0.06	21.98	31.85	21.98	30.56
250	44.54	47.03	46.04	47.76	16.04	24.89	35.14	40.21	0.32	0.07	20.04	30.17	20.04	28.59



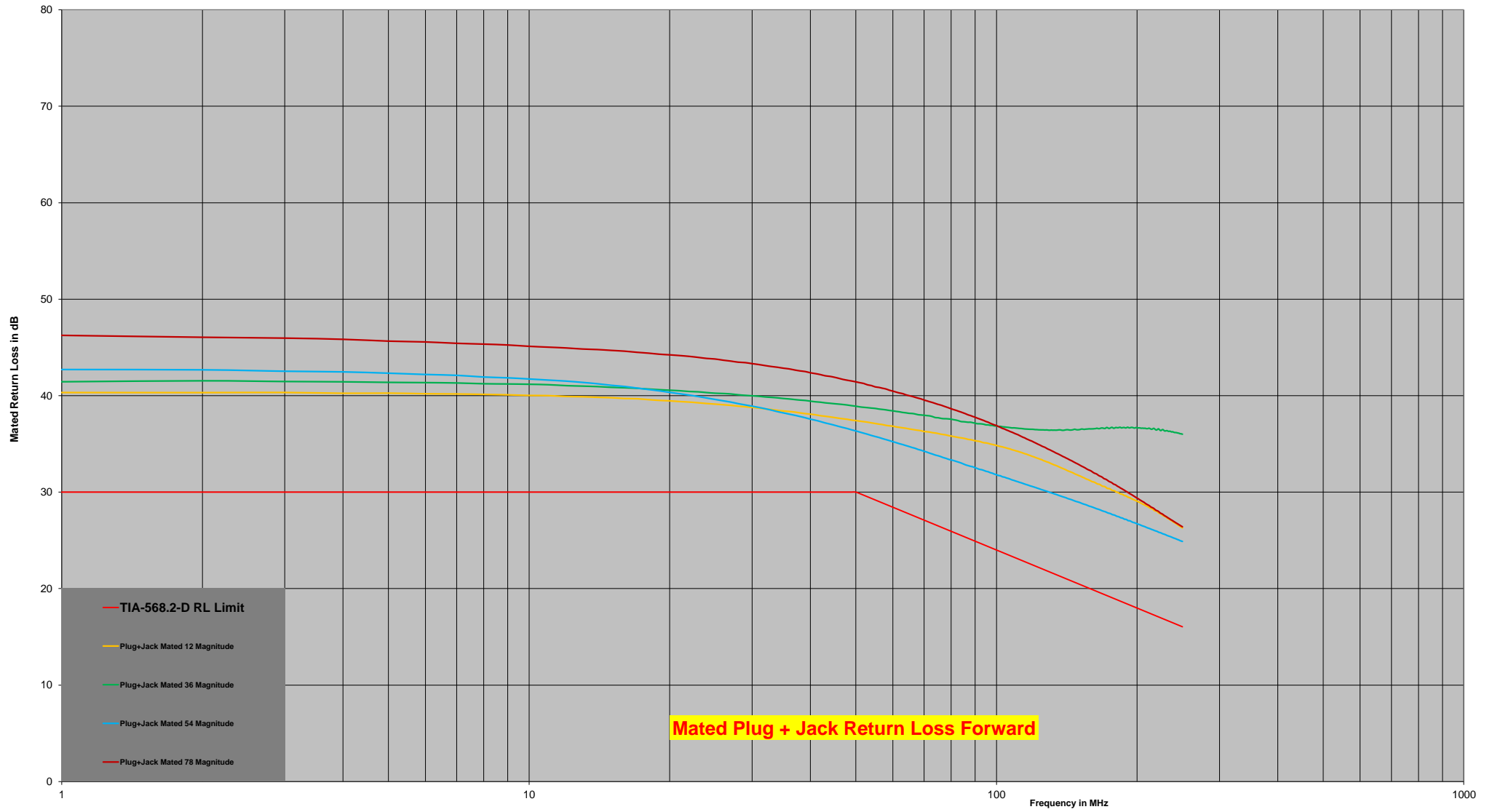
<b>12-36</b>	12-36 Low	TIA	
	Worst point Freq.	7.00	MHz
	Worst point Value	78.18	dB
	Margin	3.18	dB
<b>36-78</b>	36-78 Low	TIA	
	Worst point Freq.	249.00	MHz
	Worst point Value	48.38	dB
	Margin	2.30	dB
<b>36-54</b>	36-54 Lowest	TIA	
	Worst point Freq.	249.00	MHz
	Worst point Value	50.05	dB
	Margin	5.47	dB
	36-54 Highest	TIA	
	Worst point Freq.	3.00	MHz
	Worst point Value	77.42	dB
	Margin	2.42	dB
	36-54 Central Low	TIA	
	Worst point Freq.	3.00	MHz
	Worst point Value	80.00	dB
	Margin	5.00	dB
	36-54 Central High	TIA	
	Worst point Freq.	3.00	MHz
	Worst point Value	78.73	dB
	Margin	3.73	dB

<b>12-54</b>	12-54 Low	TIA	
	Worst point Freq.	4.00	MHz
	Worst point Value	81.79	dB
	Margin	6.79	dB
<b>54-78</b>	54-78 Low	TIA	
	Worst point Freq.	6.00	MHz
	Worst point Value	78.73	dB
	Margin	3.73	dB
<b>12-78</b>	12-78 Low	TIA	
	Worst point Freq.	15.00	MHz
	Worst point Value	78.10	dB
	Margin	7.62	dB
	12-78 High	TIA	
	Worst point Freq.	8.00	MHz
	Worst point Value	79.09	dB
	Margin	4.09	dB

**Forward NEXT**

The Jack Passes TIA-568.2-D Specified Limit

OVERALL MARGIN : 1.50 dB at 12-54 High



Pair 12	TIA
Worst point Freq.	50.00 MHz
Worst point Value	37.42 dB
Worst point Limit	30.00 dB
<b>Margin</b>	<b>7.42 dB</b>

Pair 36	TIA
Worst point Freq.	50.00 MHz
Worst point Value	38.91 dB
Worst point Limit	30.00 dB
<b>Margin</b>	<b>8.91 dB</b>

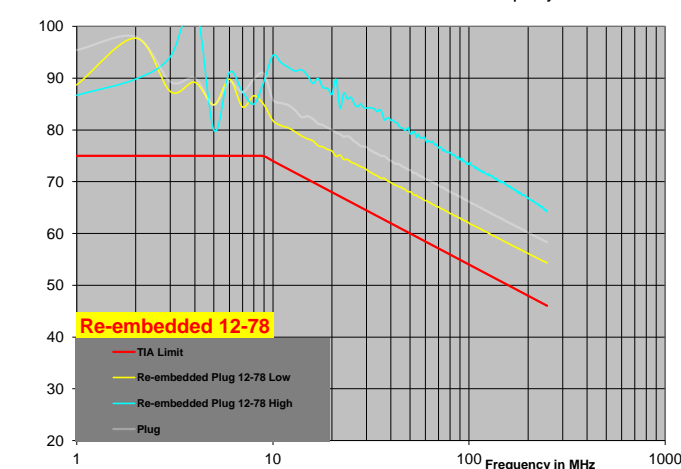
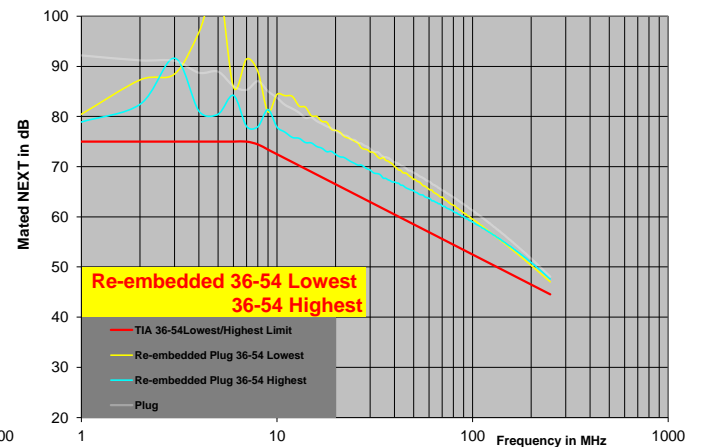
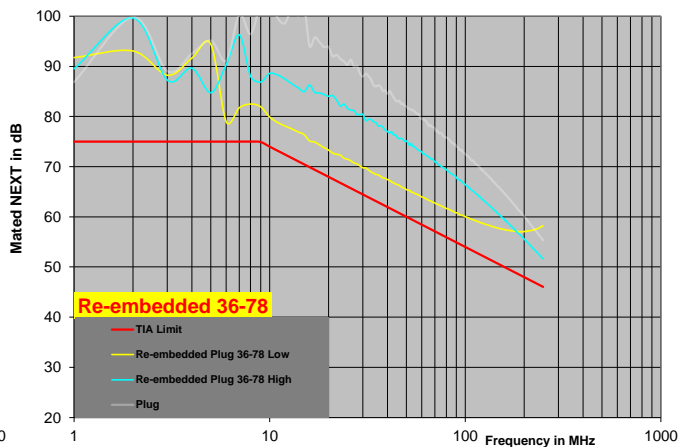
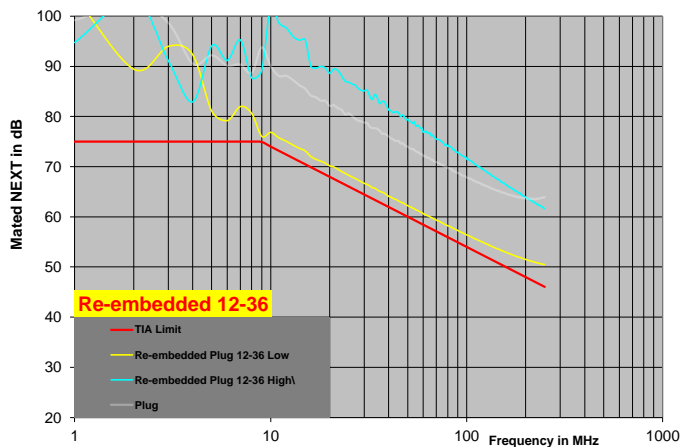
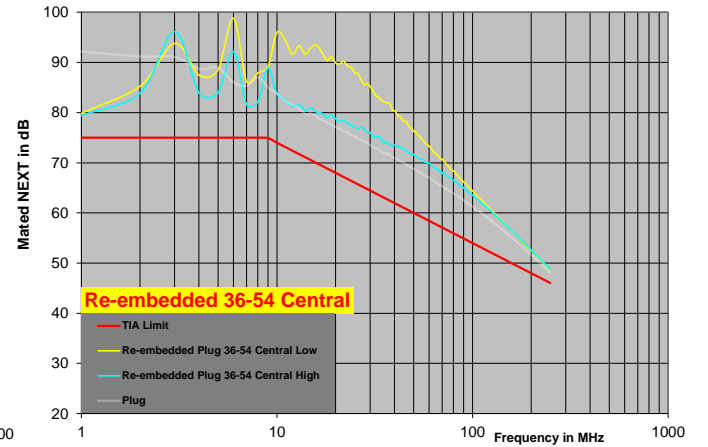
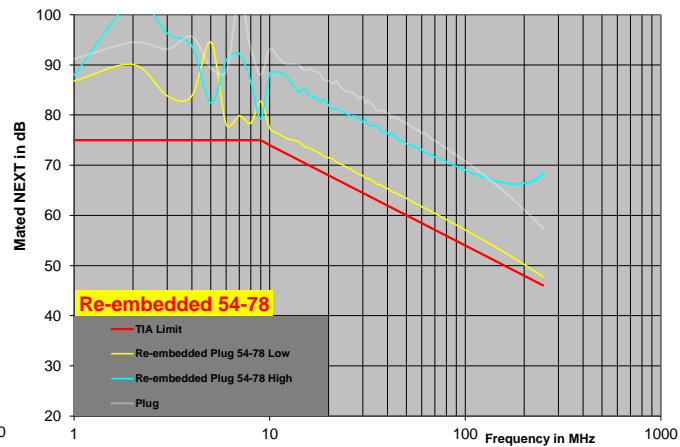
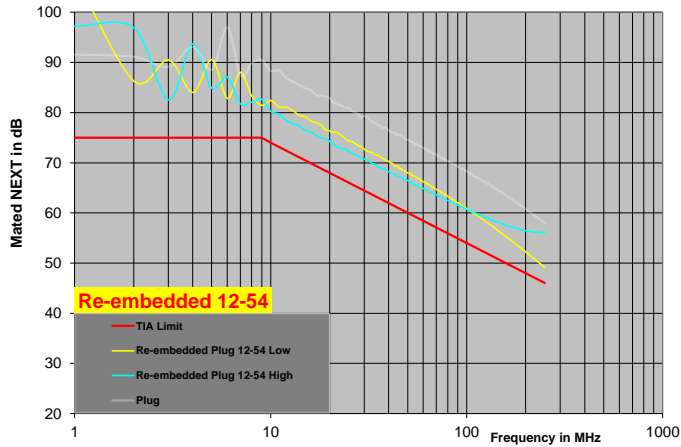
Pair 54	TIA
Worst point Freq.	50.00 MHz
Worst point Value	36.35 dB
Worst point Limit	30.00 dB
<b>Margin</b>	<b>6.35 dB</b>

Pair 78	TIA
Worst point Freq.	250.00 MHz
Worst point Value	26.41 dB
Worst point Limit	16.04 dB
<b>Margin</b>	<b>10.37 dB</b>

**Forward Return Loss**

The Jack Passes TIA-568.2-D Specified Limit

OVERALL MARGIN : 6.35 dB at Pair 54



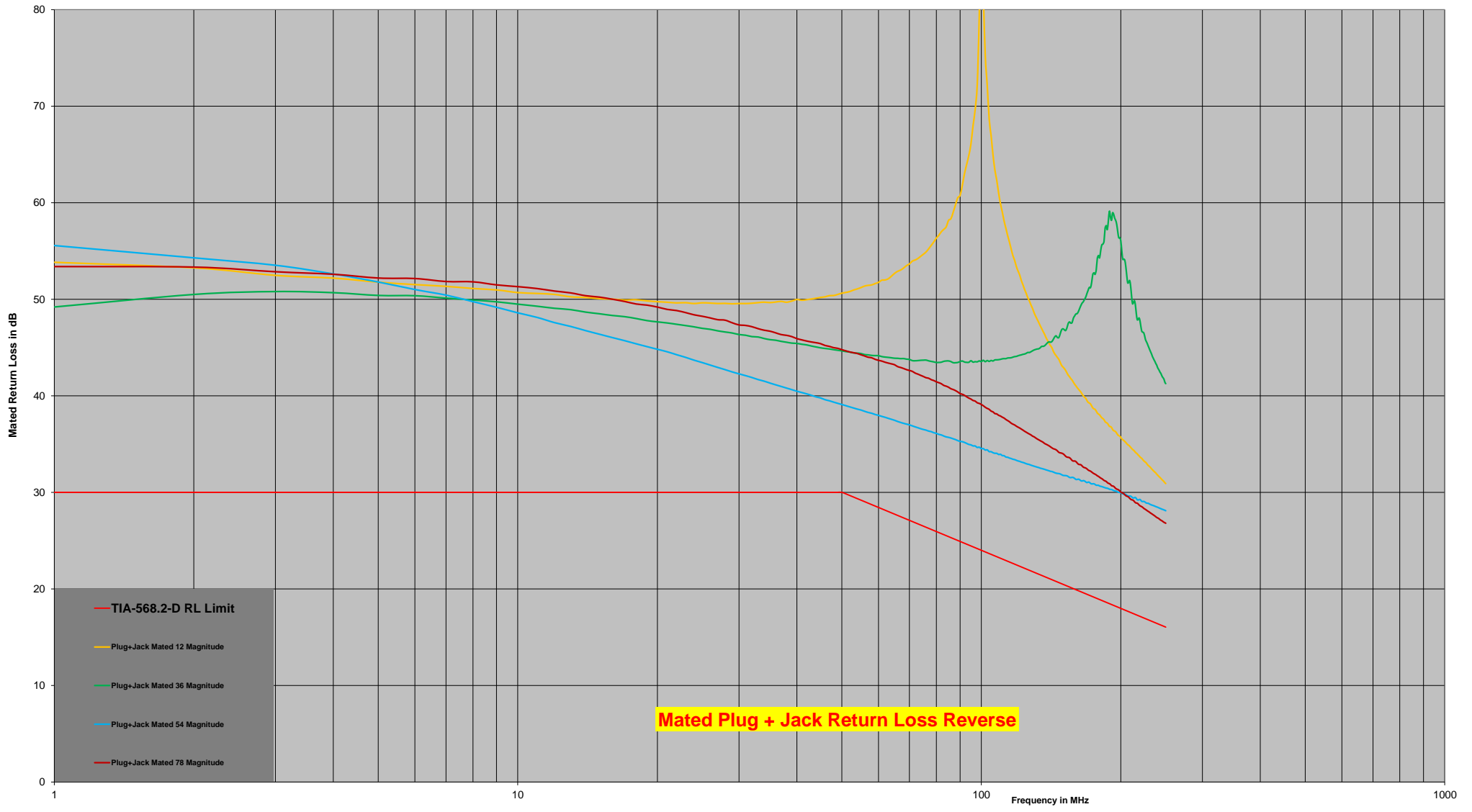
<b>12-36</b>	12-36 Low	TIA		<b>36-78</b>	36-78 Low	TIA		<b>36-54</b>	36-54 Lowest	TIA		36-54 Highest	TIA		
	Worst point Freq.	9.00	MHz		Worst point Freq.	6.00	MHz		Worst point Freq.	250.00	MHz	Worst point Freq.	7.00	MHz	
	Worst point Value	76.06	dB		Worst point Value	78.96	dB		Worst point Value	47.03	dB	Worst point Value	76.04	dB	
	Worst point Limit	74.92	dB		Worst point Limit	75.00	dB		Worst point Limit	44.54	dB	Worst point Limit	75.00	dB	
	Margin	1.14	dB		Margin	3.96	dB		Margin	2.49	dB		Margin	3.04	dB
	12-36 High	TIA			36-78 High	TIA			36-54 Central Low	TIA			36-54 Central High	TIA	
	Worst point Freq.	4.00	MHz		Worst point Freq.	250.00	MHz		Worst point Freq.	250.00	MHz		Worst point Freq.	250.00	MHz
	Worst point Value	82.93	dB		Worst point Value	51.61	dB		Worst point Value	46.53	dB		Worst point Value	46.74	dB
	Worst point Limit	75.00	dB		Worst point Limit	46.04	dB		Worst point Limit	46.04	dB		Worst point Limit	46.04	dB
	Margin	7.93	dB		Margin	5.56	dB		Margin	2.55	dB		Margin	2.69	dB

<b>12-54</b>	12-54 Low	TIA		<b>54-78</b>	54-78 Low	TIA		<b>12-78</b>	12-78 Low	TIA	
	Worst point Freq.	250.00	MHz		Worst point Freq.	250.00	MHz		Worst point Freq.	21.00	MHz
	Worst point Value	49.16	dB		Worst point Value	47.76	dB		Worst point Value	74.92	dB
	Worst point Limit	46.04	dB		Worst point Limit	46.04	dB		Worst point Limit	67.56	dB
	Margin	3.12	dB		Margin	1.72	dB		Margin	7.36	dB
	12-54 High	TIA			54-78 High	TIA			12-78 High	TIA	
	Worst point Freq.	22.00	MHz		Worst point Freq.	9.00	MHz		Worst point Freq.	5.00	MHz
	Worst point Value	73.09	dB		Worst point Value	79.21	dB		Worst point Value	79.99	dB
	Worst point Limit	67.15	dB		Worst point Limit	74.92	dB		Worst point Limit	75.00	dB
	Margin	5.94	dB		Margin	4.30	dB		Margin	4.99	dB

**Reverse NEXT**

The Jack Passes TIA-568.2-D Specified Limit

Overall Margin: 1.14 dB at 12-36 Low



- TIA-568.2-D RL Limit
- Plug+Jack Mated 12 Magnitude
- Plug+Jack Mated 36 Magnitude
- Plug+Jack Mated 54 Magnitude
- Plug+Jack Mated 78 Magnitude

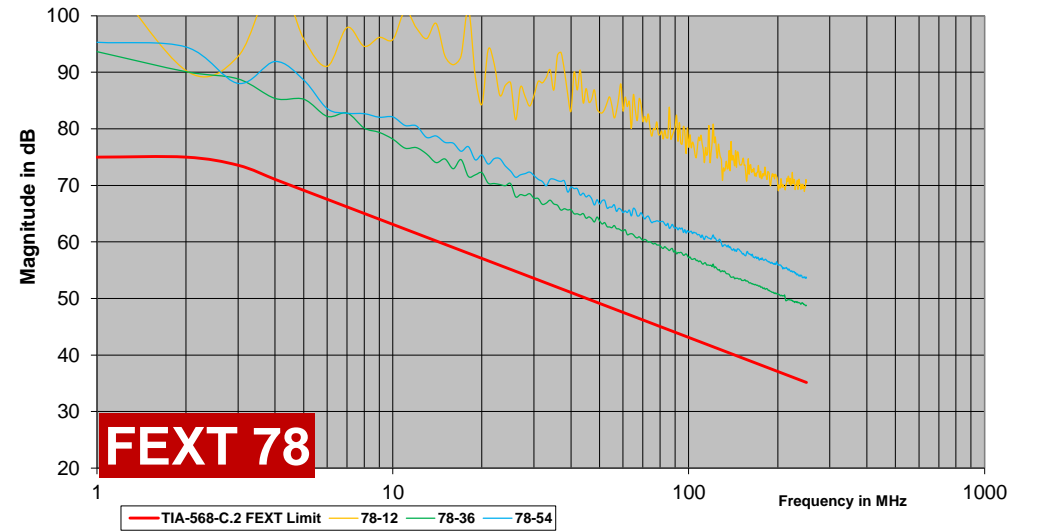
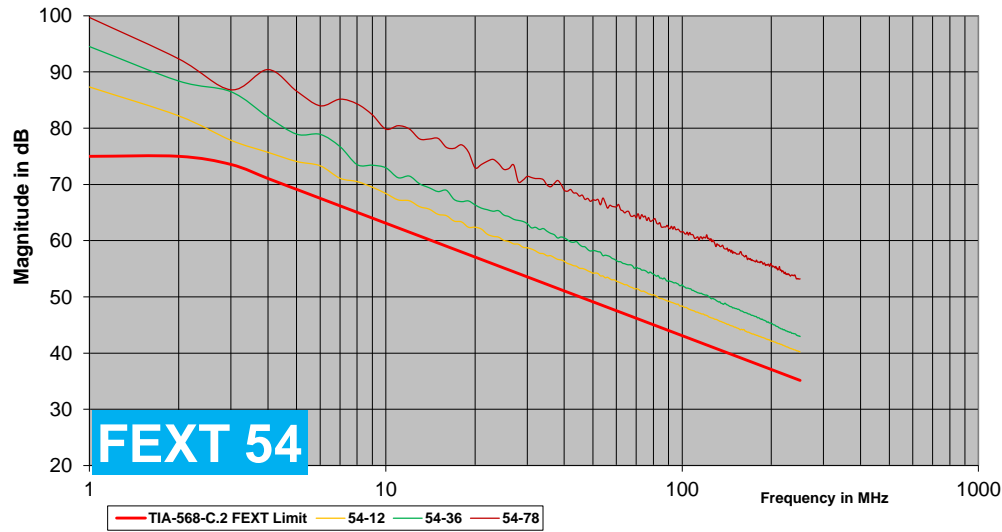
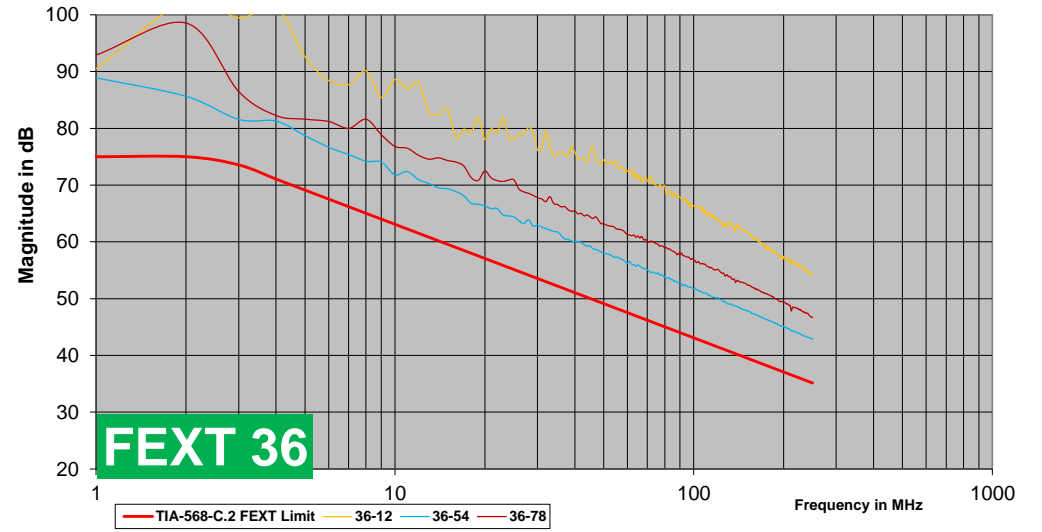
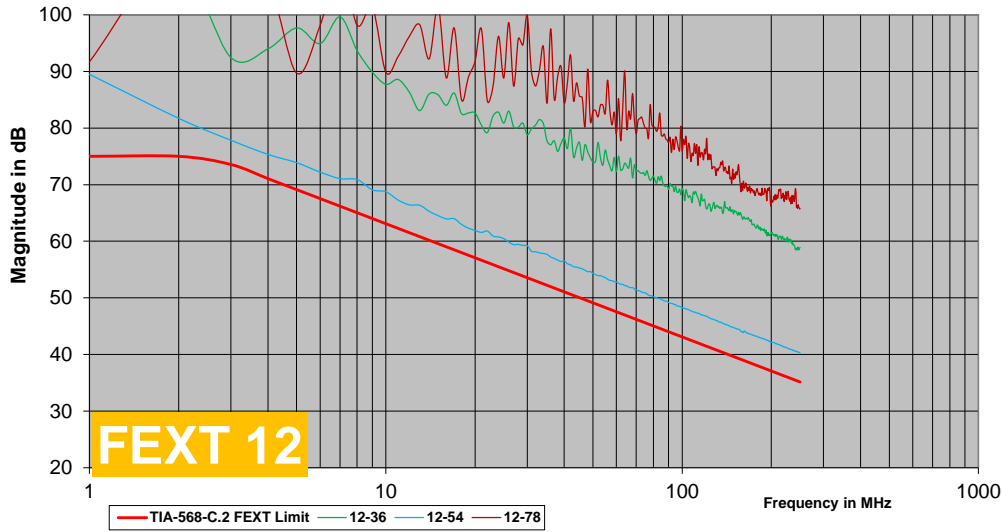
Mated Plug + Jack Return Loss Reverse

<table border="0"> <tr><td style="background-color: yellow;">Pair 12</td><td>TIA</td></tr> <tr><td>Worst point Freq.</td><td>250.00 MHz</td></tr> <tr><td>Worst point Value</td><td>30.91 dB</td></tr> <tr><td>Worst point Limit</td><td>16.04 dB</td></tr> <tr><td>Margin</td><td>14.87 dB</td></tr> </table>	Pair 12	TIA	Worst point Freq.	250.00 MHz	Worst point Value	30.91 dB	Worst point Limit	16.04 dB	Margin	14.87 dB	<table border="0"> <tr><td style="background-color: green;">Pair 36</td><td>TIA</td></tr> <tr><td>Worst point Freq.</td><td>50.00 MHz</td></tr> <tr><td>Worst point Value</td><td>44.66 dB</td></tr> <tr><td>Worst point Limit</td><td>30.00 dB</td></tr> <tr><td>Margin</td><td>14.66 dB</td></tr> </table>	Pair 36	TIA	Worst point Freq.	50.00 MHz	Worst point Value	44.66 dB	Worst point Limit	30.00 dB	Margin	14.66 dB
Pair 12	TIA																				
Worst point Freq.	250.00 MHz																				
Worst point Value	30.91 dB																				
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Pair 36	TIA																				
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Worst point Value	44.66 dB																				
Worst point Limit	30.00 dB																				
Margin	14.66 dB																				
<table border="0"> <tr><td style="background-color: blue;">Pair 54</td><td>TIA</td></tr> <tr><td>Worst point Freq.</td><td>50.00 MHz</td></tr> <tr><td>Worst point Value</td><td>39.10 dB</td></tr> <tr><td>Worst point Limit</td><td>30.00 dB</td></tr> <tr><td>Margin</td><td>9.10 dB</td></tr> </table>	Pair 54	TIA	Worst point Freq.	50.00 MHz	Worst point Value	39.10 dB	Worst point Limit	30.00 dB	Margin	9.10 dB	<table border="0"> <tr><td style="background-color: darkred;">Pair 78</td><td>TIA</td></tr> <tr><td>Worst point Freq.</td><td>250.00 MHz</td></tr> <tr><td>Worst point Value</td><td>26.80 dB</td></tr> <tr><td>Worst point Limit</td><td>16.04 dB</td></tr> <tr><td>Margin</td><td>10.76 dB</td></tr> </table>	Pair 78	TIA	Worst point Freq.	250.00 MHz	Worst point Value	26.80 dB	Worst point Limit	16.04 dB	Margin	10.76 dB
Pair 54	TIA																				
Worst point Freq.	50.00 MHz																				
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Margin	9.10 dB																				
Pair 78	TIA																				
Worst point Freq.	250.00 MHz																				
Worst point Value	26.80 dB																				
Worst point Limit	16.04 dB																				
Margin	10.76 dB																				

Reverse Return Loss

The Jack Passes TIA-568.2-D Specified Limit

OVERALL MARGIN : 9.10 dB at Pair 54

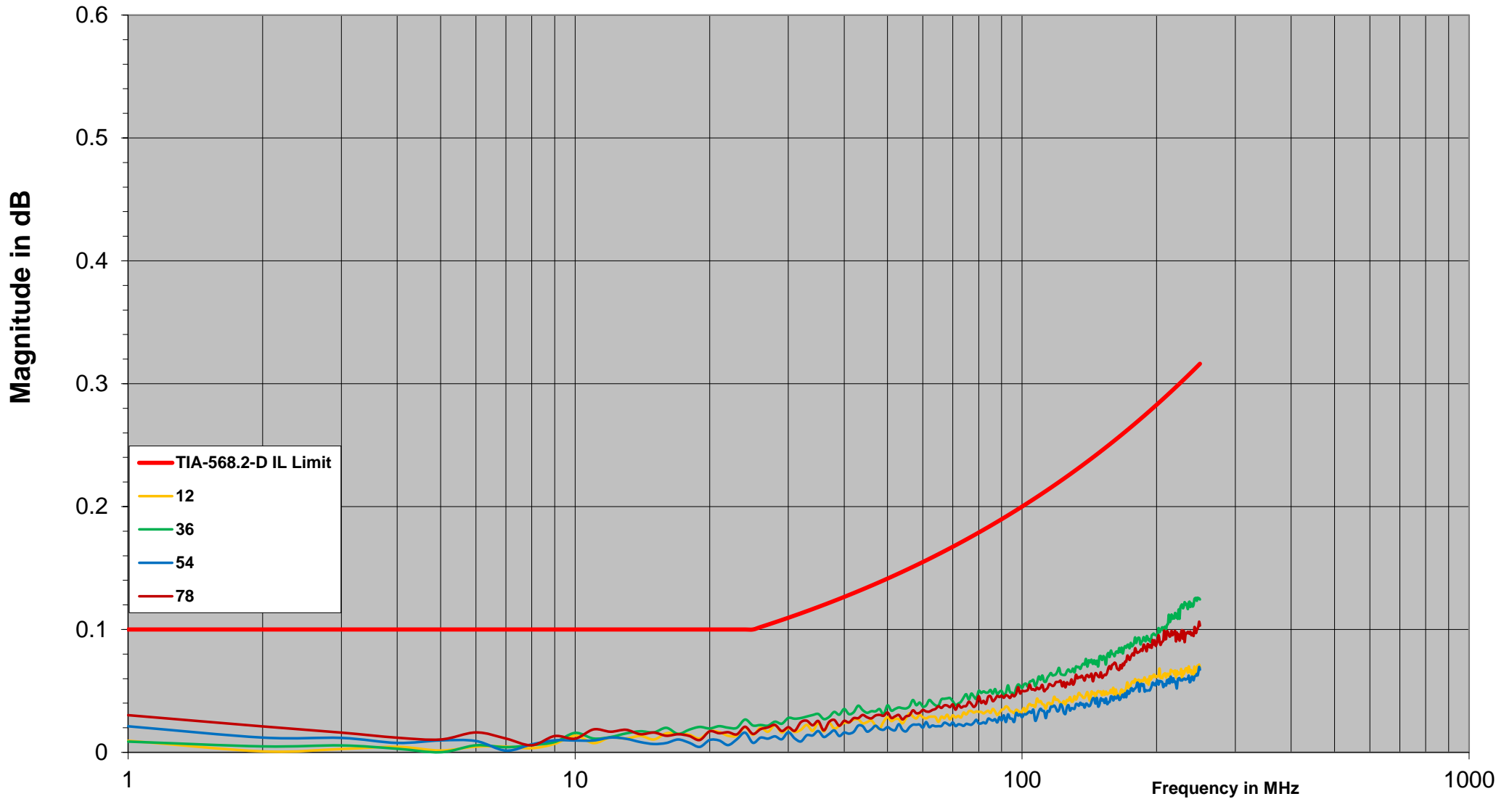


	Margin	Worst Point Freq.	Worst Point Value	Worst Point Limit
12-36	18.89 (dB)	3 (MHz)	92.44 (dB)	73.56 (dB)
12-54	4.28 (dB)	3 (MHz)	77.84 (dB)	73.56 (dB)
12-78	16.71 (dB)	1 (MHz)	91.71 (dB)	75.00 (dB)
36-12	15.51 (dB)	1 (MHz)	90.51 (dB)	75.00 (dB)
36-54	7.69 (dB)	239 (MHz)	43.23 (dB)	35.53 (dB)
36-78	11.20 (dB)	4 (MHz)	82.26 (dB)	71.06 (dB)
54-12	4.30 (dB)	3 (MHz)	77.86 (dB)	73.56 (dB)
54-36	7.78 (dB)	245 (MHz)	43.10 (dB)	35.32 (dB)
54-78	13.28 (dB)	3 (MHz)	86.84 (dB)	73.56 (dB)
78-12	15.31 (dB)	2 (MHz)	90.31 (dB)	75.00 (dB)
78-36	13.06 (dB)	213 (MHz)	49.59 (dB)	36.53 (dB)
78-54	14.48 (dB)	3 (MHz)	88.04 (dB)	73.56 (dB)



The Jack Passes TIA-568.2-D Specified Limit

OVERALL MARGIN : 4.28 dB at 12-54



### Insertion Loss

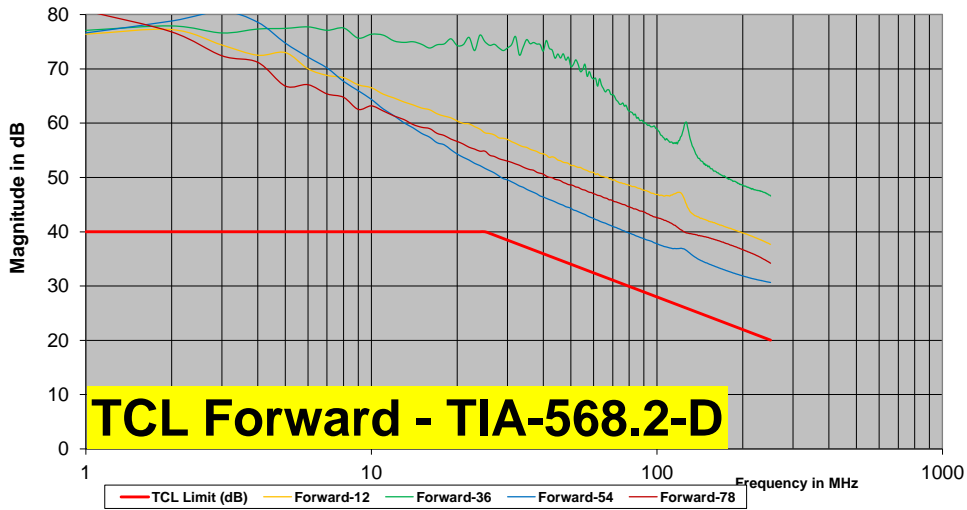
	Margin	Worst Point Freq.	Worst Point Value	Worst Point Limit
12	0.08 (dB)	24 (MHz)	0.02 (dB)	0.10 (dB)
36	0.07 (dB)	24 (MHz)	0.03 (dB)	0.10 (dB)
54	0.08 (dB)	1 (MHz)	0.02 (dB)	0.10 (dB)
78	0.07 (dB)	1 (MHz)	0.03 (dB)	0.10 (dB)

**The Jack Passes TIA-568.2-D Specified Limit**

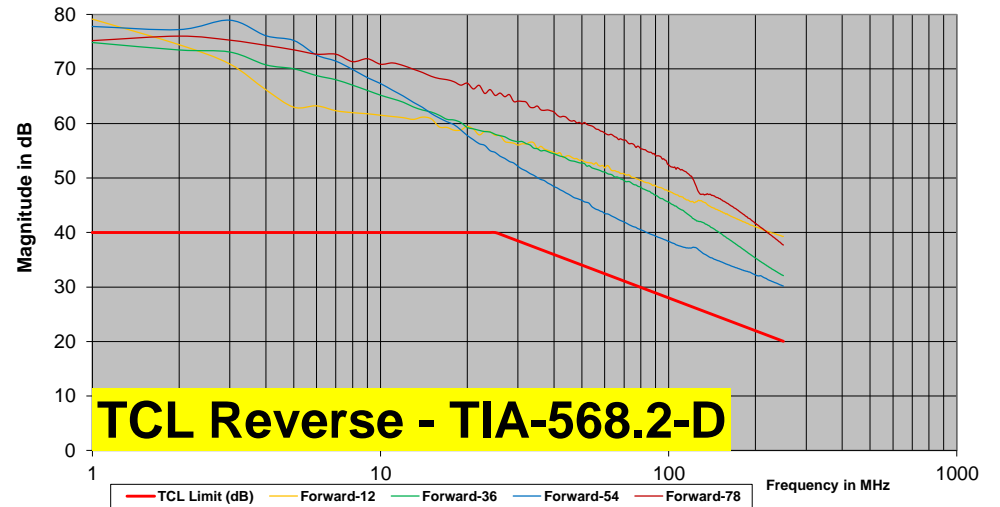
**Overall Margin : 0.07 (dB)**

**At Pair : 78**





	Margin	Worst Point Freq.	Worst Point Value	Worst Point Limit
Pair 12	17.52 (dB)	142 (MHz)	42.47 (dB)	24.95 (dB)
Pair 36	26.47 (dB)	215 (MHz)	47.82 (dB)	21.35 (dB)
Pair 54	9.68 (dB)	165 (MHz)	33.33 (dB)	23.65 (dB)
Pair 78	13.85 (dB)	127 (MHz)	39.78 (dB)	25.92 (dB)



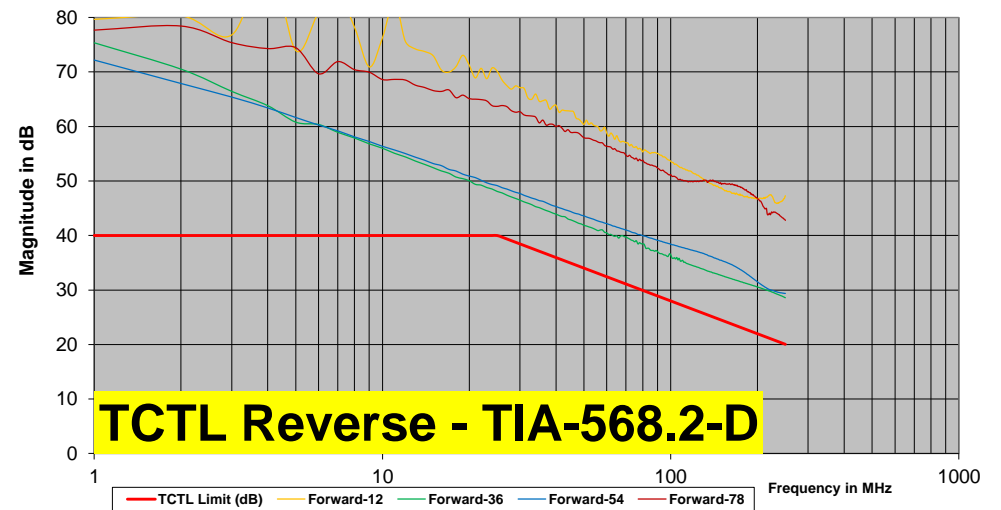
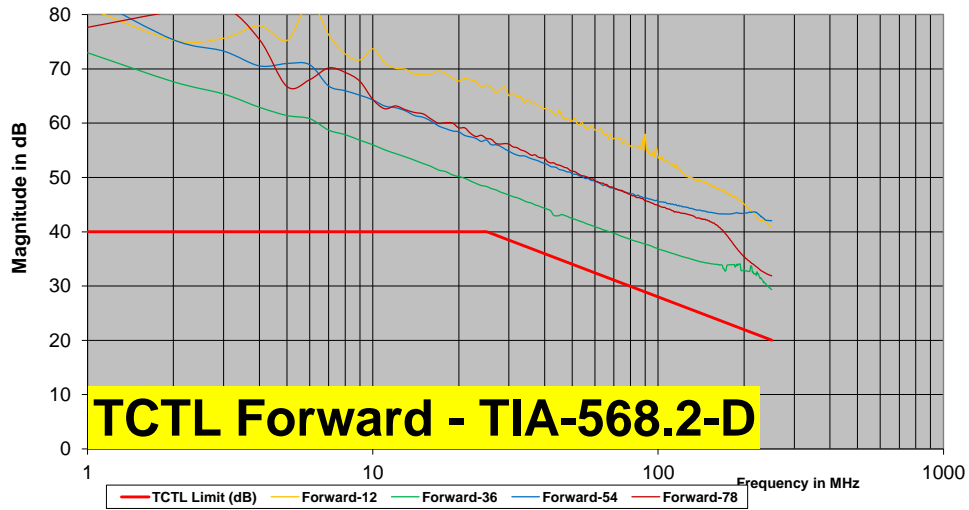
	Margin	Worst Point Freq.	Worst Point Value	Worst Point Limit
Pair 12	17.33 (dB)	27 (MHz)	56.70 (dB)	39.37 (dB)
Pair 36	12.05 (dB)	250 (MHz)	32.09 (dB)	20.04 (dB)
Pair 54	10.13 (dB)	244 (MHz)	30.38 (dB)	20.25 (dB)
Pair 78	17.66 (dB)	250 (MHz)	37.70 (dB)	20.04 (dB)

**TCL**

Forward TCL MARGIN : 9.68 dB at Pair 54  
TIA-568.2-D

Reverse TCL MARGIN : 10.13 dB at Pair 54

The Jack Passes ANSI/TIA-568.2-D Specified Limit



	Margin	Worst Point Freq.	Worst Point Value	Worst Point Limit
Pair 12	20.75 (dB)	250 (MHz)	40.79 (dB)	20.04 (dB)
Pair 36	7.71 (dB)	43 (MHz)	43.04 (dB)	35.33 (dB)
Pair 54	16.23 (dB)	32 (MHz)	54.12 (dB)	37.90 (dB)
Pair 78	11.82 (dB)	244 (MHz)	32.07 (dB)	20.25 (dB)

	Margin	Worst Point Freq.	Worst Point Value	Worst Point Limit
Pair 12	23.95 (dB)	154 (MHz)	48.20 (dB)	24.25 (dB)
Pair 36	7.85 (dB)	50 (MHz)	41.87 (dB)	34.02 (dB)
Pair 54	8.94 (dB)	220 (MHz)	30.09 (dB)	21.15 (dB)
Pair 78	22.52 (dB)	217 (MHz)	43.79 (dB)	21.27 (dB)

**TCTL**

Forward TCTL MARGIN : 7.71 dB at Pair 36  
 TIA-568.2-D  
 Reverse TCTL MARGIN : 7.85 dB at Pair 36

The Jack Passes ANSI/TIA-568.2-D Specified Limit