



**SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX
APPENDIX A**

PL30309/2039

Customer:		Tested By: <u>E. Kretz</u>	
SO No:		Temperature: <u>+25°C</u>	
Model No: <u>6SFB-CC-100M18G-MAH-RX-TX</u>		Date: <u>9/16/20</u>	
Serial No: <u>PL30309/2039</u>		Drawing No: <u>27624332</u>	Rev: <u>A1</u>

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC	
1	J1 Input Frequency (RF RX Input)	100MHz-18.0GHz	100MHz-18.0GHz See Plot	PMI QA 2	
2	J1 Input Power Level	-80dBm to -10dBm Typical	-80dBm to -10dBm		
3	J5 Input Frequency (RF TX Input)	100MHz-18.0GHz	100MHz-18.0GHz See Plot		
4	J5 Input Power Level	-20dBm to -15dBm Typical	-20dBm to -15dBm		
5	J7 Input Frequency (RF BIT RX Input)	100MHz-18.0GHz	100MHz-18.0GHz See Plot		
6	J7 Input Power Level	-20dBm to -15dBm Typical	-20dBm to -15dBm		
7	J2 Output Frequency (RF RX Output)	100MHz-18.0GHz	100MHz-18.0GHz See Plot		
8	J2 Output Power Level	-62dBm to +8dBm Typical	-60dBm to +15dBm		
9	J6 Output Frequency (RF TX Output)	100MHz-18.0GHz	100MHz-18.0GHz See Plot		
10	J6 Output Power Level	0dBm to +10dBm Typical	+7dBm to +14dBm		
11	J1 RX Path Gain	18dB Typical	20dB to 29dB		
12	J7 RX BIT Path Insertion Loss	10dB Typical	3dB to 8dB		
13	(J1 to J2) to (J7 to J2) RX Isolation	100dB Typical	117 dB See Plot		
14	J5 TX Path Gain	32dB Typical	33dB to 40dB		
15	VSWR Over 90% Passband	2 : 1 Maximum	2.0:1 See Plots		PMI QA 2



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16	Switching Speed	100ns Typical	75.0ns See Plot	PMI QA 2
17	Thru Channel Passband	100MHz-18.0GHz	100MHz- 18.0GHz See Plots	
18	Channel 1 Center Frequency	3400MHz	3400MHz	
19	Channel 1 3dB Bandwidth	2000MHz	2000MHz	
20	Channel 1 RX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-2.0GHz,	-48dBc See Plot	
		-40dBc Typical, -30dBc Minimum 4.8GHz-18.0GHz	-46dBc See Plot	
21	Channel 1 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-2.0GHz,	-51dBc See Plot	
		-40dBc Typical, -30dBc Minimum 4.8GHz-18.0GHz	-46dBc See Plot	
22	Channel 2 Center Frequency	5400MHz	5400MHz	
23	Channel 2 3dB Bandwidth	2000MHz	2000MHz	
24	Channel 2 RX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-4.0GHz,	-50dBc See Plot	
		-40dBc Typical, -30dBc Minimum 6.8GHz-18.0GHz	-32dBc See Plot	
25	Channel 2 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-4.0GHz,	-49dBc See Plot	
		-40dBc Typical, -30dBc Minimum 6.8GHz-18.0GHz	-41dBc See Plot	
26	Channel 3 Center Frequency	7400MHz	7400MHz	
27	Channel 3 3dB Bandwidth	2000MHz	2000MHz	
28	Channel 3 RX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-6.0GHz,	-52dBc See Plot	
		-40dBc Typical, -30dBc Minimum 8.8GHz-18.0GHz	-45dBc See Plot	



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29	Channel 3 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-6.0GHz, -40dBc Typical, -30dBc Minimum 8.8GHz-18.0GHz	-55dBc See Plot -41dBc See Plot	PMI QA 2
30	Channel 4 Center Frequency	9400MHz	9400MHz	
31	Channel 4 3dB Bandwidth	2000MHz	2000MHz	
32	Channel 4 RX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-8.0GHz, -40dBc Typical, -30dBc Minimum 10.8GHz-18.0GHz	-39dBc See Plot -44dBc See Plot	
33	Channel 4 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-8.0GHz, -40dBc Typical, -30dBc Minimum 10.8GHz-18.0GHz	-49dBc See Plot -41dBc See Plot	
34	Channel 5 Center Frequency	11400MHz	11400MHz	
35	Channel 5 3dB Bandwidth	2000MHz	2000MHz	
36	Channel 5 RX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-10.0GHz, -40dBc Typical, -30dBc Minimum 12.8GHz-18.0GHz	-56dBc See Plot -47dBc See Plot	
37	Channel 5 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-10.0GHz, -40dBc Typical, -30dBc Minimum 12.8GHz-18.0GHz	-60dBc See Plot -52dBc See Plot	
38	Control Logic	TTL '0': 0V to 0.8V TTL '1': 2V to 5V	Pass	
39	Power Supplies	+12V @ 600mA Max +5V @ 550mA Max -12V @ 300mA Max	+12V @ 410mA +5V @ 91mA -12V @ 150mA	PMI QA 2



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QA/QC Approval:

Date:

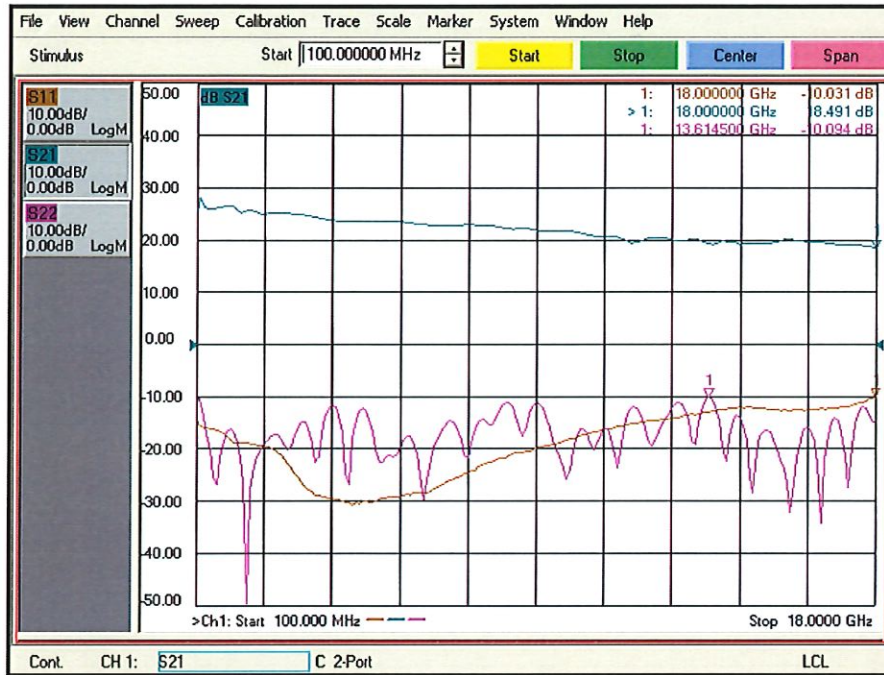
9.28.2020



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RX High Gain Thru Path (J1 RX IN)





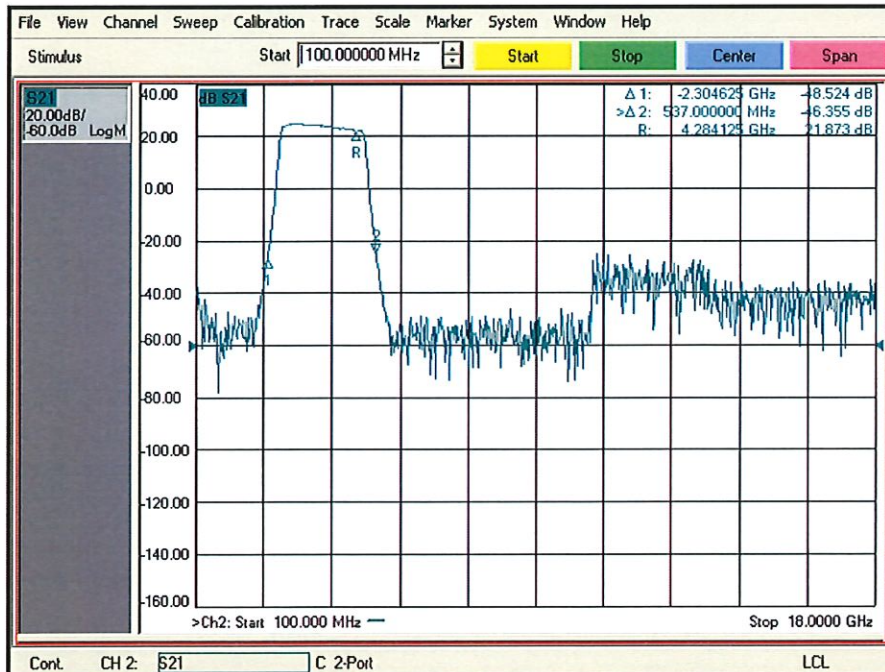
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RX Ch1 High Gain Path Narrow Band (J1 RX IN)



RX Ch1 High Gain Path Broadband (J1 RX IN)

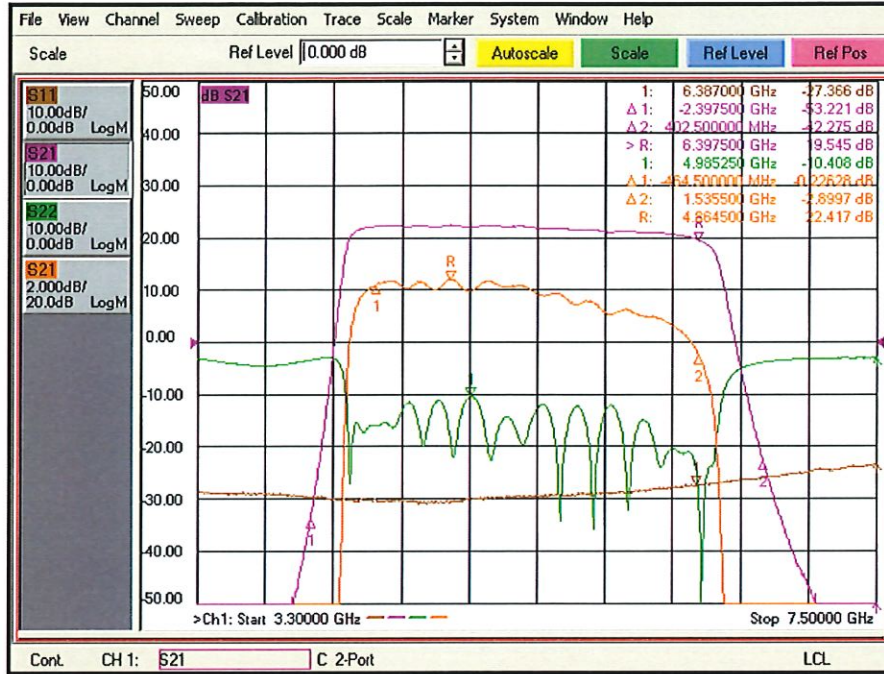




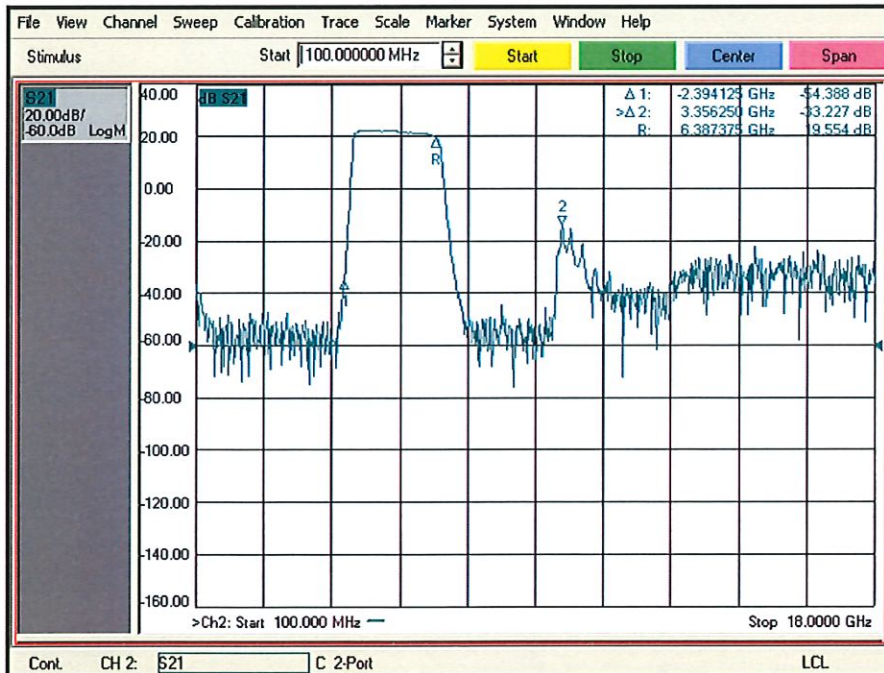
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RX Ch2 High Gain Path Narrow Band (J1 RX IN)



RX Ch2 High Gain Path Broadband (J1 RX IN)





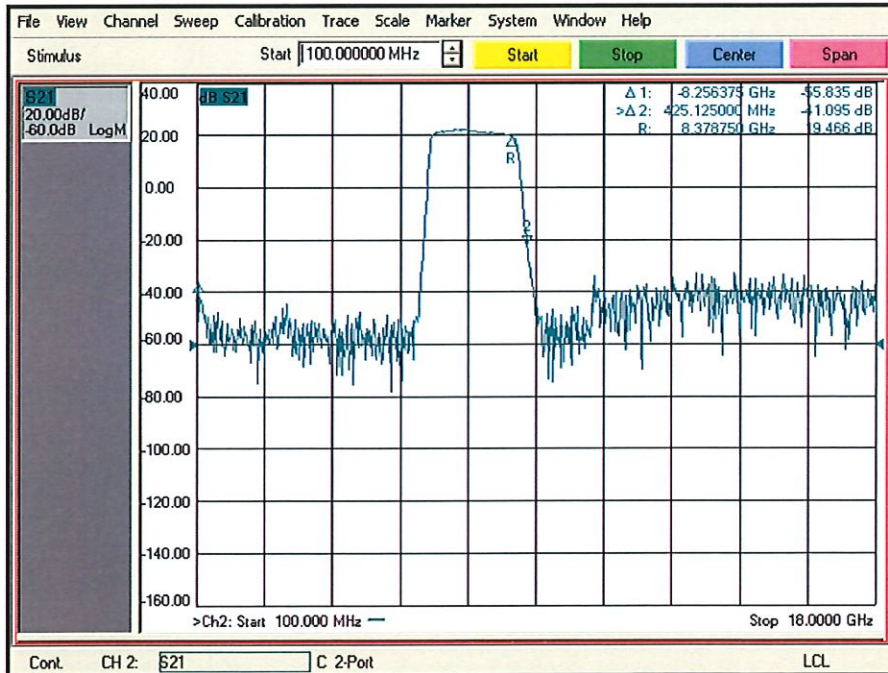
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RX Ch3 High Gain Path Narrow Band (J1 RX IN)



RX Ch3 High Gain Path Broadband (J1 RX IN)

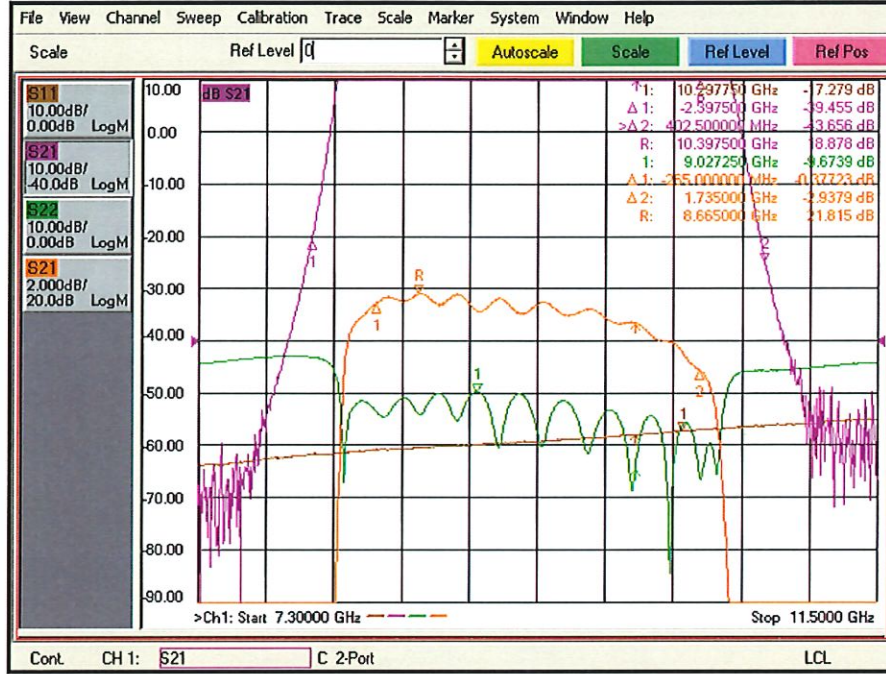




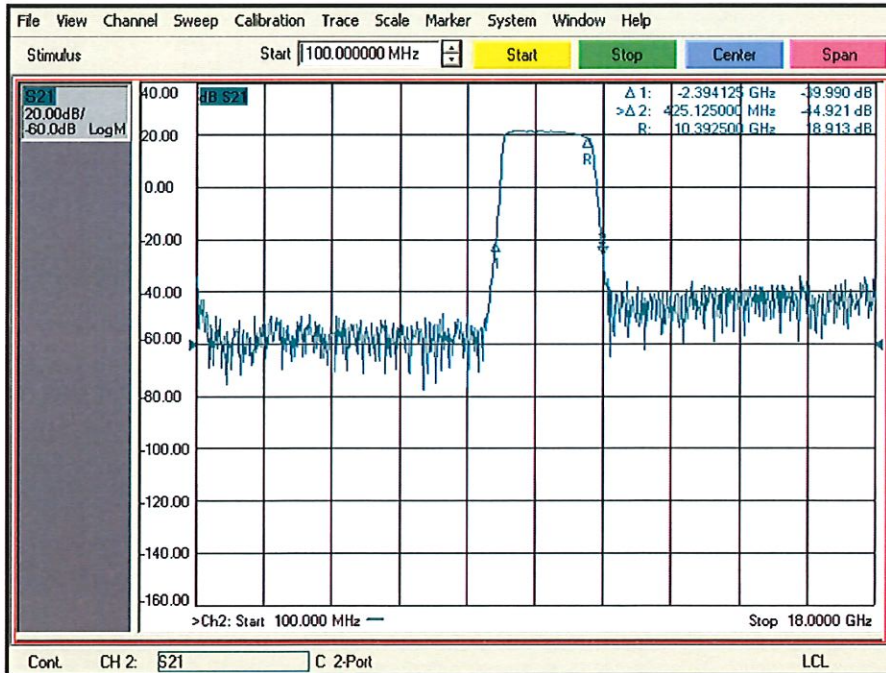
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RX Ch4 High Gain Path Narrow Band (J1 RX IN)



RX Ch4 High Gain Path Broadband (J1 RX IN)





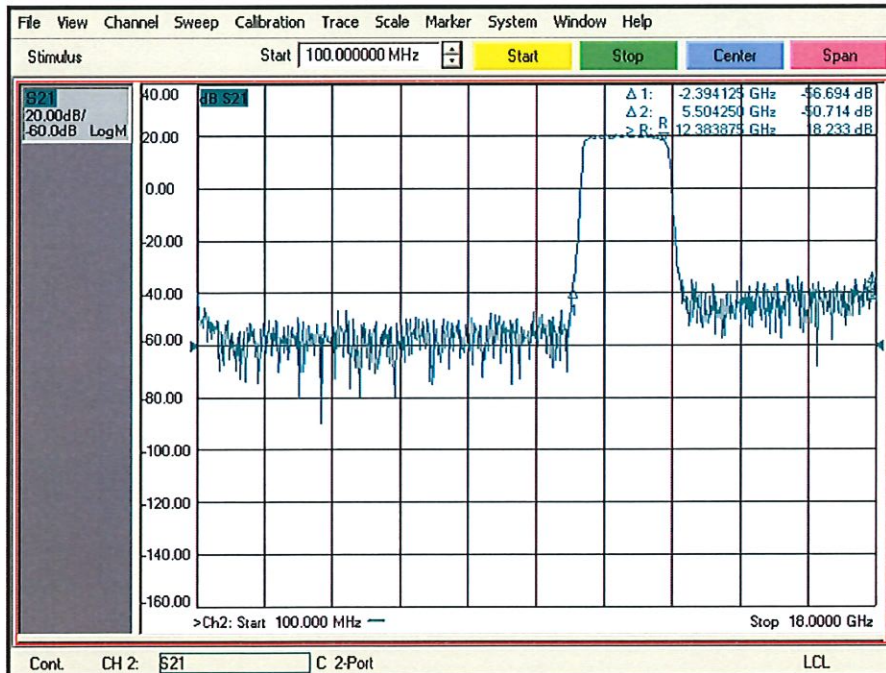
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RX Ch5 High Gain Path Narrow Band (J1 RX IN)



RX Ch5 High Gain Path Broadband (J1 RX IN)

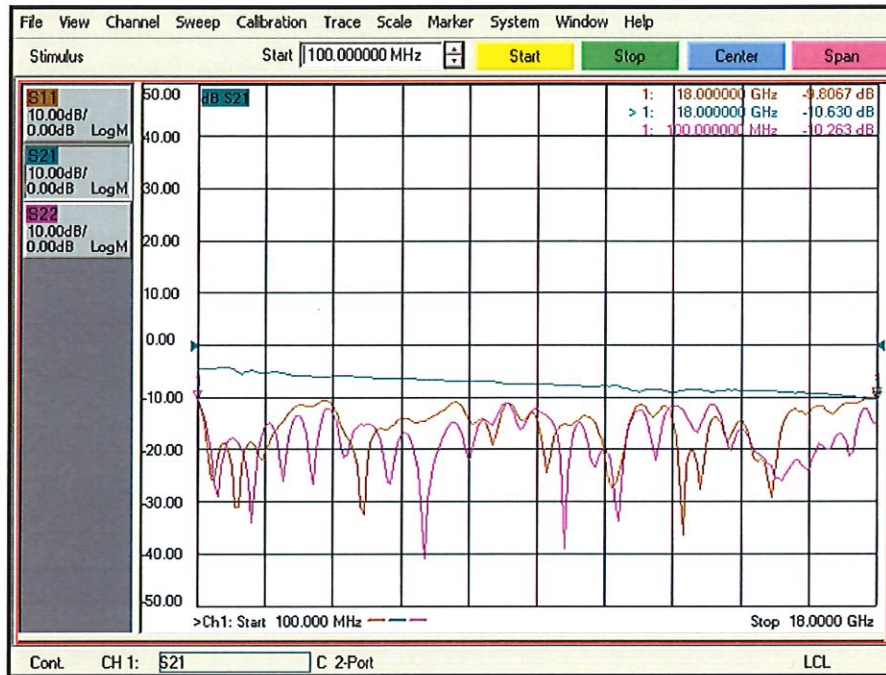




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RX Low Gain Thru Path (J7 RX BIT IN)

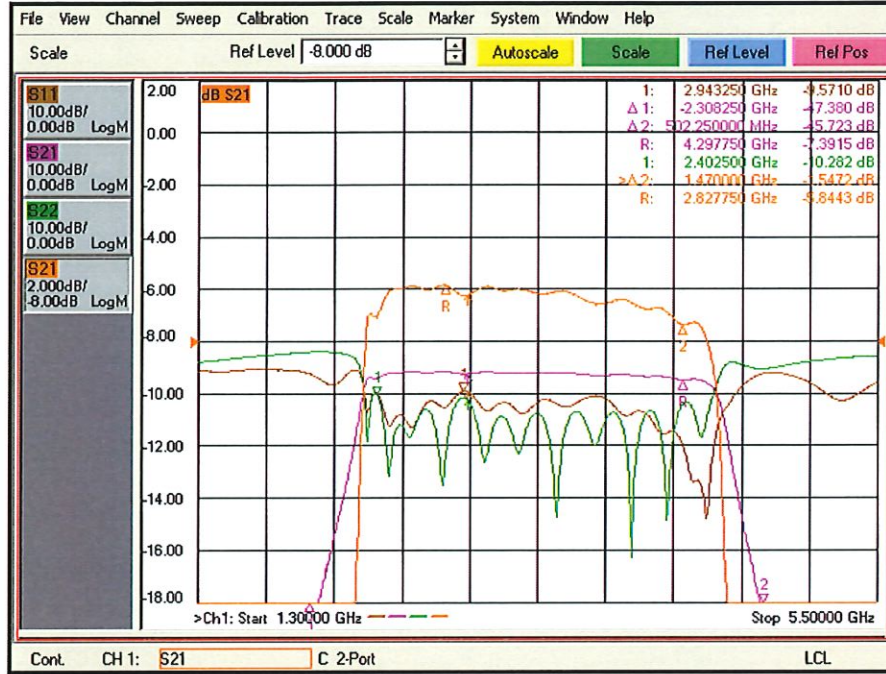




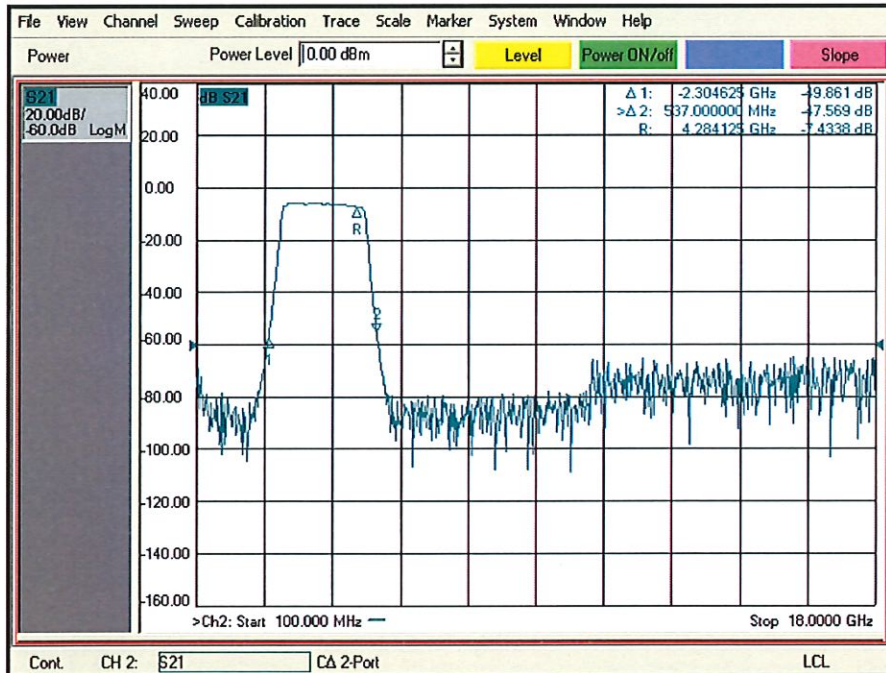
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RX Ch1 Low Gain Path Narrow Band (J7 RX BIT IN)



RX Ch1 Low Gain Path Broadband (J7 RX BIT IN)





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RX Ch2 Low Gain Path Narrow Band (J7 RX BIT IN)



RX Ch2 Low Gain Path Broadband (J7 RX BIT IN)

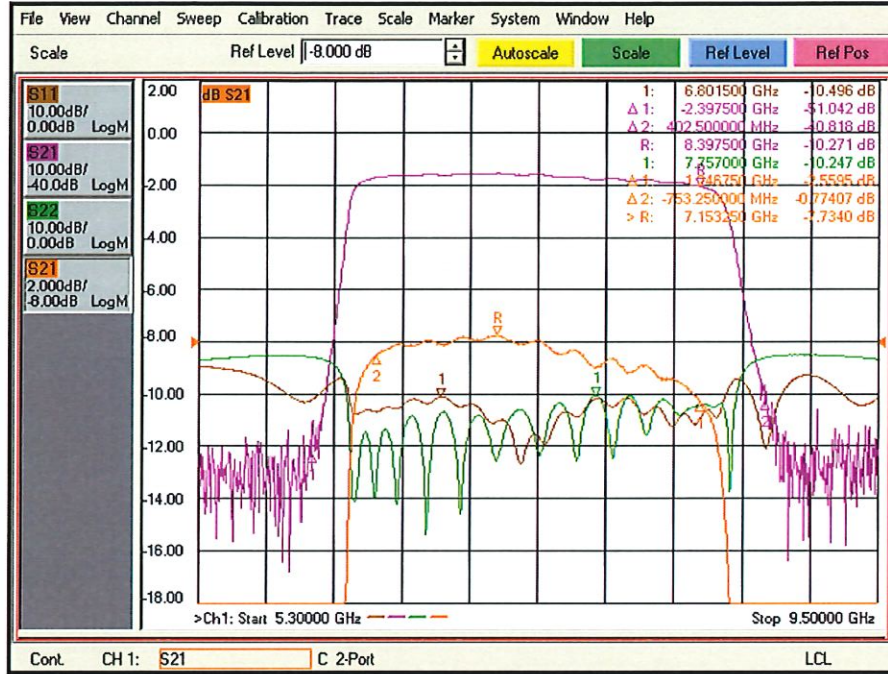




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RX Ch3 Low Gain Path Narrow Band (J7 RX BIT IN)



RX Ch3 Low Gain Path Broadband (J7 RX BIT IN)





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RX Ch4 Low Gain Path Narrow Band (J7 RX BIT IN)



RX Ch4 Low Gain Path Broadband (J7 RX BIT IN)

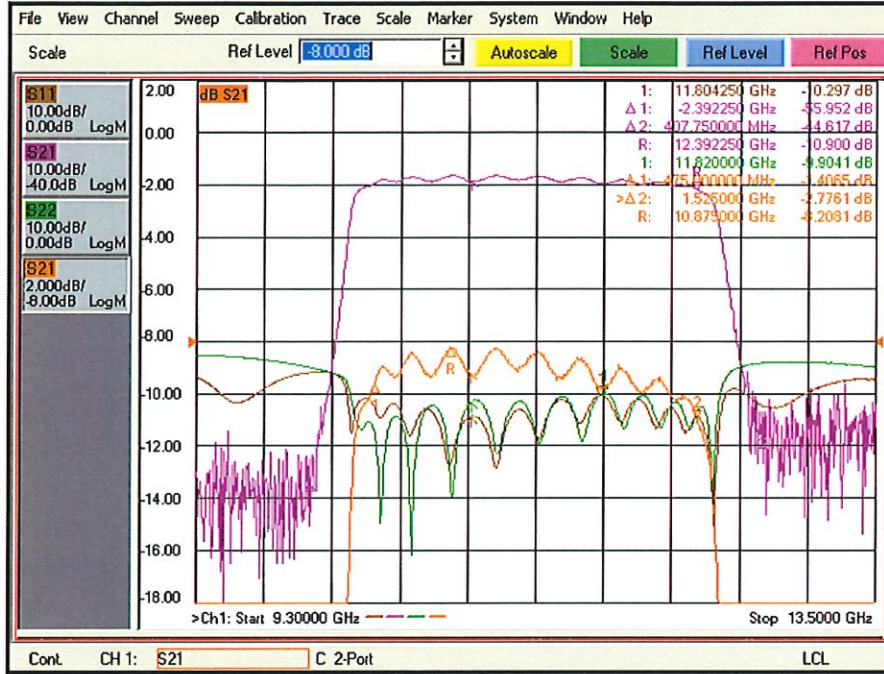




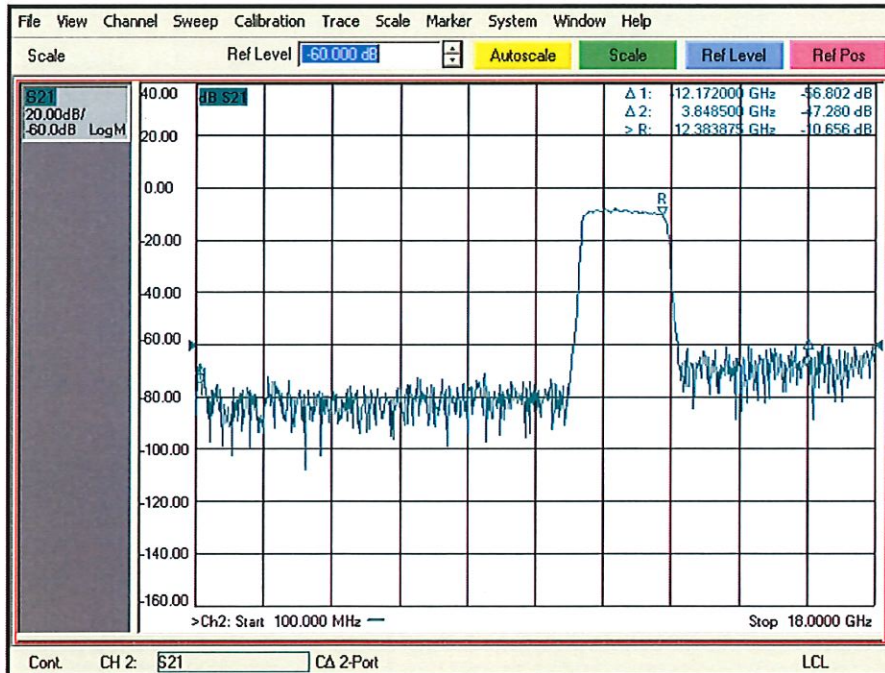
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RX Ch5 Low Gain Path Narrow Band (J7 RX BIT IN)



RX Ch5 Low Gain Path Broadband (J7 RX BIT IN)





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TX Thru Path





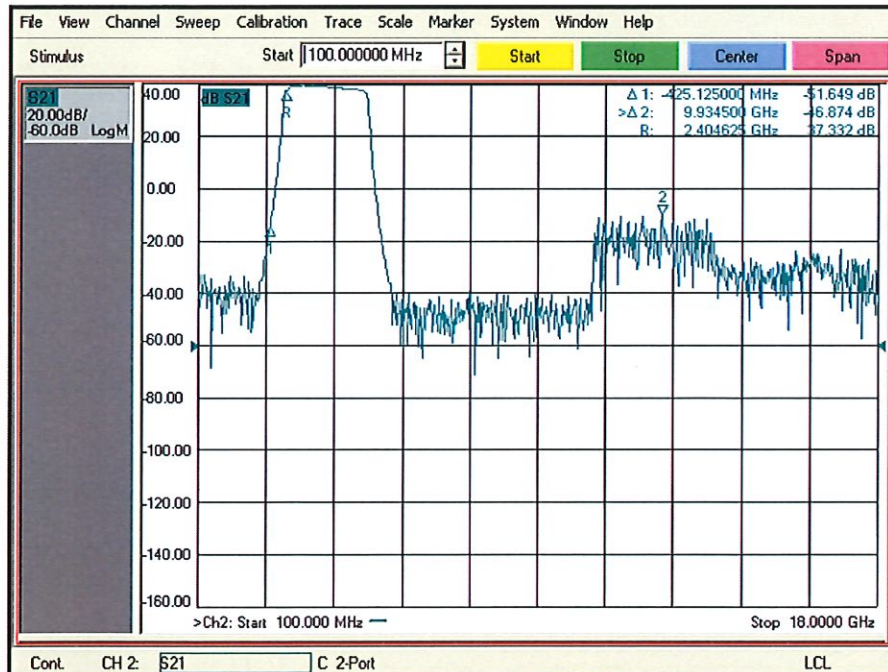
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TX Ch1 Path Narrow Band



TX Ch1 Path Broadband

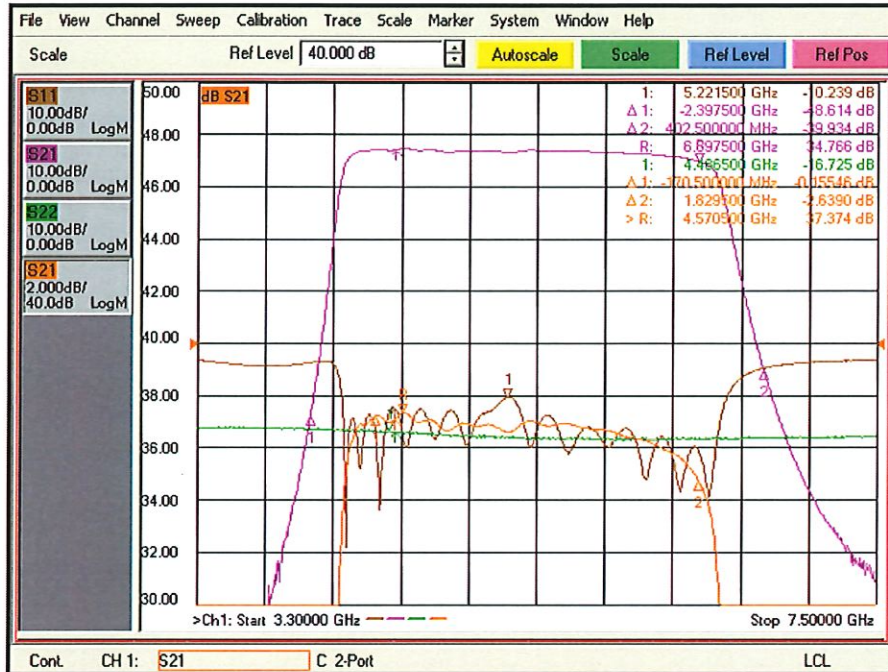




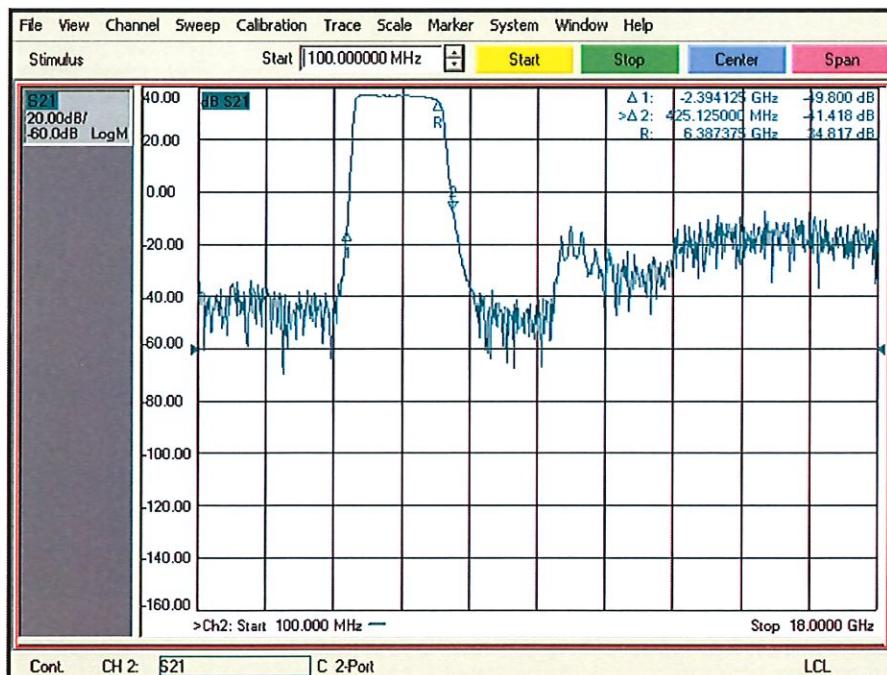
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TX Ch2 Path Narrow Band



TX Ch2 Path Broadband

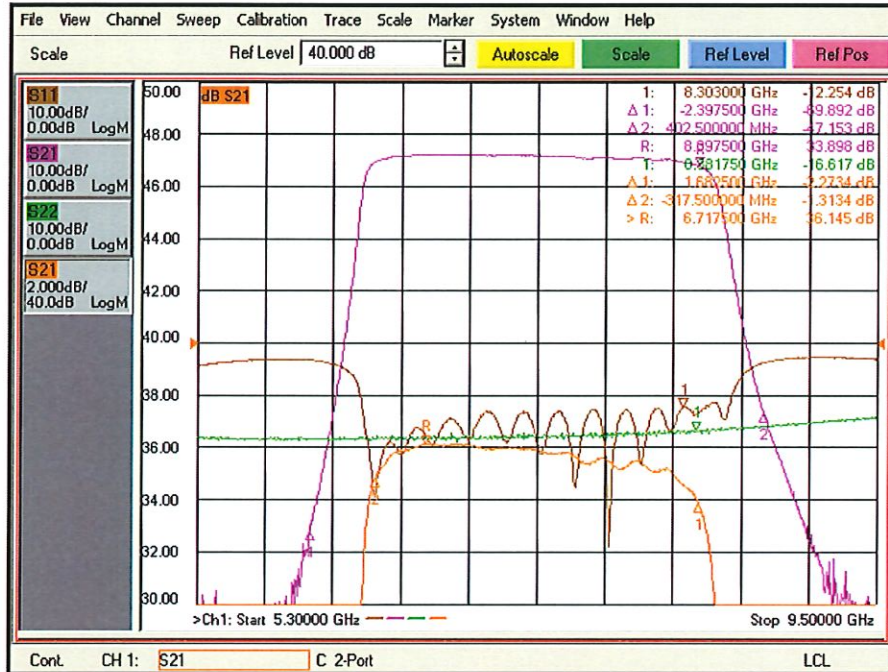




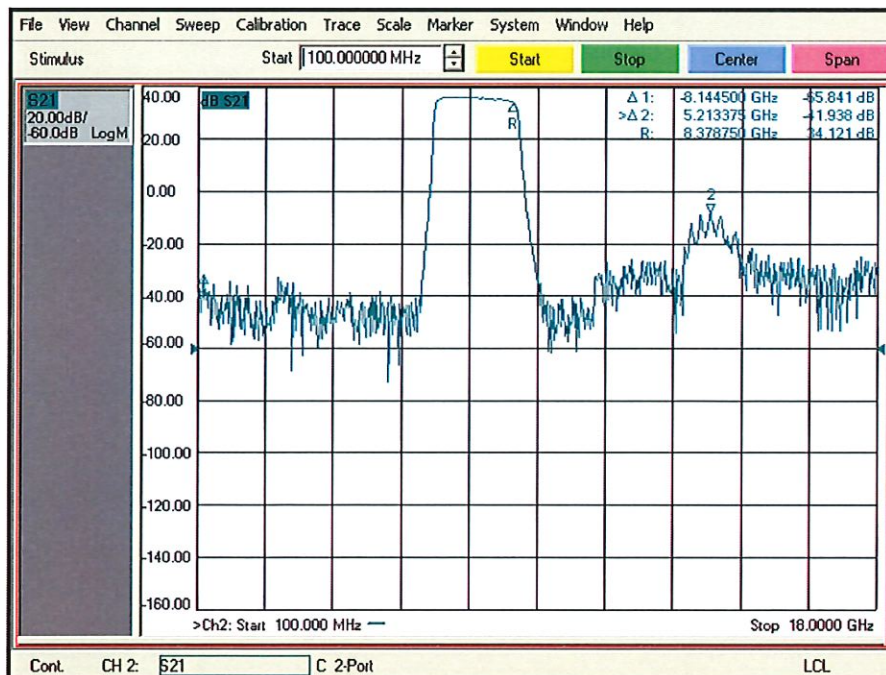
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TX Ch3 Path Narrow Band



TX Ch3 Path Broadband





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TX Ch4 Path Narrow Band



TX Ch4 Path Broadband

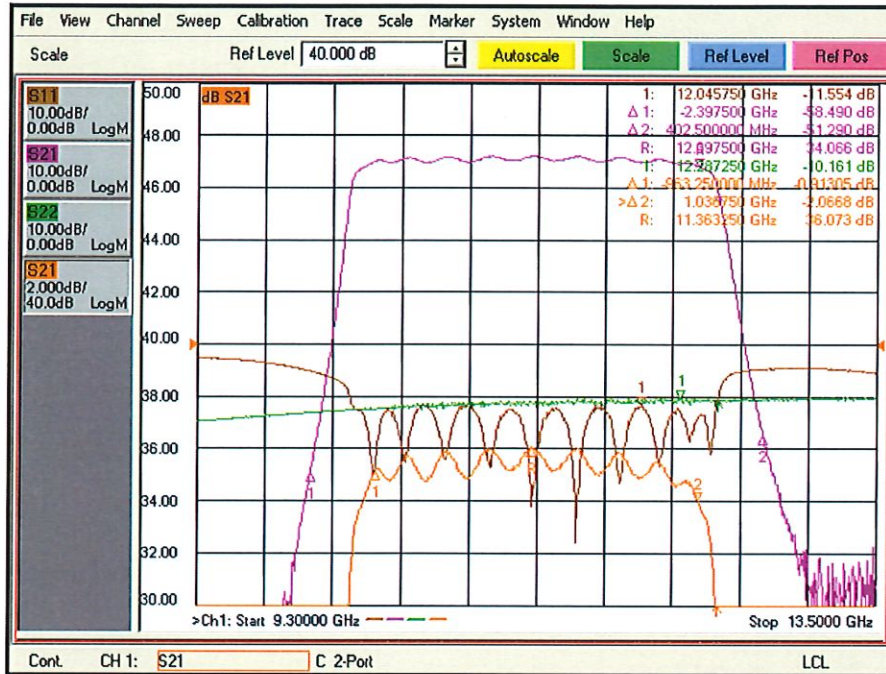




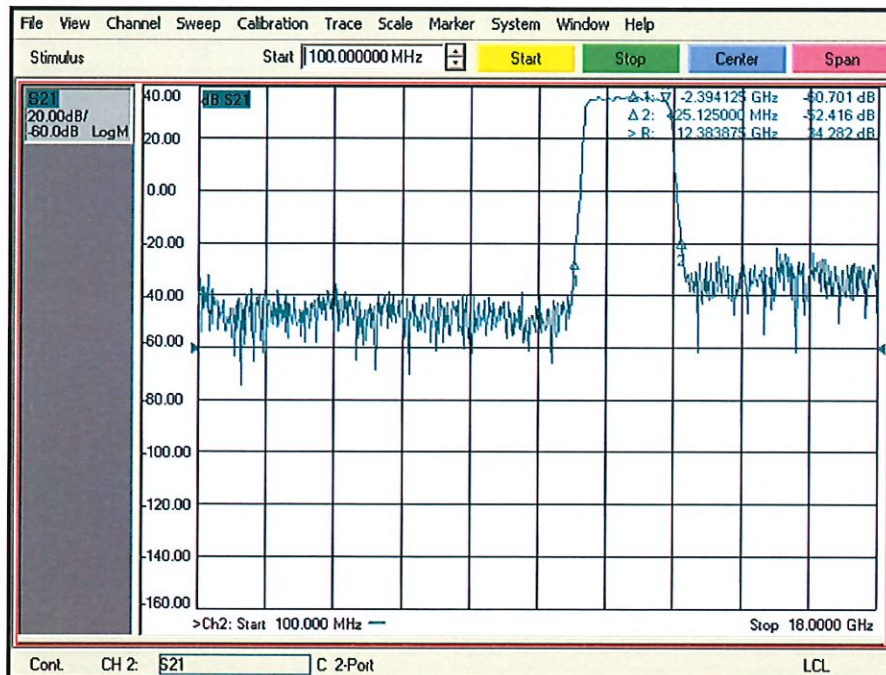
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TX Ch5 Path Narrow Band



TX Ch5 Path Broadband

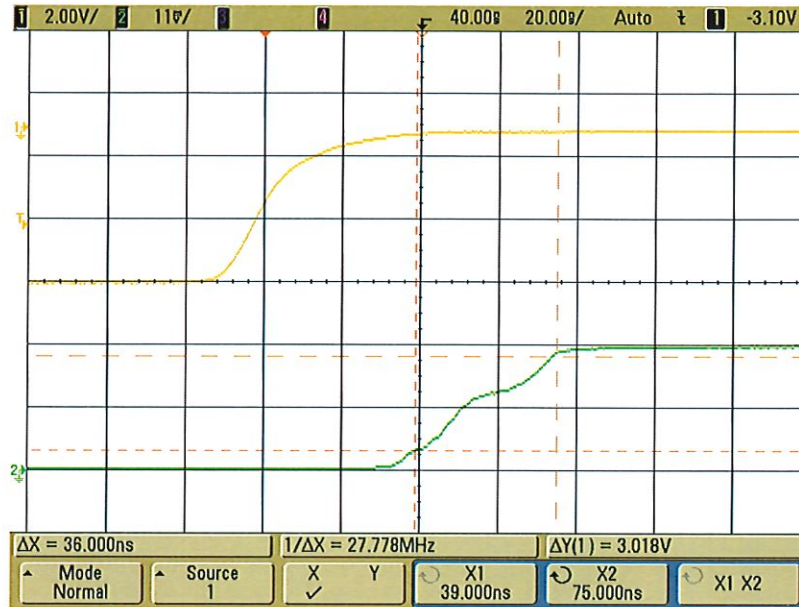




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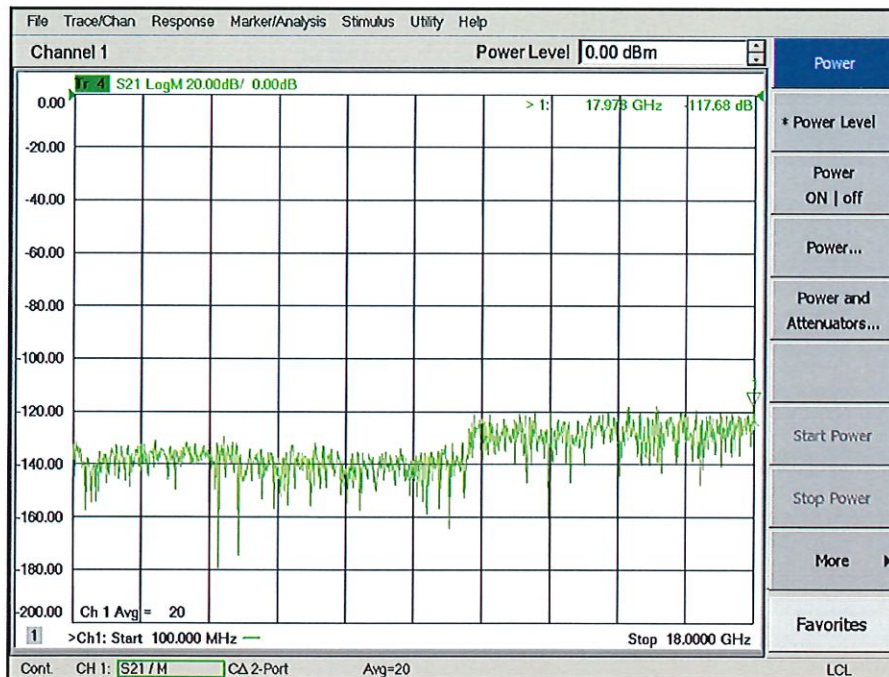
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Switching Speed



Yellow Trace TTL Input Signal
Green Trace RF Output of Detector
*Plot From Typical Characteristics

Isolation BIT Port (J7) to RX Port (J1)



*Plot From Typical Characteristics