



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

PL17346/1524

Customer: \_\_\_\_\_ Tested By: H. Gonzales  
 SO No: \_\_\_\_\_ Temperature: +25°C  
 Model No: 6SFB-CC-100M18G-MAH-RX-TX Date: 6/17/15  
 Serial No: PL17346/1524 Drawing No: 27624332 Rev: A1

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	J1 Input Frequency (RF RX Input)	100MHz-18.0GHz	<b>100MHz-18.0GHz</b> See Plot	
2	J1 Input Power Level	-80dBm to -10dBm Typical	<b>-80dBm to -10dBm</b>	
3	J5 Input Frequency (RF TX Input)	100MHz-18.0GHz	<b>100MHz-18.0GHz</b> See Plot	
4	J5 Input Power Level	-20dBm to -15dBm Typical	<b>-20dBm to -15dBm</b>	
5	J7 Input Frequency (RF BIT RX Input)	100MHz-18.0GHz	<b>100MHz-18.0GHz</b> See Plot	
6	J7 Input Power Level	-20dBm to -15dBm Typical	<b>-20dBm to -15dBm</b>	
7	J2 Output Frequency (RF RX Output)	100MHz-18.0GHz	<b>100MHz-18.0GHz</b> See Plot	
8	J2 Output Power Level	-62dBm to +8dBm Typical	<b>-59dBm to +11dBm</b>	
9	J6 Output Frequency (RF TX Output)	100MHz-18.0GHz	<b>100MHz-18.0GHz</b> See Plot	
10	J6 Output Power Level	0dBm to +10dBm Typical	<b>+2dBm to +13dB</b>	
11	J1 RX Path Gain	18dB Typical	<b>21dB to 30dB</b>	
12	J7 RX BIT Path Insertion Loss	10dB Typical	<b>3dB to 9dB</b>	
13	(J1 to J2) to (J7 to J2) RX Isolation	100dB Typical	<b>112.06dB</b> See Plot	
14	J5 TX Path Gain	32dB Typical	<b>38dB to 43dB</b>	
15	VSWR Over 90% Passband	2 : 1 Maximum	<b>2.0:1</b> See Plots	



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16	Switching Speed	100ns Typical	<b>75.0ns</b> See Plots	
17	Thru Channel Passband	100MHz-18.0GHz	<b>100MHz-18.0GHz</b> See Plots	
18	Channel 1 Center Frequency	3400MHz	<b>3400MHz</b>	
19	Channel 1 3dB Bandwidth	2000MHz	<b>2000MHz</b>	
20	Channel 1 RX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-2.0GHz,	<b>-51.67dBc</b> See Plot	
		-40dBc Typical, -30dBc Minimum 4.8GHz-18.0GHz	<b>-54.20dBc</b> See Plot	
21	Channel 1 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-2.0GHz,	<b>-55.38dBc</b> See Plot	
		-40dBc Typical, -30dBc Minimum 4.8GHz-18.0GHz	<b>-49.77dBc</b> See Plot	
22	Channel 2 Center Frequency	5400MHz	<b>5400MHz</b>	
23	Channel 2 3dB Bandwidth	2000MHz	<b>2000MHz</b>	
24	Channel 2 RX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-4.0GHz,	<b>-61.03dBc</b> See Plot	
		-40dBc Typical, -30dBc Minimum 6.8GHz-18.0GHz	<b>-36.98dBc</b> See Plot	
25	Channel 2 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-4.0GHz,	<b>-62.80dBc</b> See Plot	
		-40dBc Typical, -30dBc Minimum 6.8GHz-18.0GHz	<b>-43.55dBc</b> See Plot	
26	Channel 3 Center Frequency	7400MHz	<b>7400MHz</b>	
27	Channel 3 3dB Bandwidth	2000MHz	<b>2000MHz</b>	
28	Channel 3 RX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-6.0GHz,	<b>-79.66dBc</b> See Plot	
		-40dBc Typical,	<b>-38.75dBc</b> See Plot	



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		-30dBc Minimum 8.8GHz-18.0GHz		
29	Channel 3 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-6.0GHz,  -40dBc Typical, -30dBc Minimum 8.8GHz-18.0GHz	<b>-73.15dBc See Plot</b>  <b>-35.09dBc See Plot</b>	
30	Channel 4 Center Frequency	9400MHz	<b>9400MHz</b>	
31	Channel 4 3dB Bandwidth	2000MHz	<b>2000MHz</b>	
32	Channel 4 RX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-8.0GHz,  -40dBc Typical, -30dBc Minimum 10.8GHz-18.0GHz	<b>-40.75dBc See Plot</b>  <b>-34.30dBc See Plot</b>	
33	Channel 4 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-8.0GHz,  -40dBc Typical, -30dBc Minimum 10.8GHz-18.0GHz	<b>-47.94dBc See Plot</b>  <b>-38.94dBc See Plot</b>	
34	Channel 5 Center Frequency	11400MHz	<b>11400MHz</b>	
35	Channel 5 3dB Bandwidth	2000MHz	<b>2000MHz</b>	
36	Channel 5 RX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-10.0GHz,  -40dBc Typical, -30dBc Minimum 12.8GHz-18.0GHz	<b>-49.53dBc See Plot</b>  <b>-33.76dBc See Plot</b>	
37	Channel 5 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-10.0GHz,  -40dBc Typical, -30dBc Minimum 12.8GHz-18.0GHz	<b>-62.73dBc See Plot</b>  <b>-39.61dBc See Plot</b>	
38	Control Logic	TTL '0': 0V to 0.8V TTL '1': 2V to 5V	<b>Pass</b>	



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39	Power Supplies	+12V @ 600mA Max +5V @ 550mA Max +3.3V @ 0A -12V @ 300mA Max	<b>+12V @ 420mA +5V @ 82mA +3.3V @ 0mA -12V @ 133mA</b>	
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QA/QC Approval: \_\_\_\_\_ Date: \_\_\_\_\_

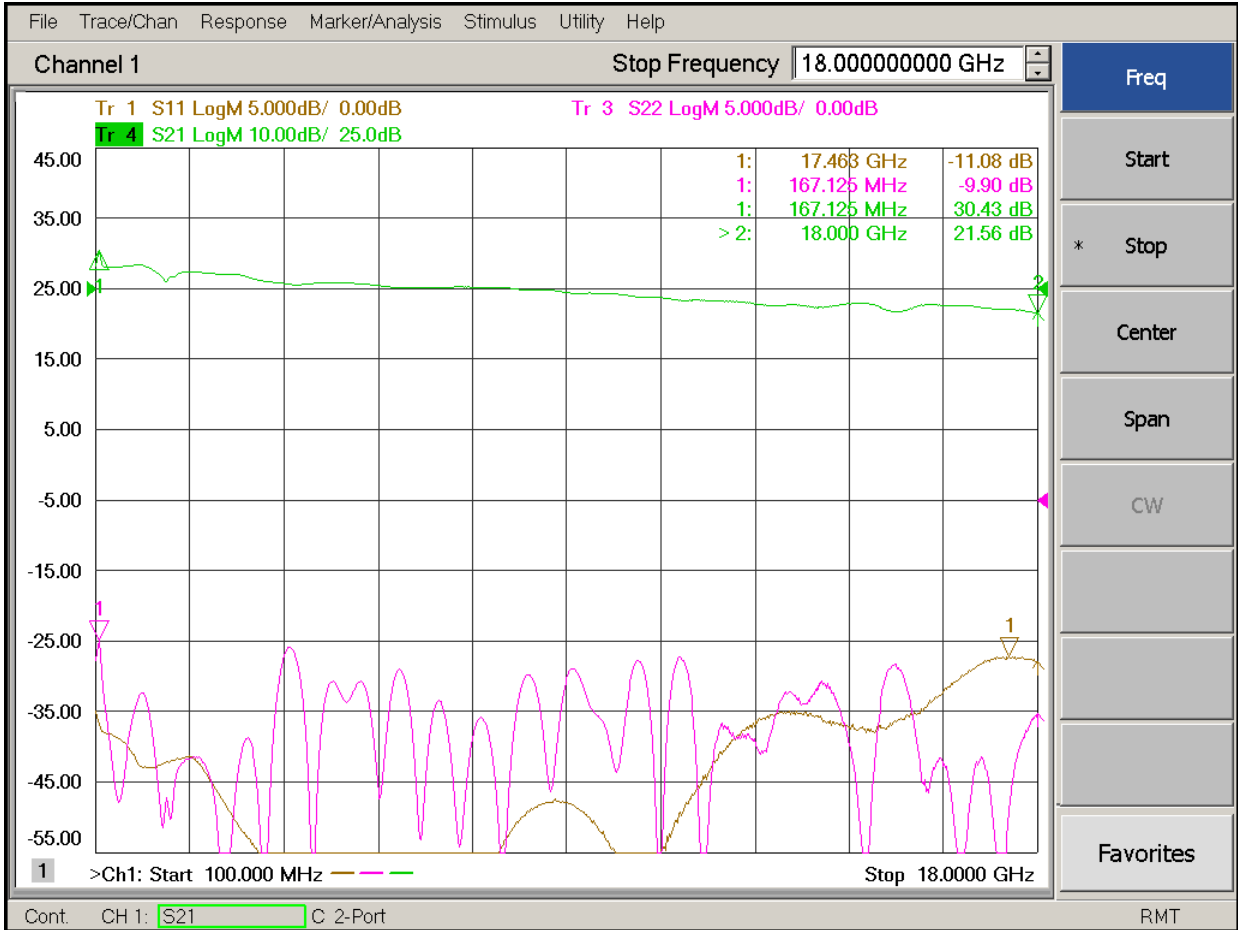
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**RX Thru Path (J1 RX IN)**

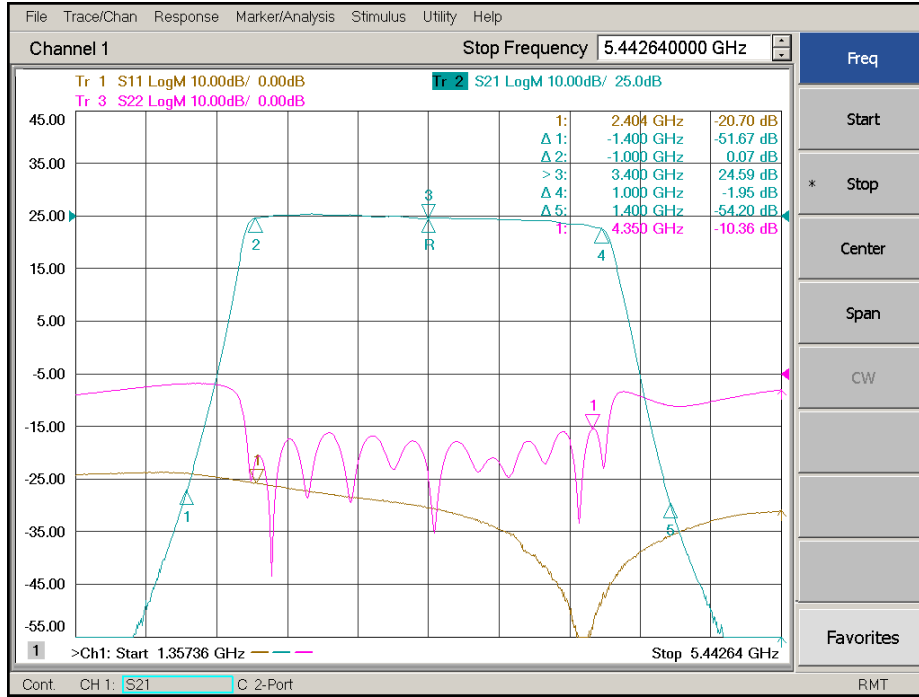




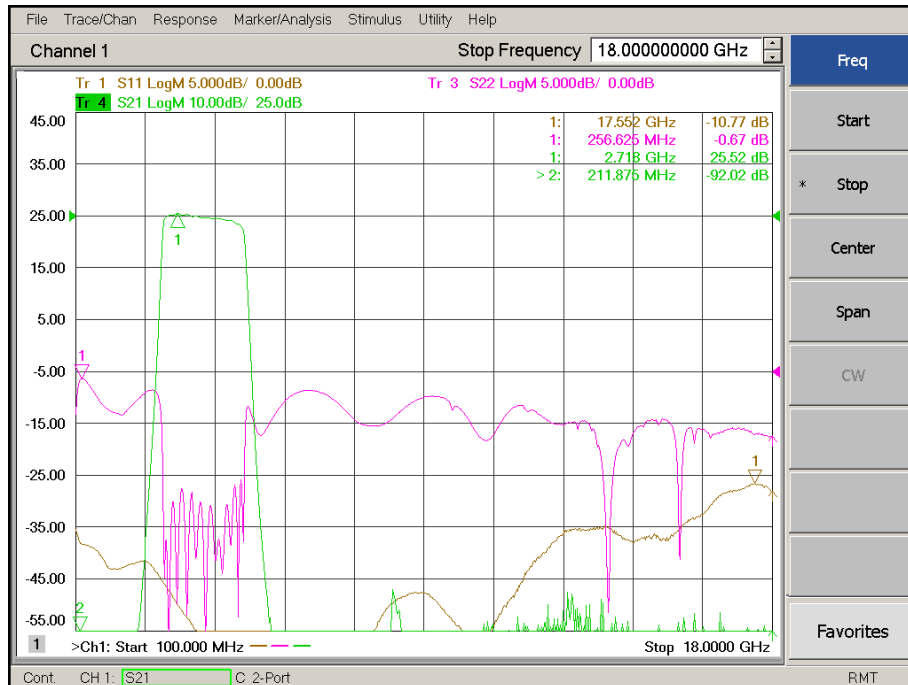
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**RX Ch1 Path Narrow Band (J1 RX IN)**



**RX Ch1 Path Broadband (J1 RX IN)**



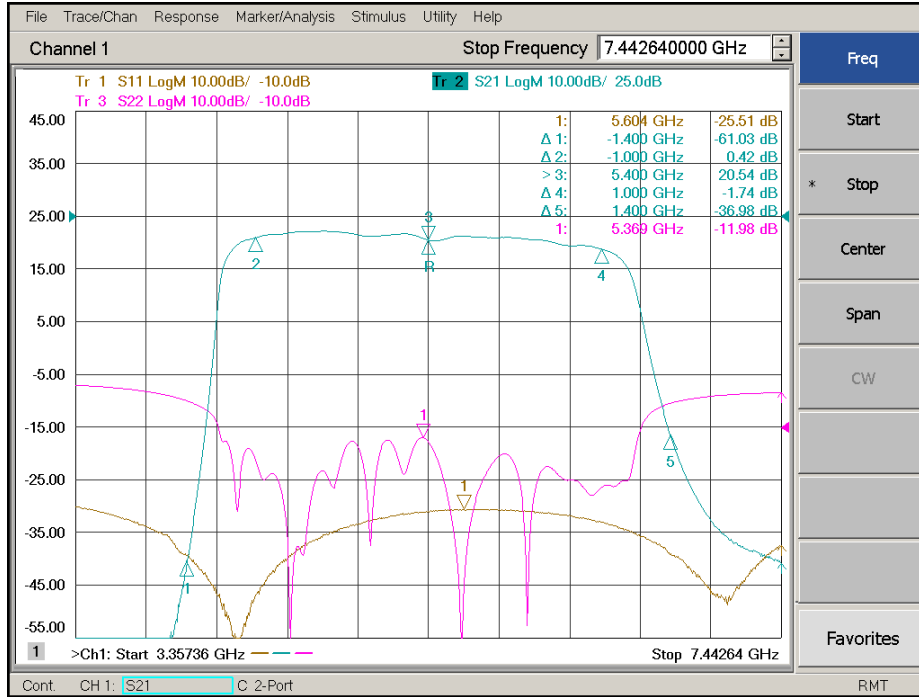
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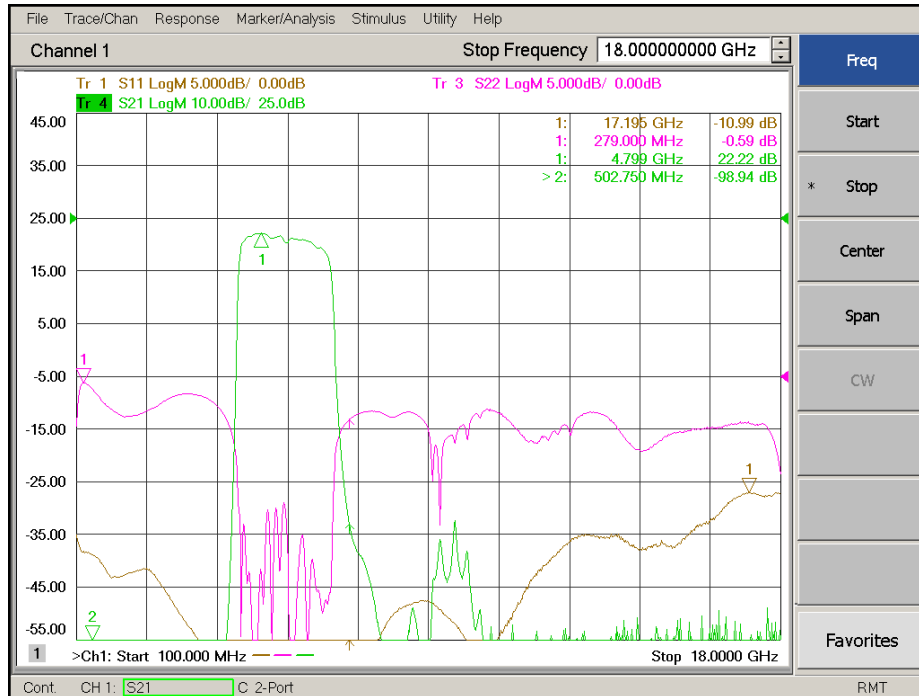
**SUMMARY TEST DATA  
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**RX Ch2 Path Narrow Band (J1 RX IN)**



**RX Ch2 Path Broadband (J1 RX IN)**



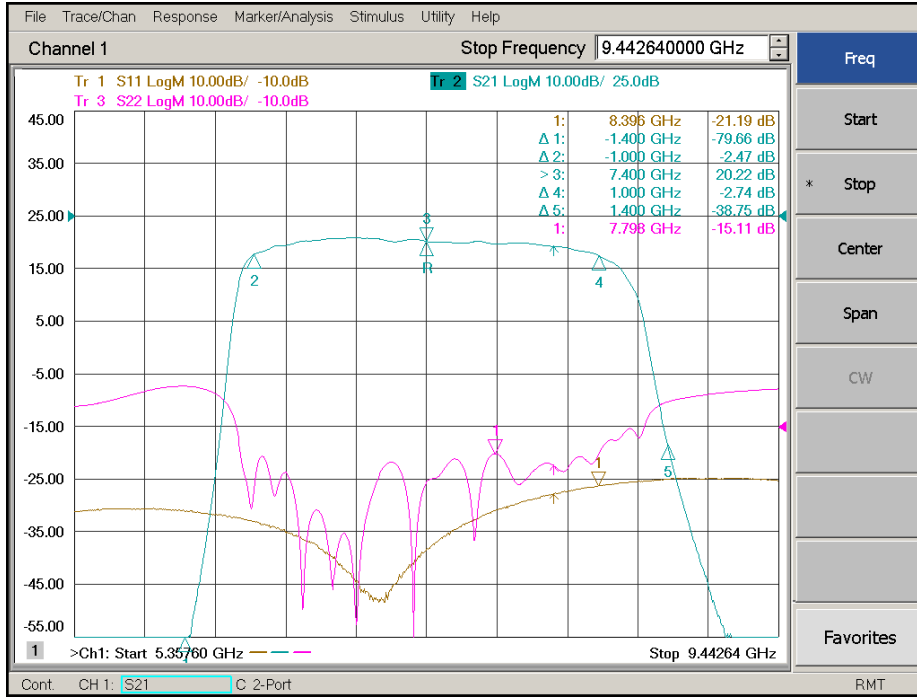
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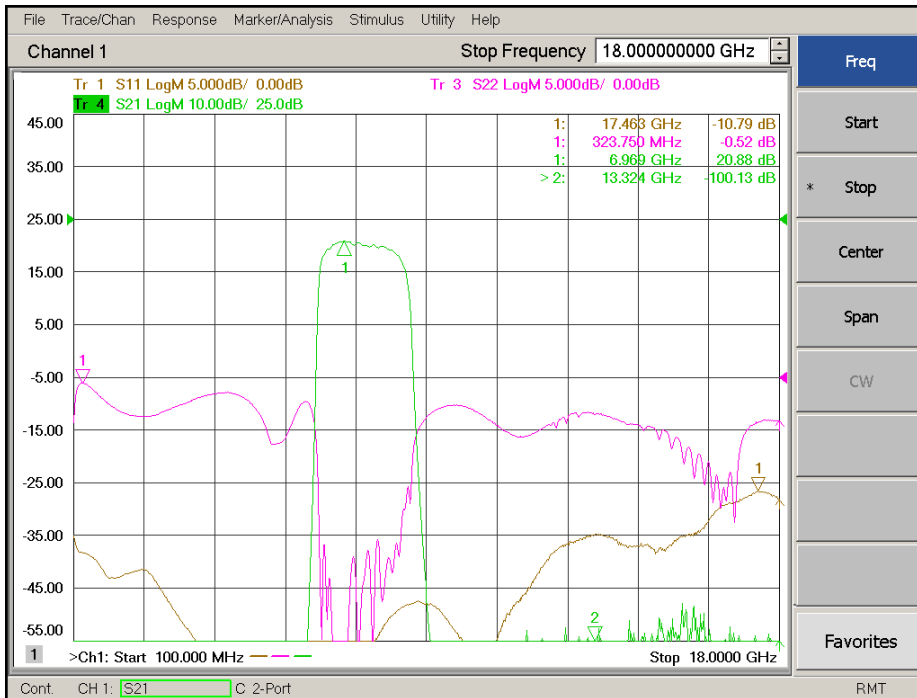
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**RX Ch3 Path Narrow Band (J1 RX IN)**



**RX Ch3 Path Broadband (J1 RX IN)**



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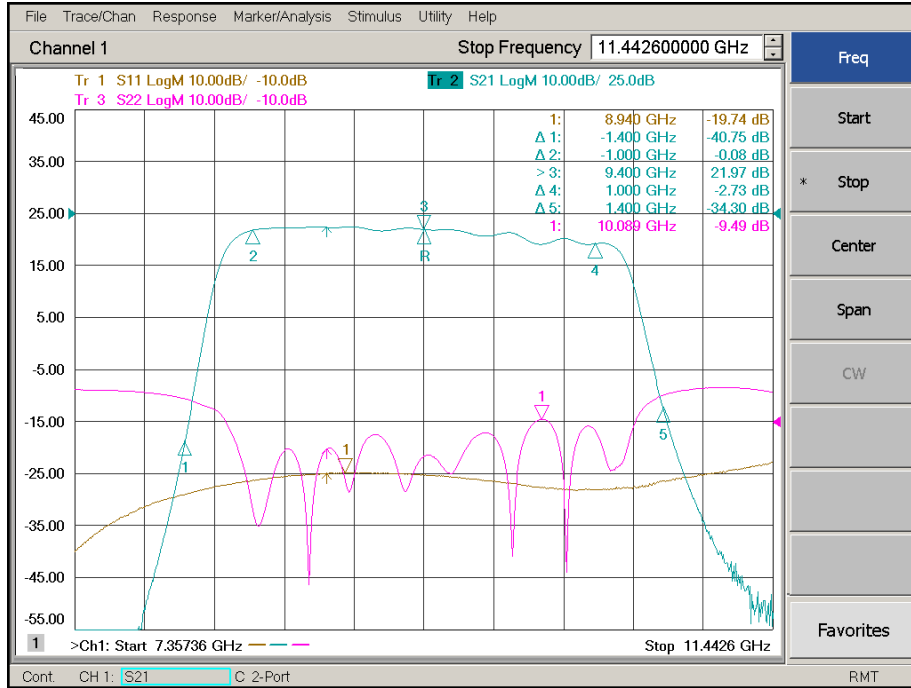




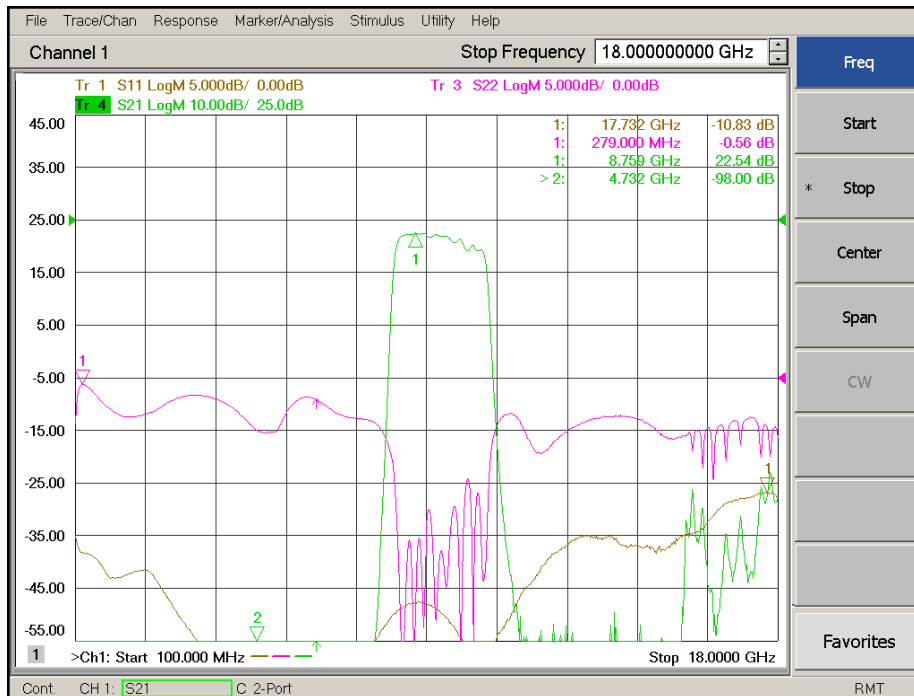
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**RX Ch4 Path Narrow Band (J1 RX IN)**



**RX Ch4 Path Broadband (J1 RX IN)**



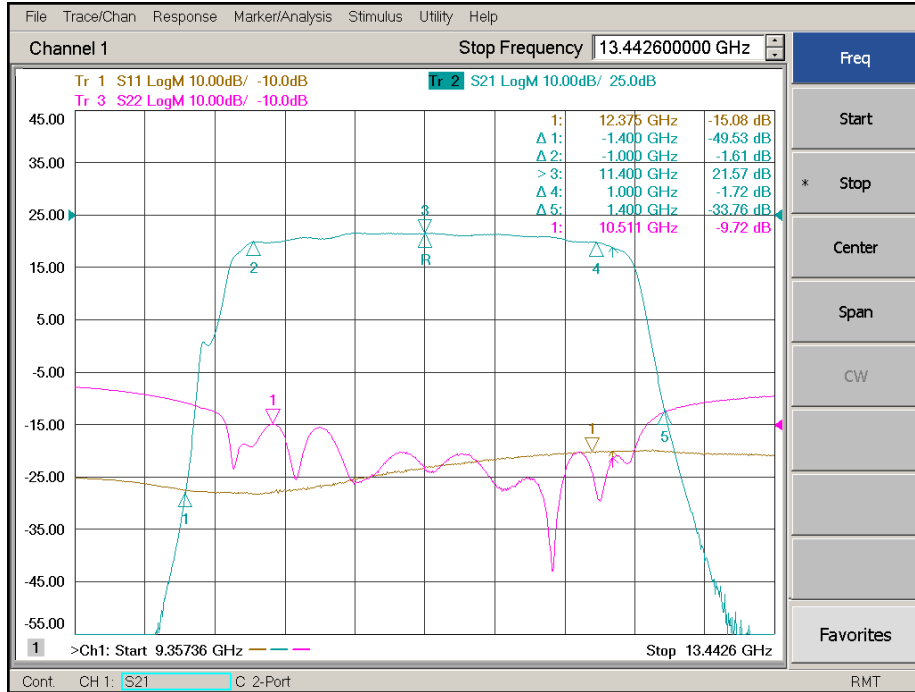
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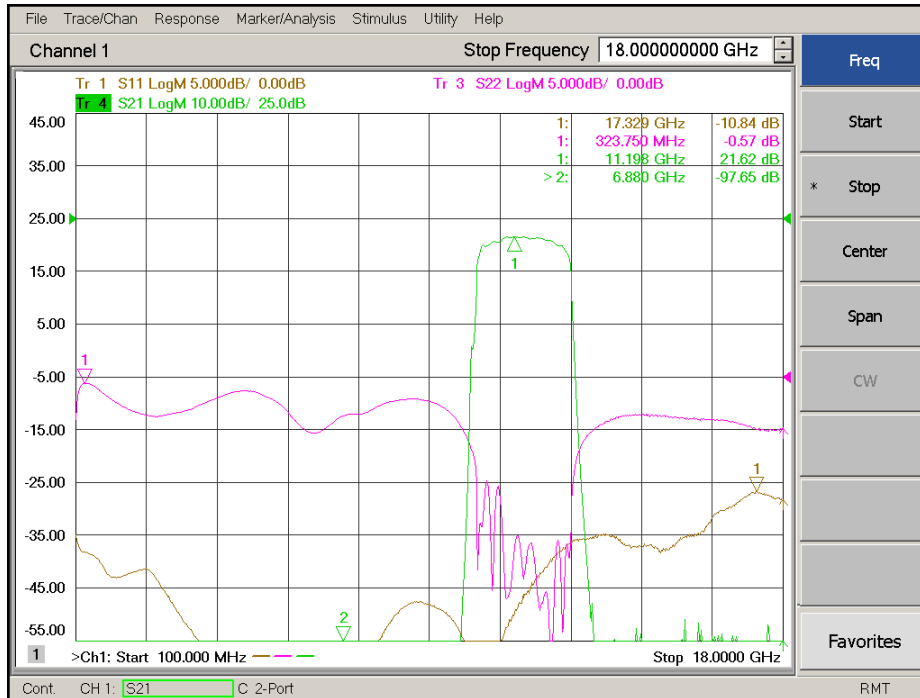
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**RX Ch5 Path Narrow Band (J1 RX IN)**



**RX Ch5 Path Broadband (J1 RX IN)**



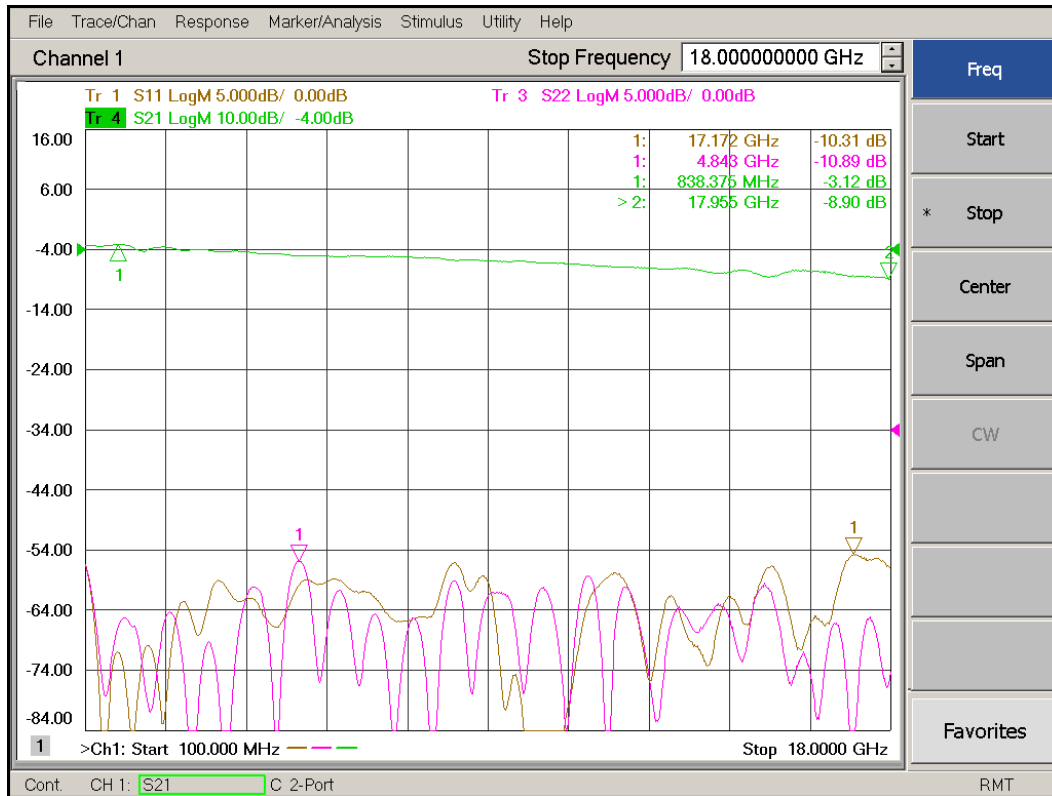
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# SUMMARY TEST DATA ON 6SFB-CC-100M18G-MAH-RX-TX

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## RX Thru Path (J2 RX BIT IN)

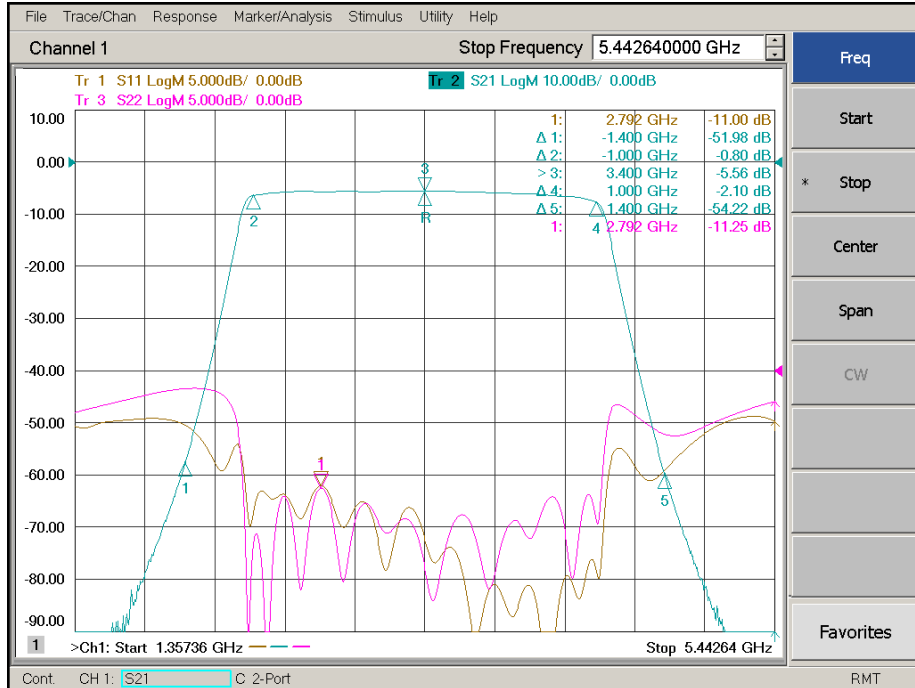




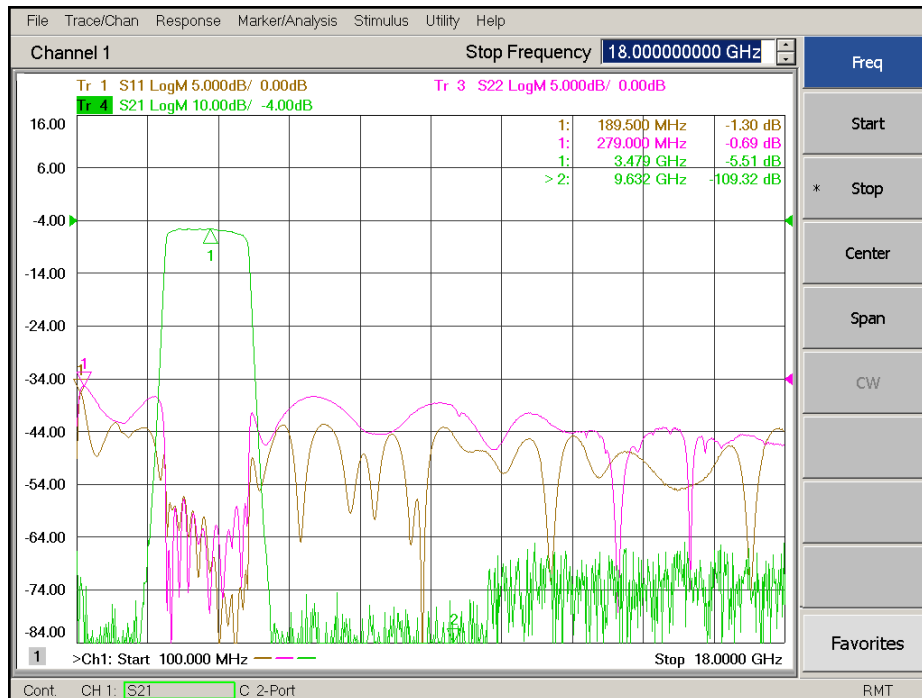
**SUMMARY TEST DATA  
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6SFB-CC-100M18G-MAH-RX-TX**

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**RX Ch1 Path Narrow Band (J2 RX BIT IN)**



**RX Ch1 Path Broadband (J2 RX BIT IN)**



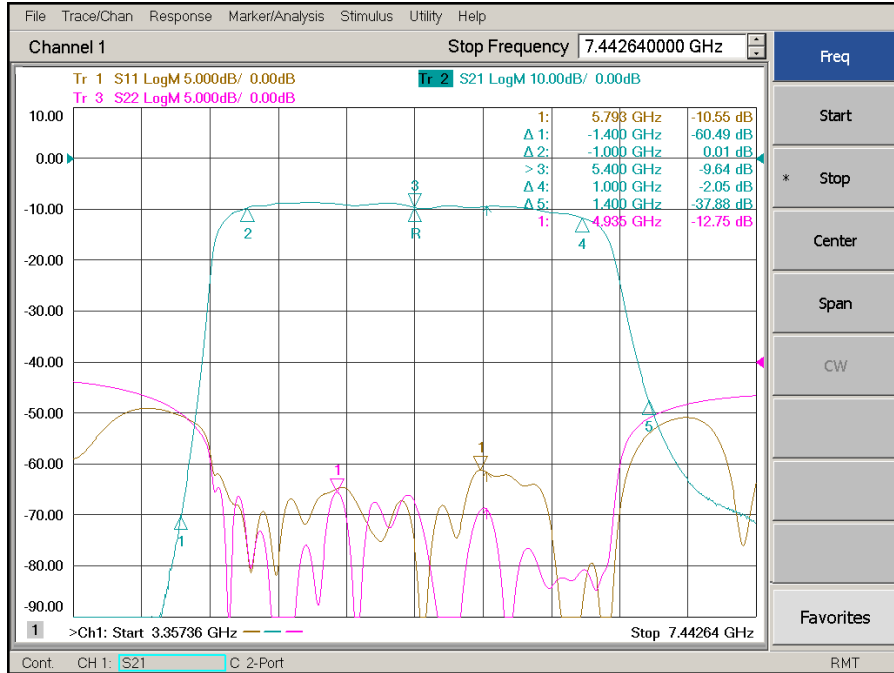
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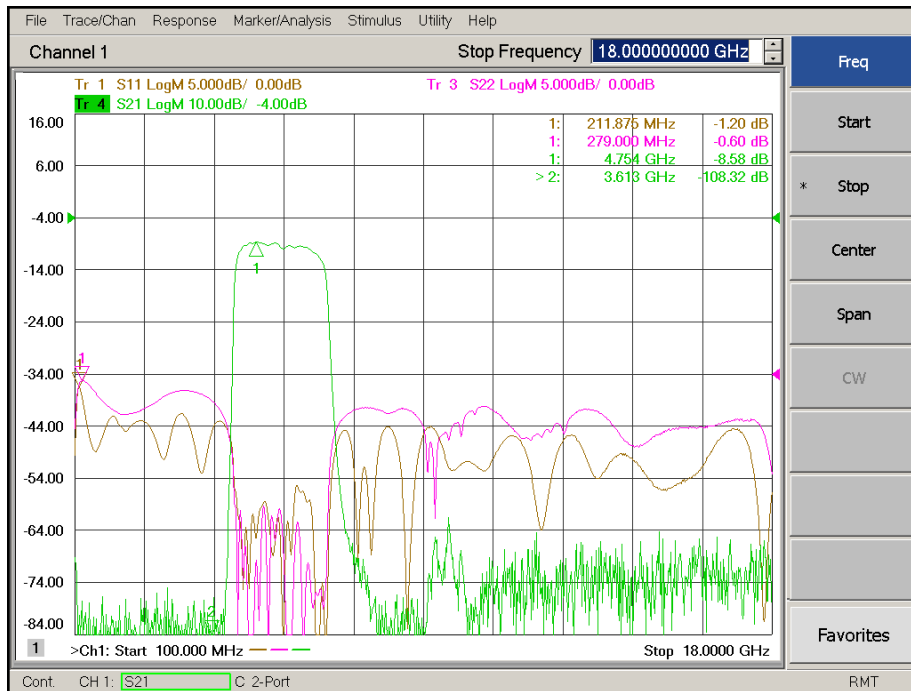
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**RX Ch2 Path Narrow Band (J2 RX BIT IN)**



**RX Ch2 Path Broadband (J2 RX BIT IN)**



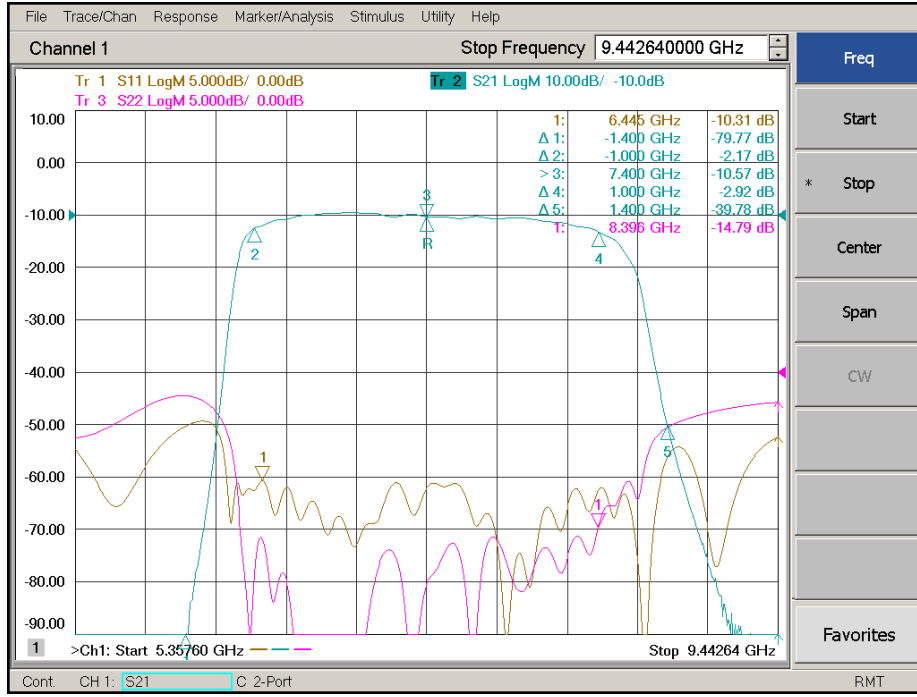
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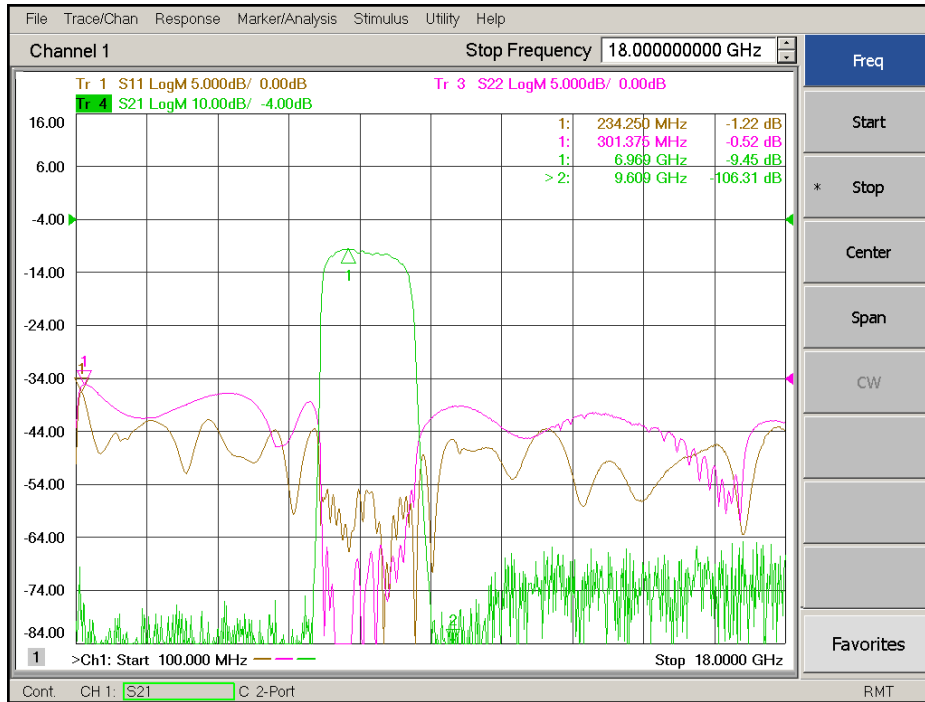
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**RX Ch3 Path Narrow Band (J2 RX BIT IN)**



**RX Ch3 Path Broadband (J2 RX BIT IN)**



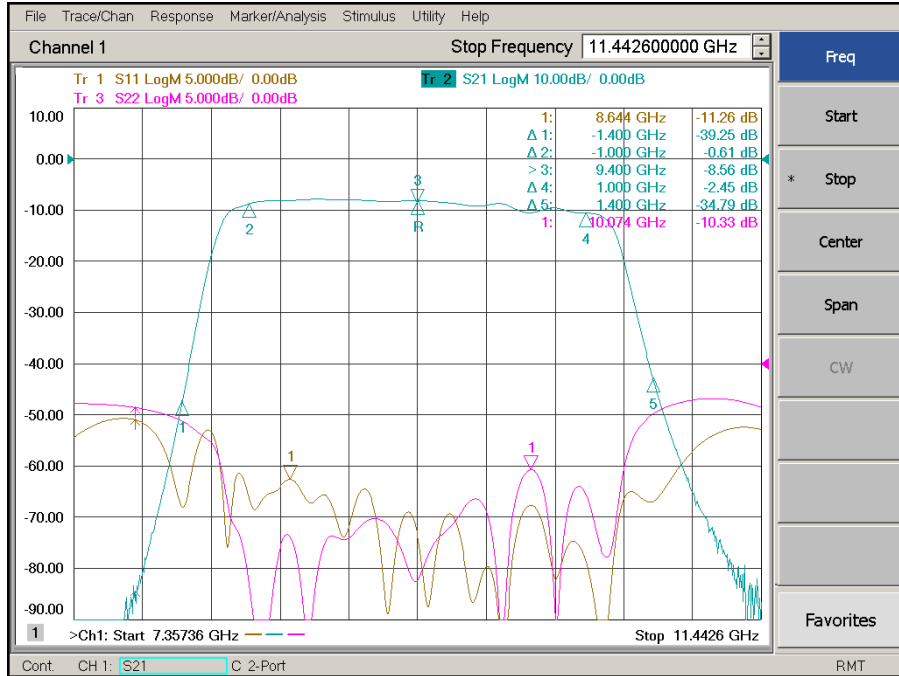
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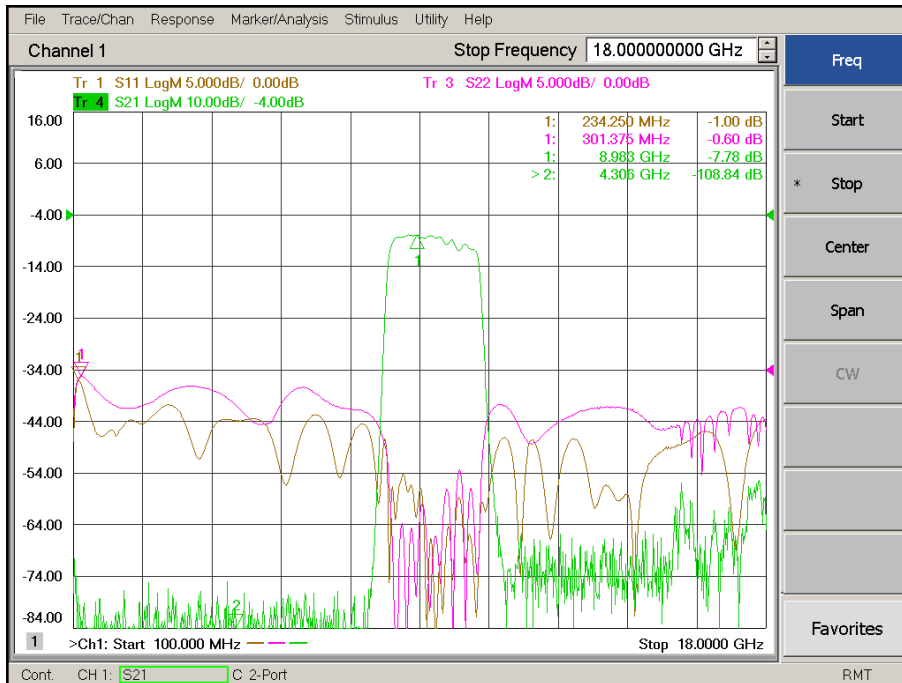
**SUMMARY TEST DATA  
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6SFB-CC-100M18G-MAH-RX-TX**

PL17346/1524

**RX Ch4 Path Narrow Band (J2 RX BIT IN)**



**RX Ch4 Path Broadband (J2 RX BIT IN)**



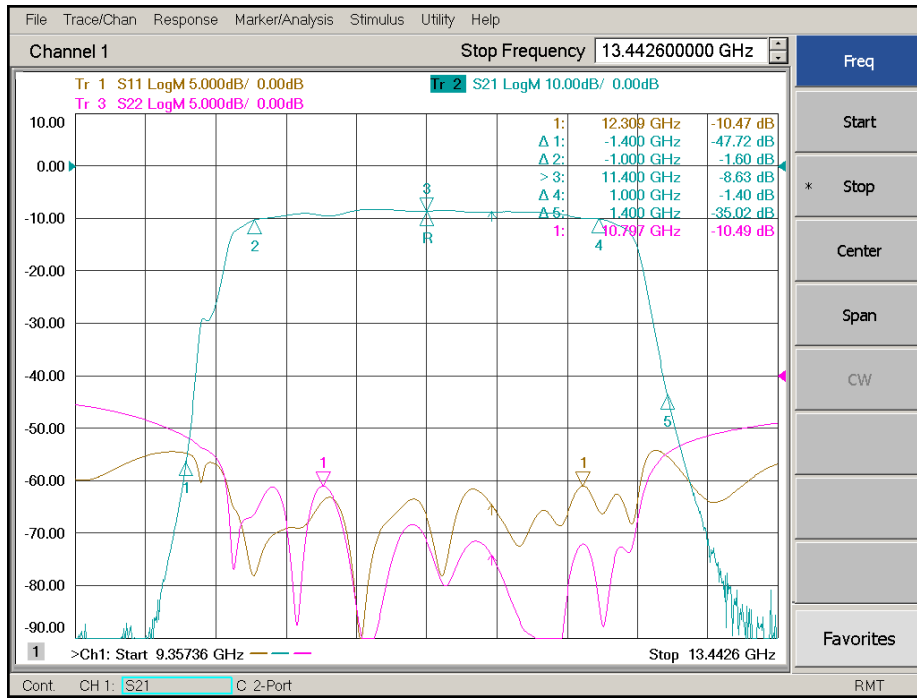
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# SUMMARY TEST DATA ON 6SFB-CC-100M18G-MAH-RX-TX

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## RX Ch5 Path Narrow Band (J2 RX BIT IN)



## RX Ch5 Path Broadband (J2 RX BIT IN)



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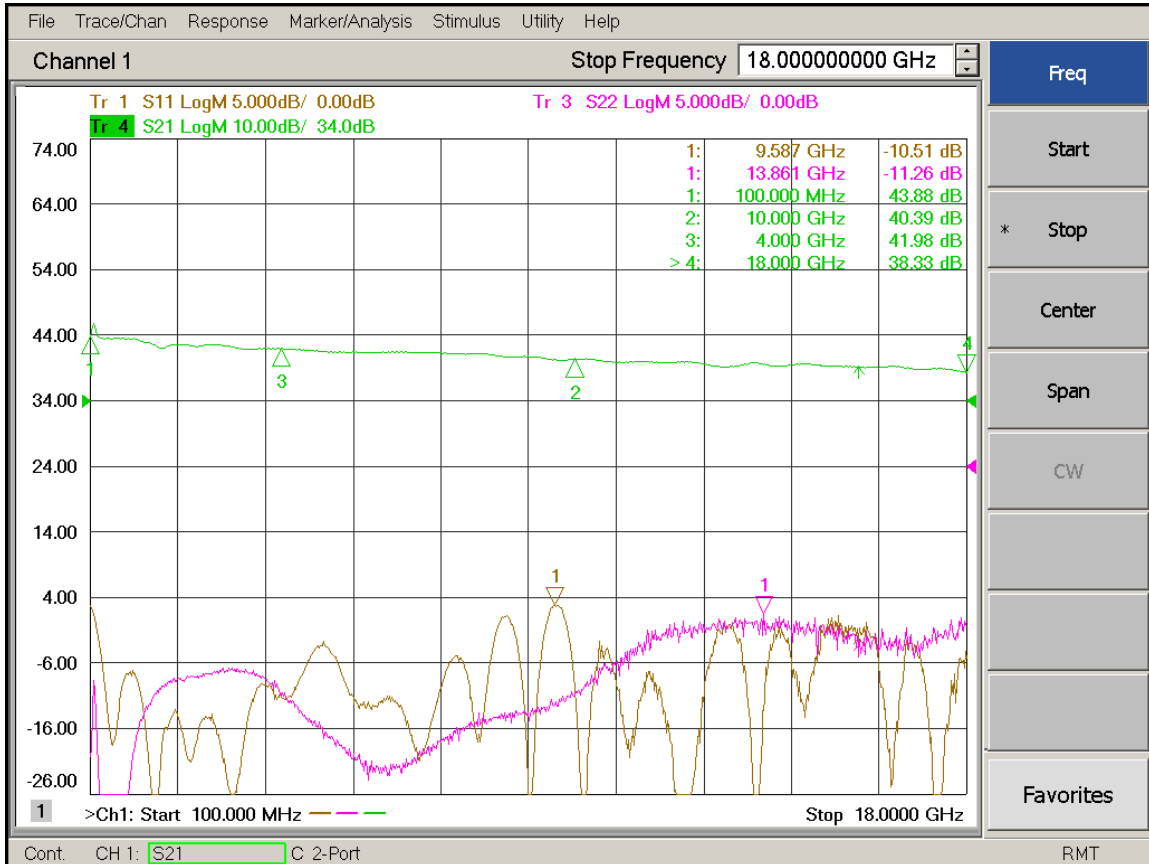




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## TX Thru Path

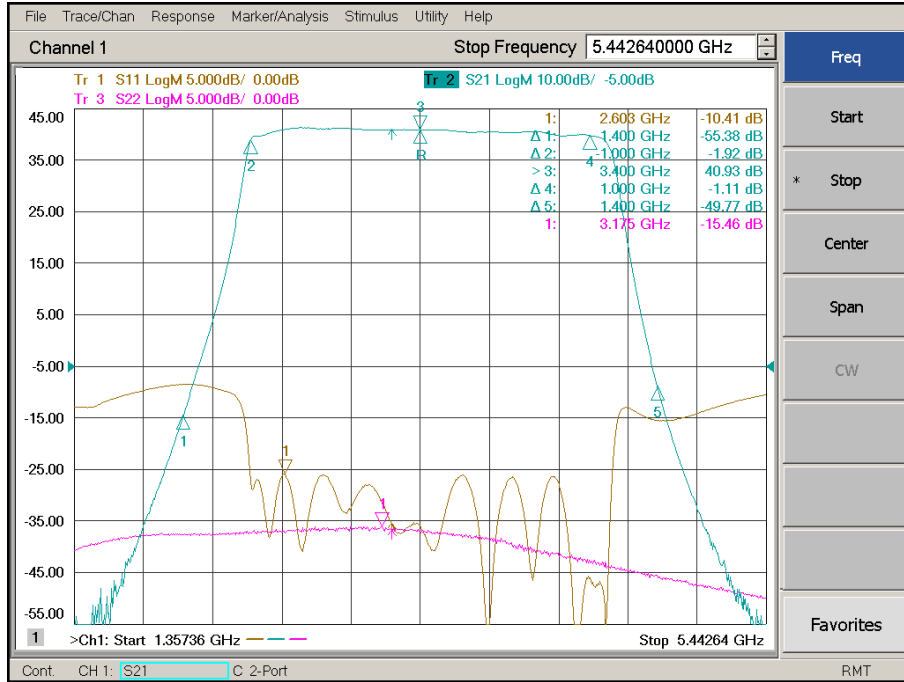




## SUMMARY TEST DATA ON 6SFB-CC-100M18G-MAH-RX-TX

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### TX Ch1 Path Narrow Band



### TX Ch1 Path Broadband



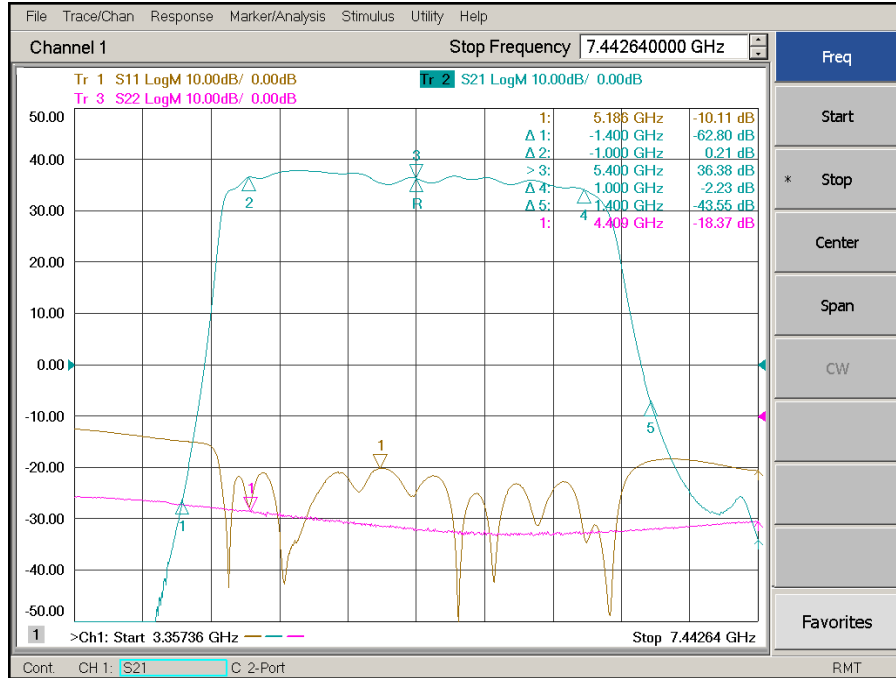
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Email: [sales@pmi-rf.com](mailto:sales@pmi-rf.com)



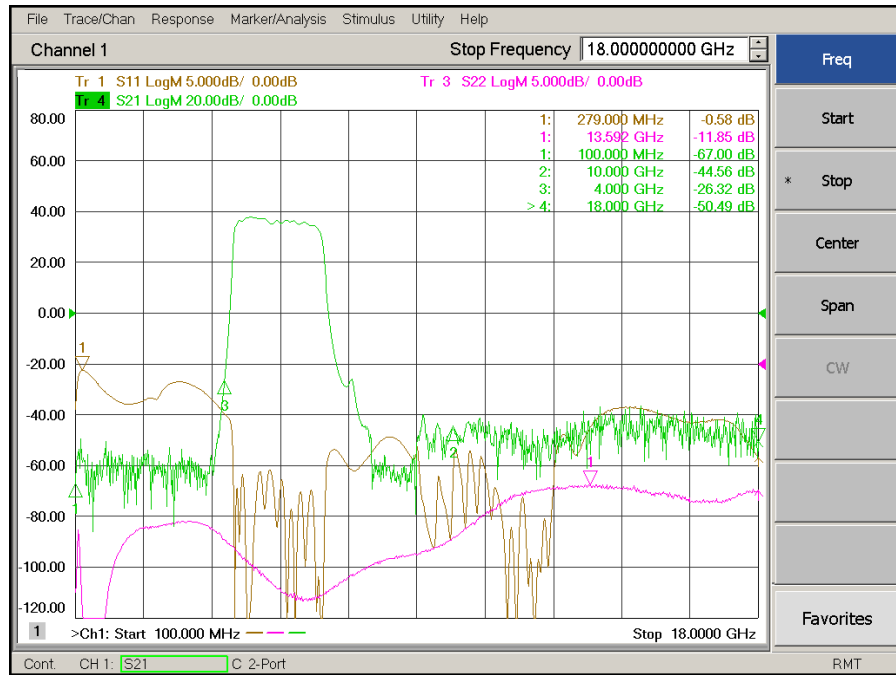
## SUMMARY TEST DATA ON 6SFB-CC-100M18G-MAH-RX-TX

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### TX Ch2 Path Narrow Band



### TX Ch2 Path Broadband



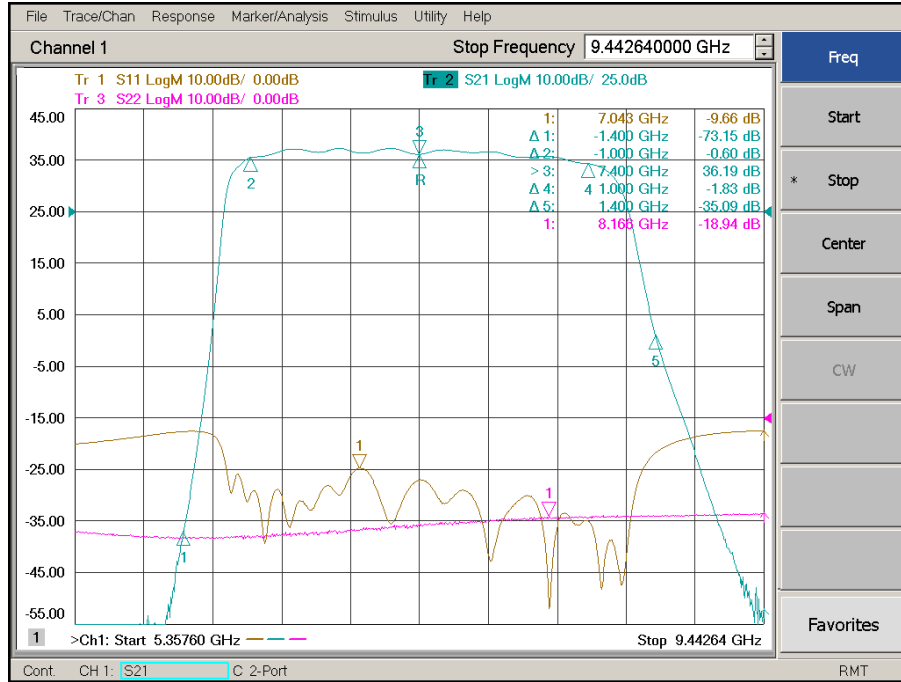
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Email: [sales@pmi-rf.com](mailto:sales@pmi-rf.com)



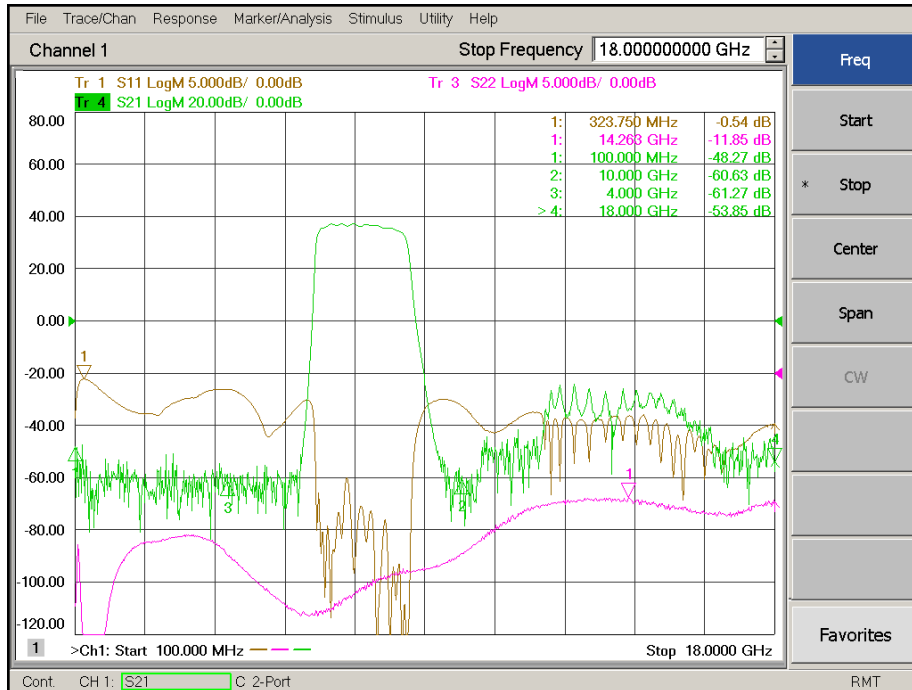
## SUMMARY TEST DATA ON 6SFB-CC-100M18G-MAH-RX-TX

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### TX Ch3 Path Narrow Band



### TX Ch3 Path Broadband



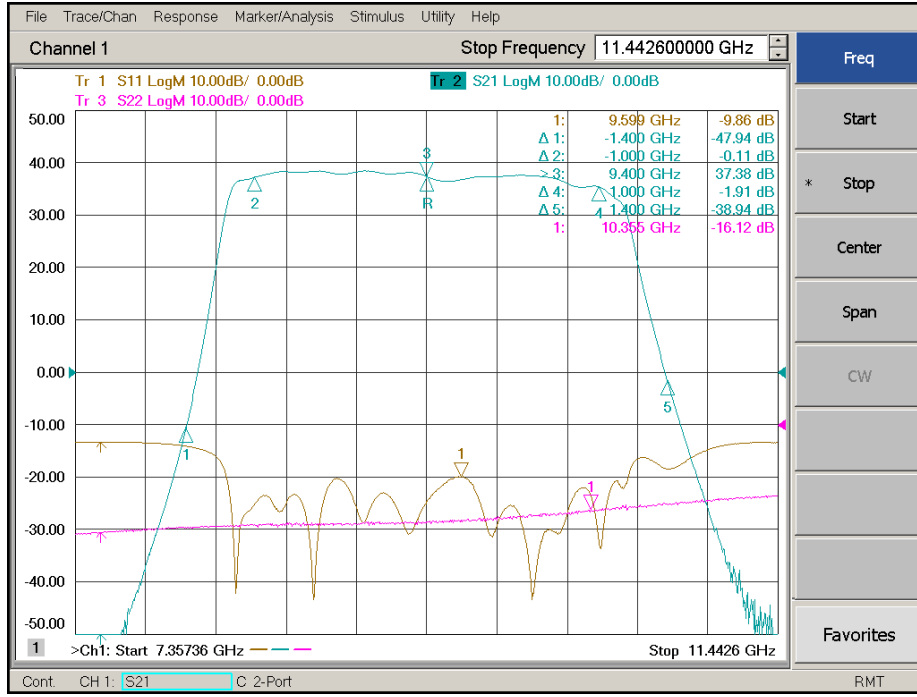
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Email: [sales@pmi-rf.com](mailto:sales@pmi-rf.com)



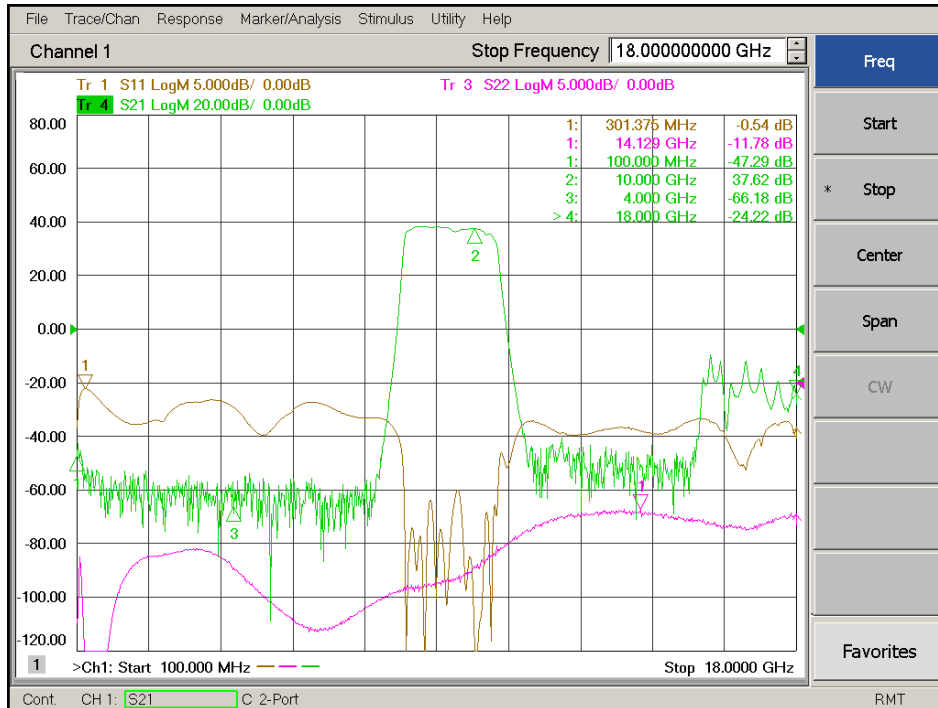
# SUMMARY TEST DATA ON 6SFB-CC-100M18G-MAH-RX-TX

PL17346/1524

## TX Ch4 Path Narrow Band



## TX Ch4 Path Broadband



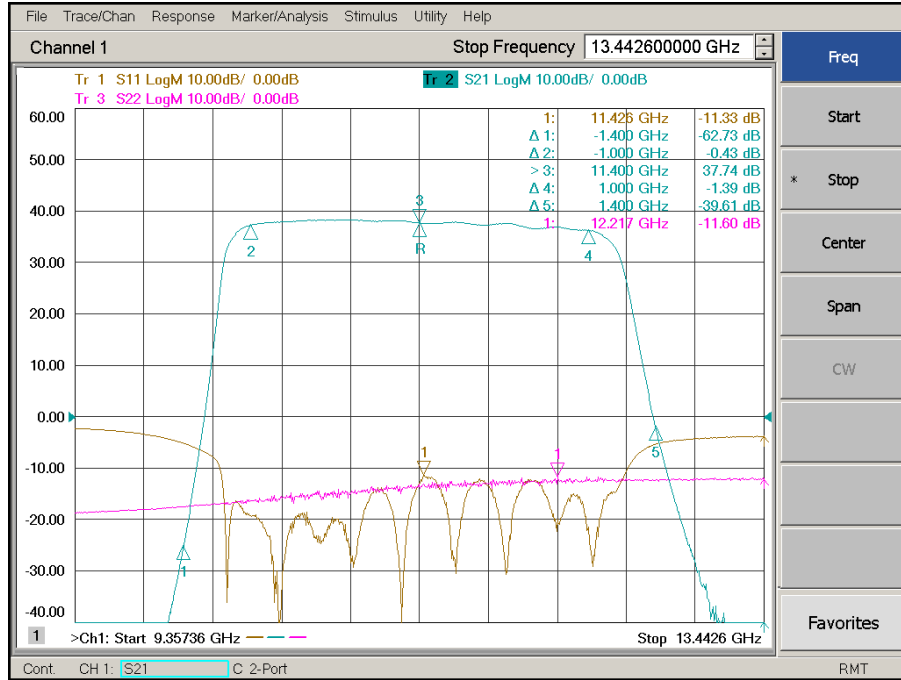
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Email: [sales@pmi-rf.com](mailto:sales@pmi-rf.com)



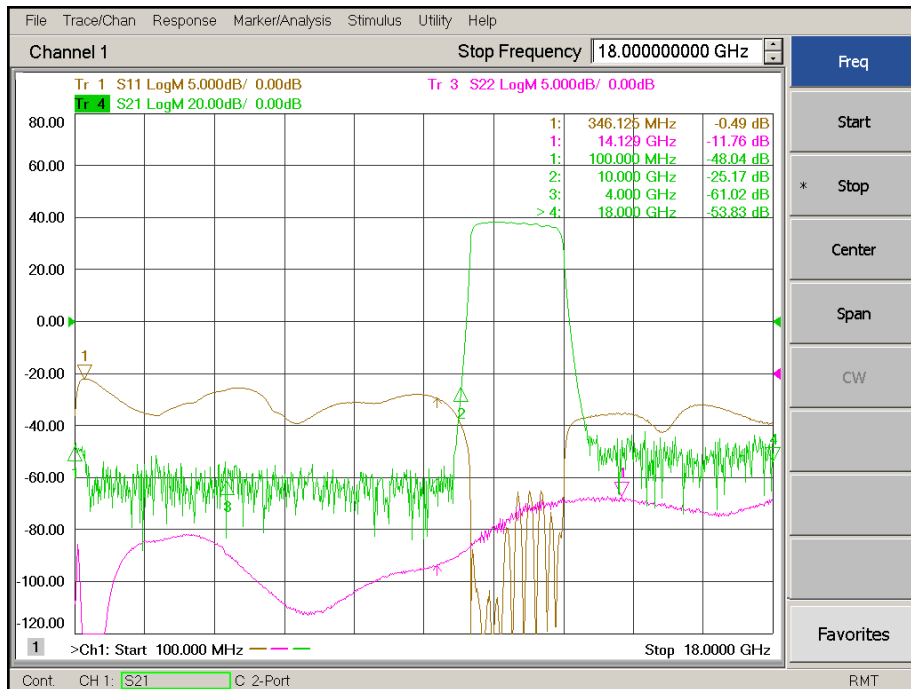
**SUMMARY TEST DATA  
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**TX Ch5 Path Narrow Band**



**TX Ch5 Path Broadband**



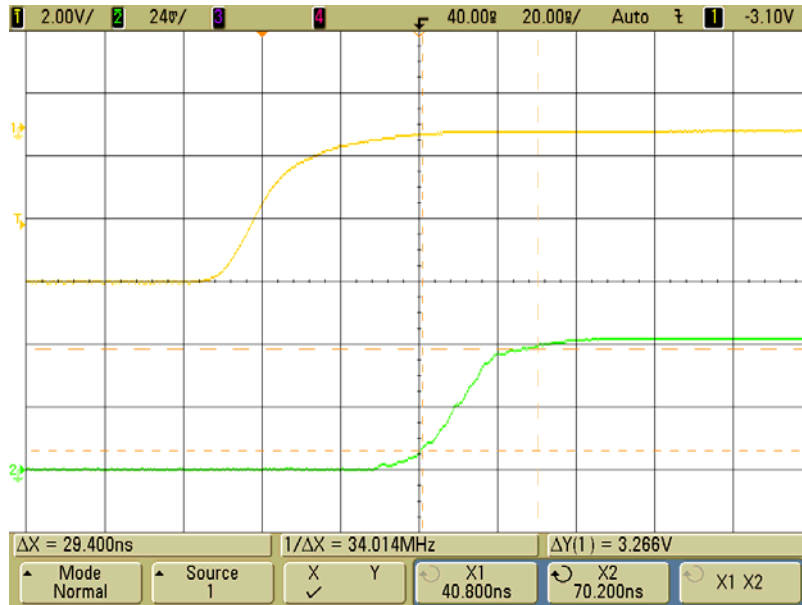
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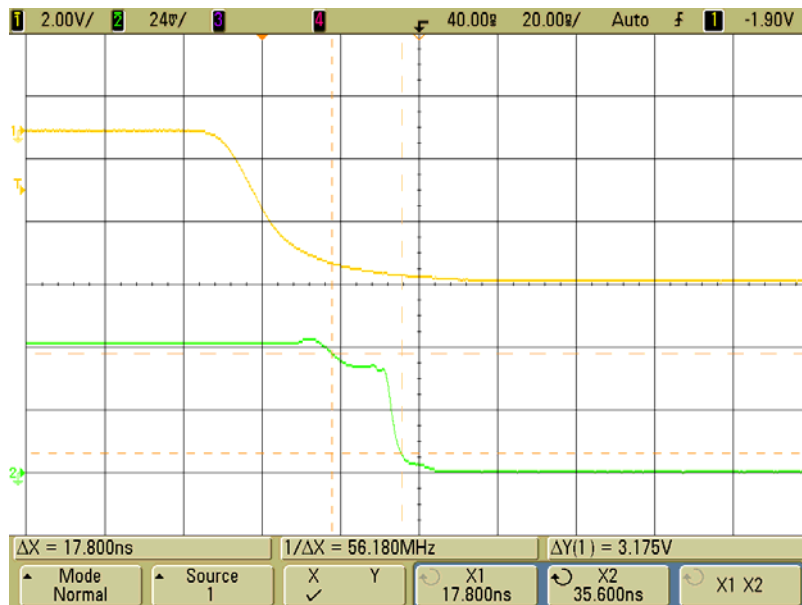
PL17346/1524

**Switching Speed RX Channel 1 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed RX Channel 1 OFF**



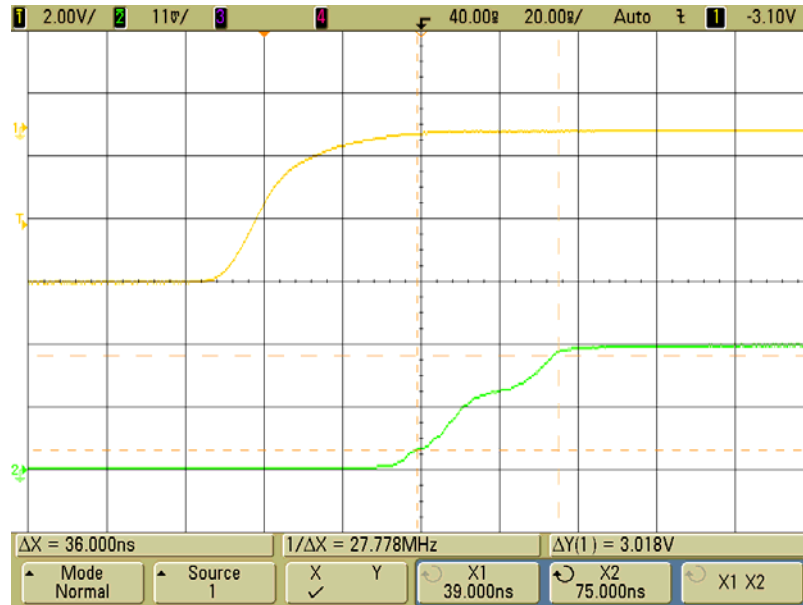
Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



**SUMMARY TEST DATA  
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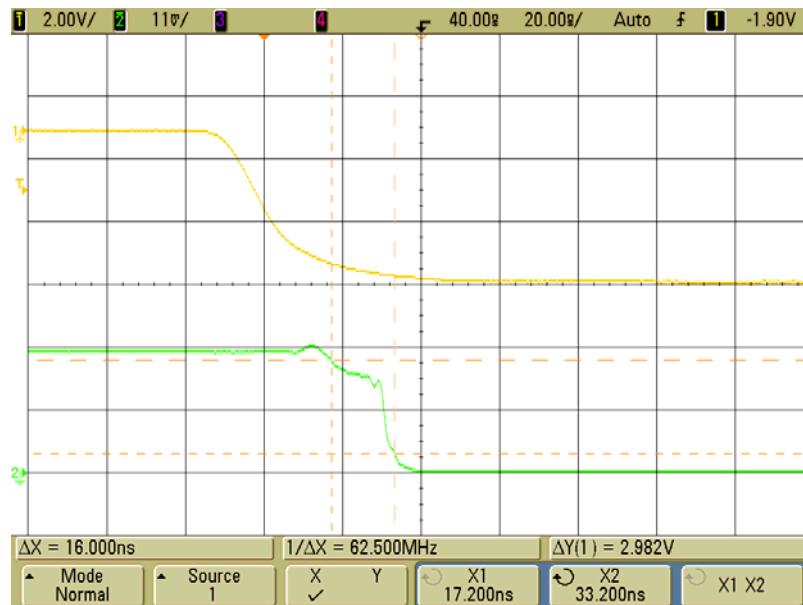
PL17346/1524

**Switching Speed RX Channel 2 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed RX Channel 2 OFF**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

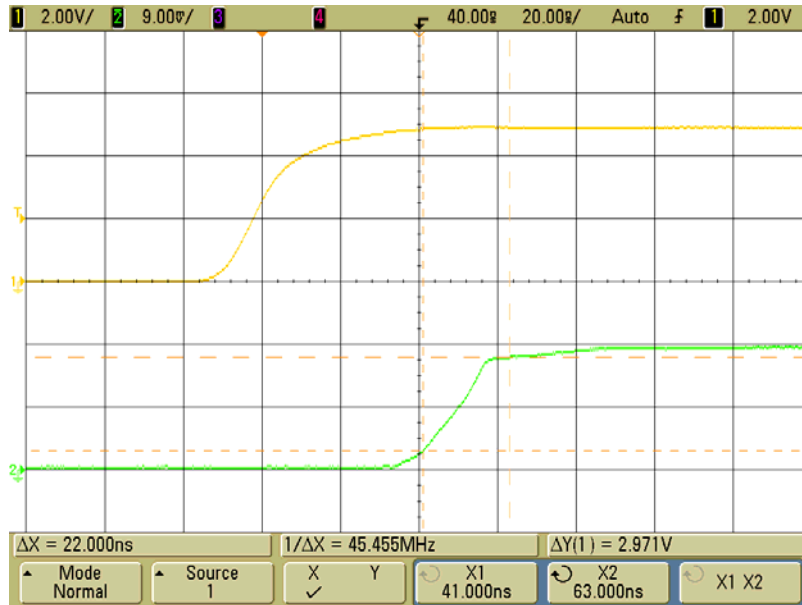




**SUMMARY TEST DATA  
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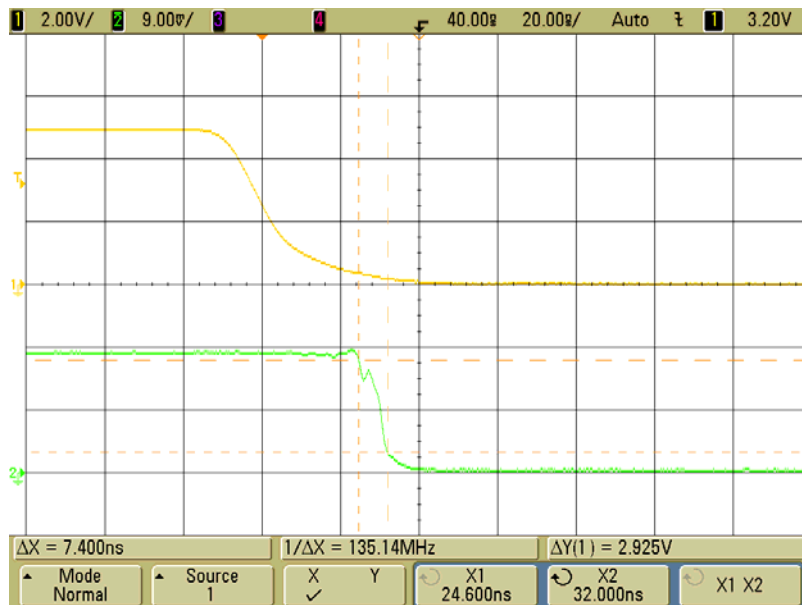
PL17346/1524

**Switching Speed RX Channel 3 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed RX Channel 3 OFF**



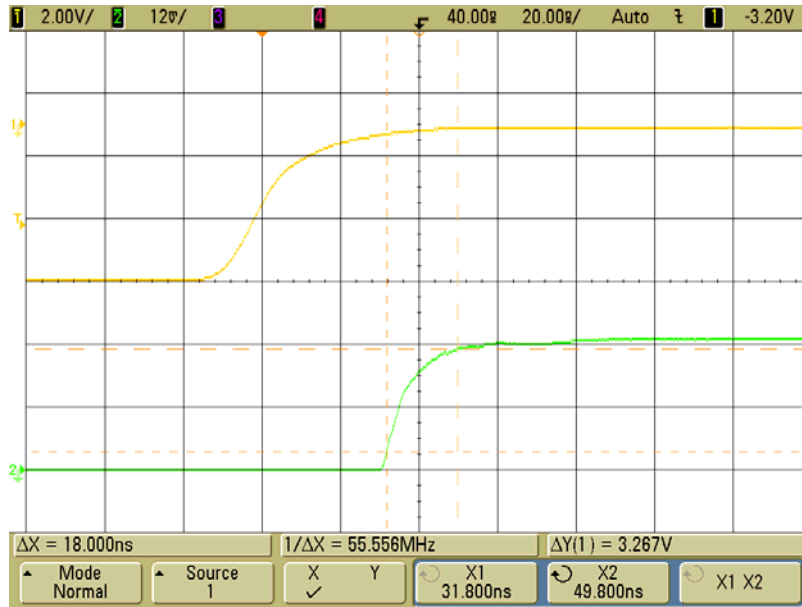
Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



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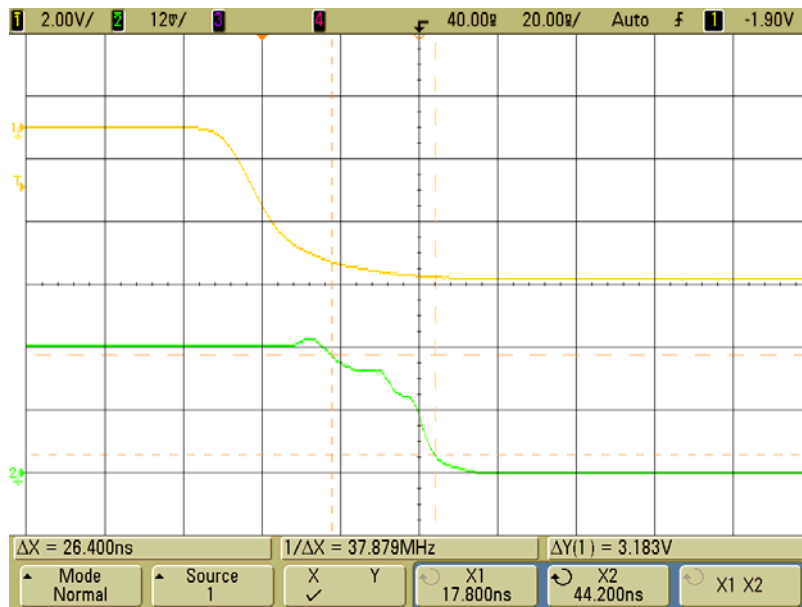
PL17346/1524

**Switching Speed RX Channel 4 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed RX Channel 4 OFF**



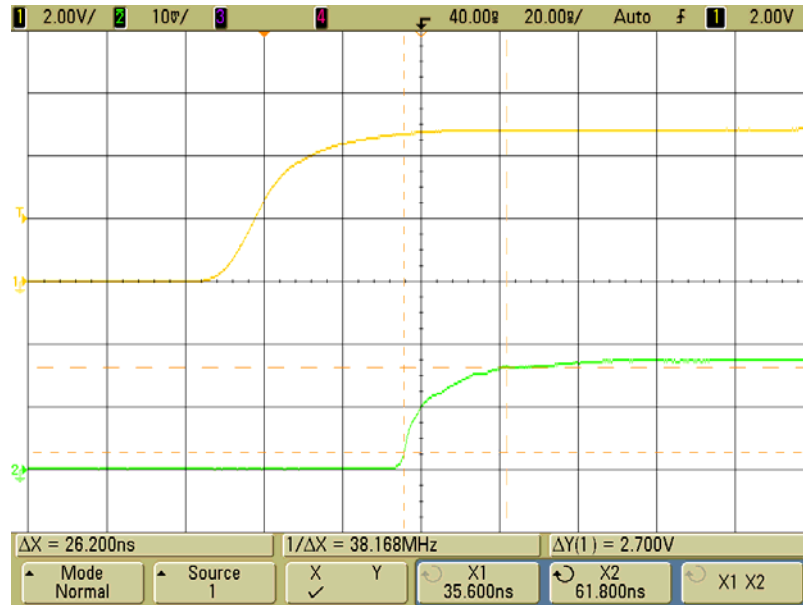
Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



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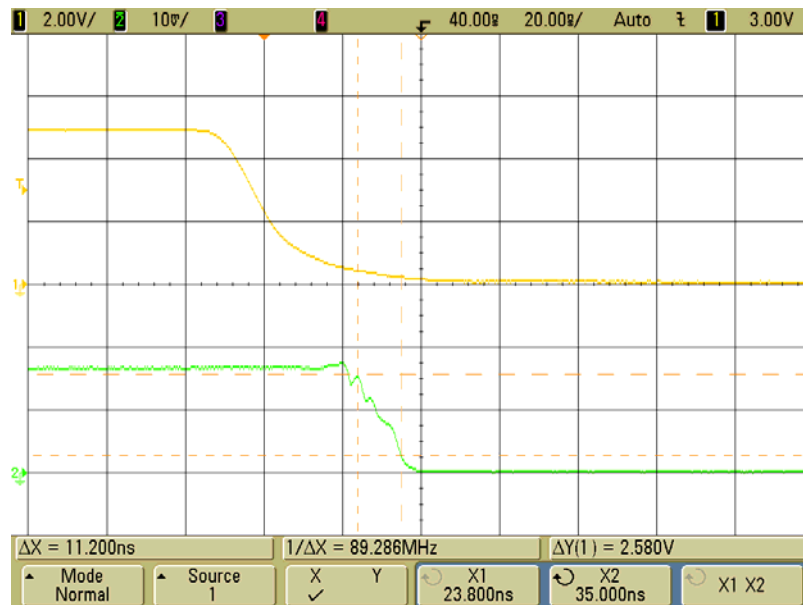
PL17346/1524

**Switching Speed RX Channel 5 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed RX Channel 5 OFF**



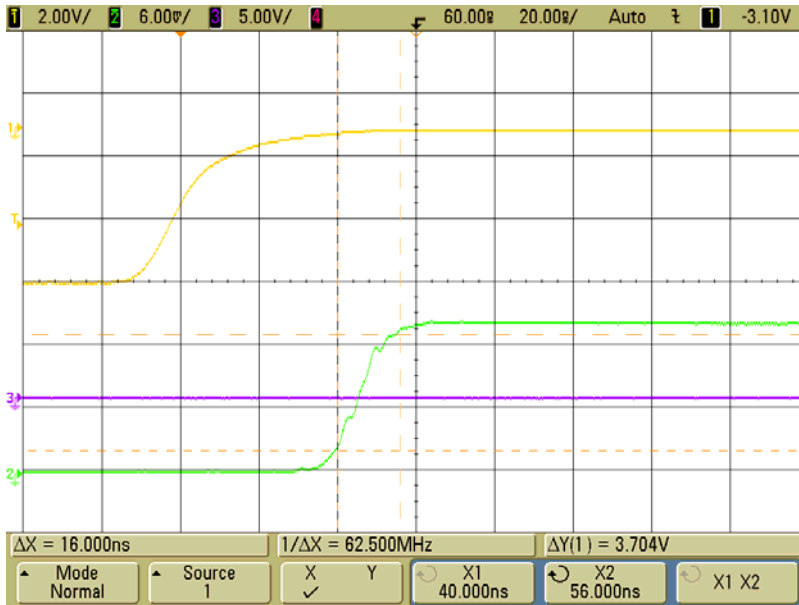
Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



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

PL17346/1524

**Switching Speed BIT Channel 1 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed BIT Channel 1 OFF**



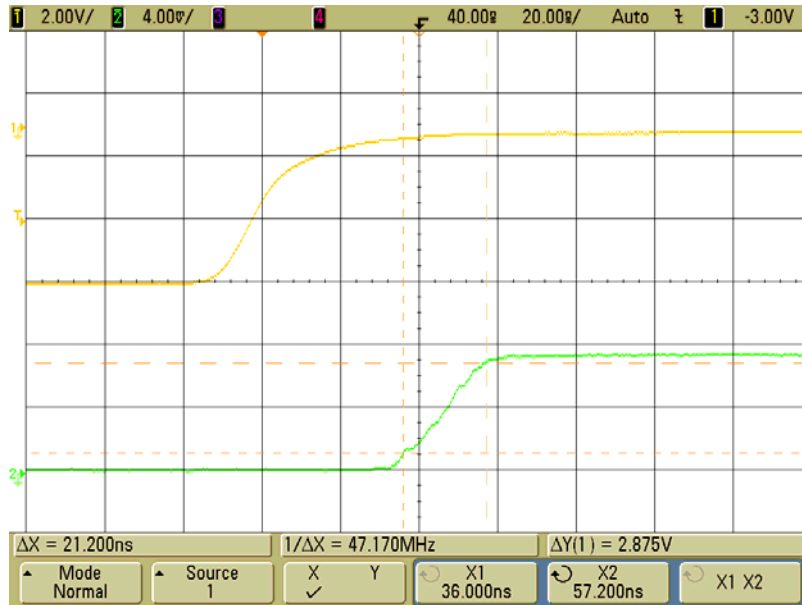
Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



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

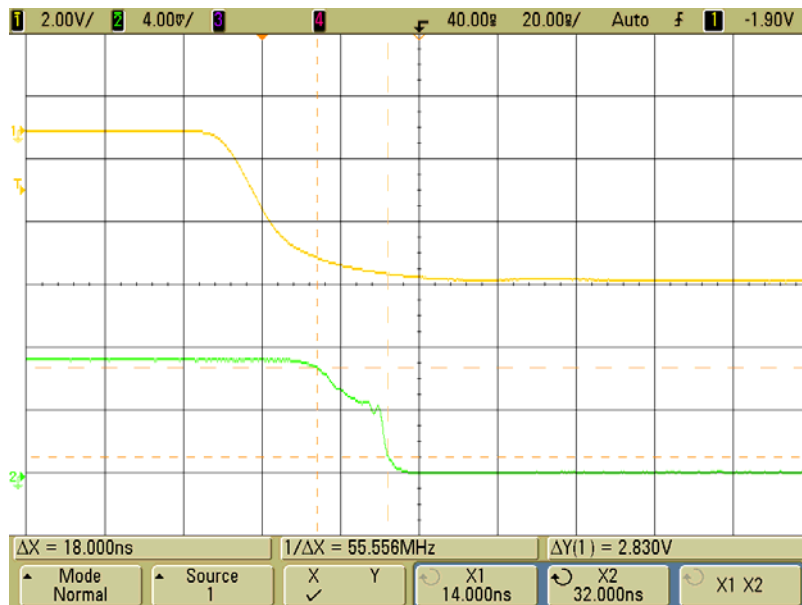
PL17346/1524

**Switching Speed BIT Channel 2 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed BIT Channel 2 OFF**



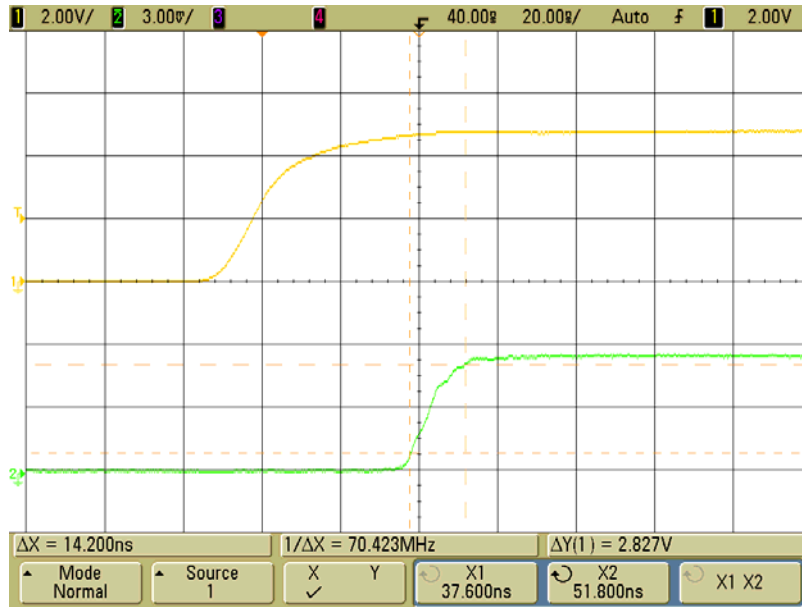
Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



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

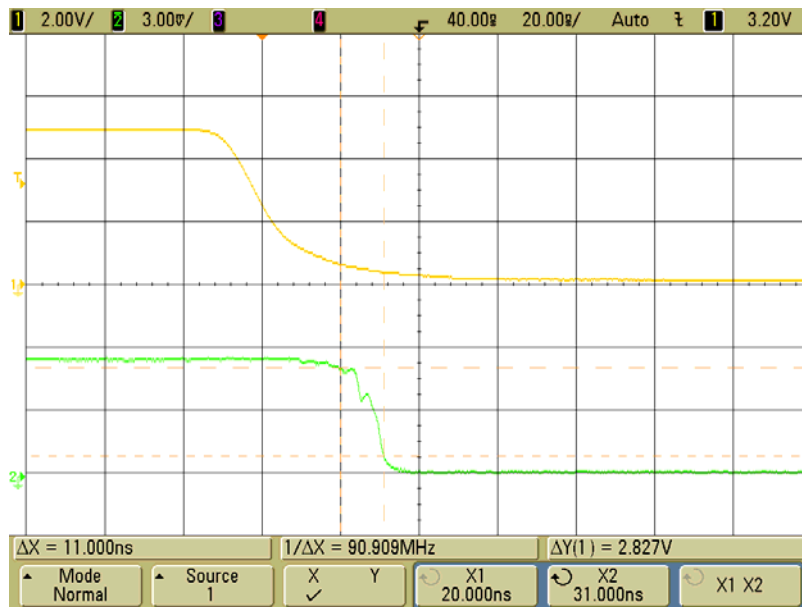
PL17346/1524

**Switching Speed BIT Channel 3 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed BIT Channel 3 OFF**



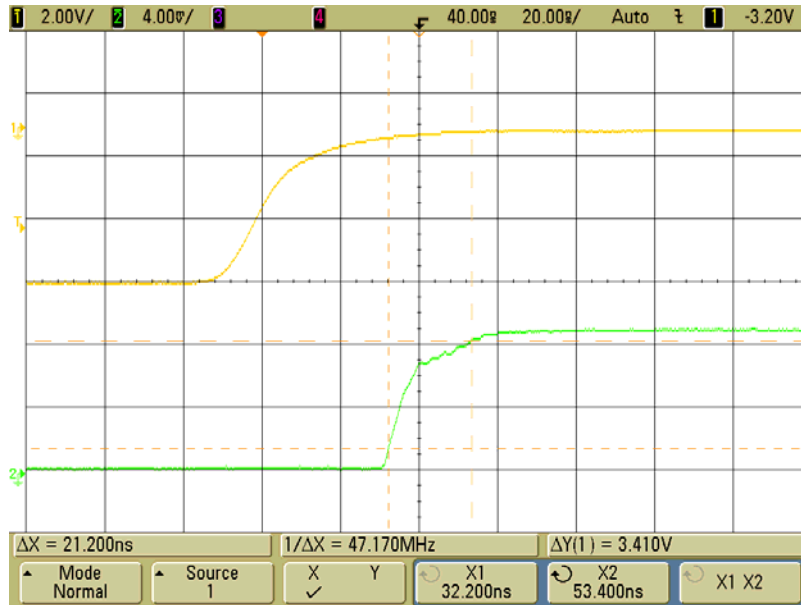
Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



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

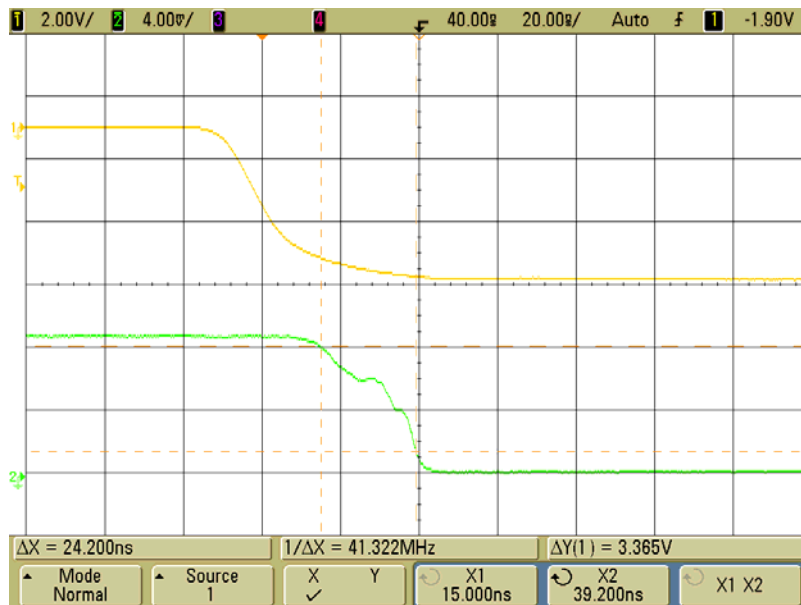
PL17346/1524

**Switching Speed BIT Channel 4 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed BIT Channel 4 OFF**



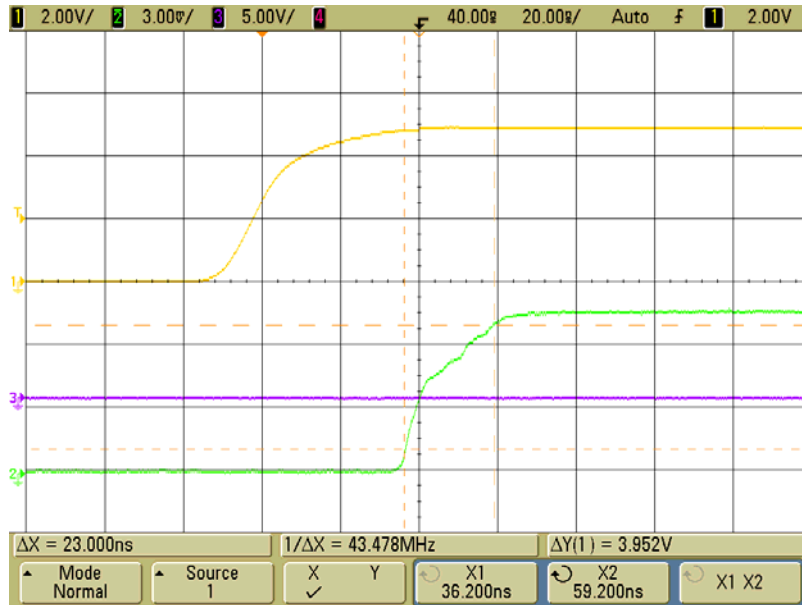
Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



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

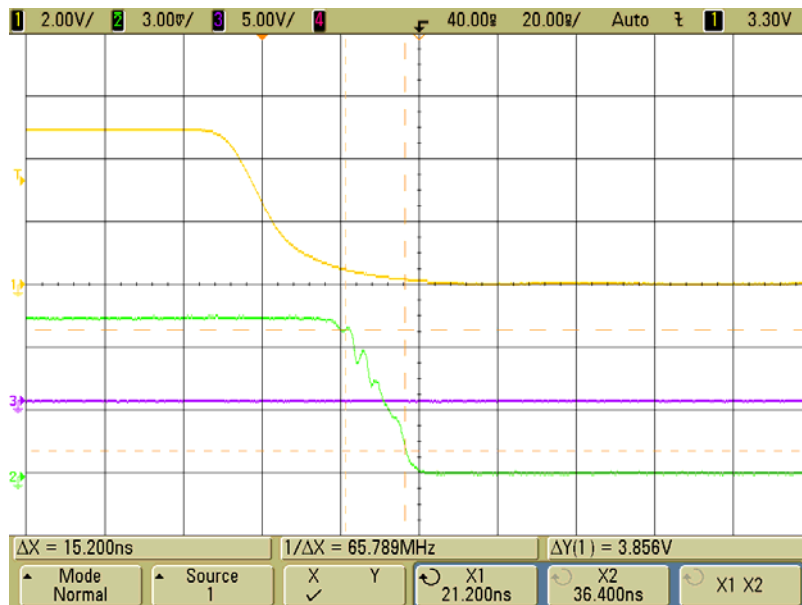
PL17346/1524

**Switching Speed BIT Channel 5 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed BIT Channel 5 OFF**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

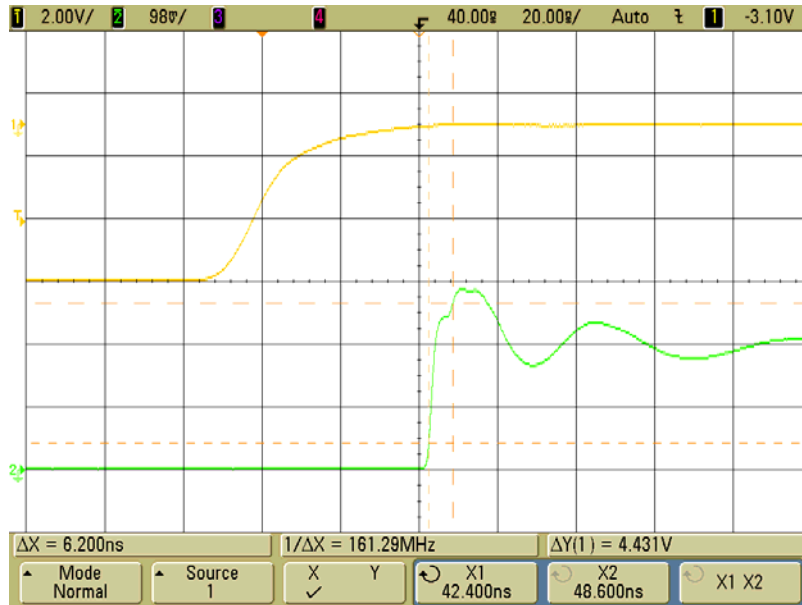




**SUMMARY TEST DATA  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

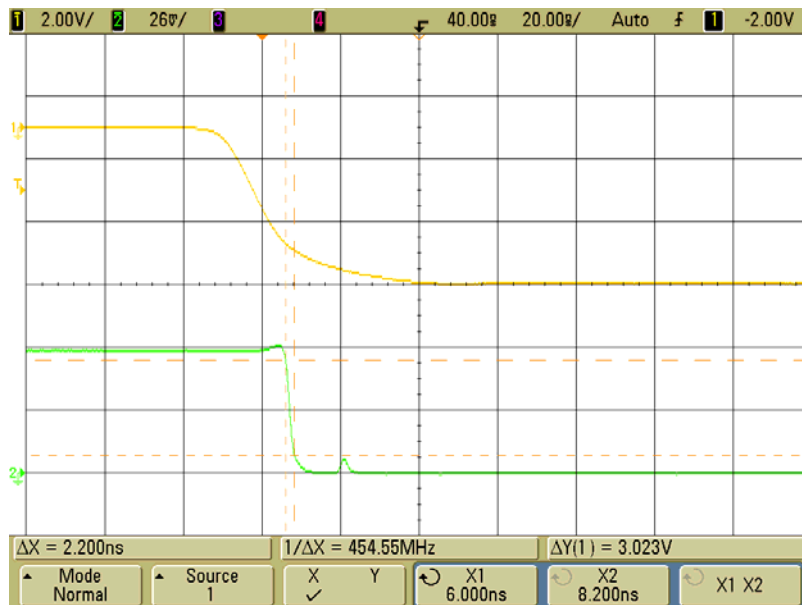
PL17346/1524

**Switching Speed TX Channel 1 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed TX Channel 1 OFF**



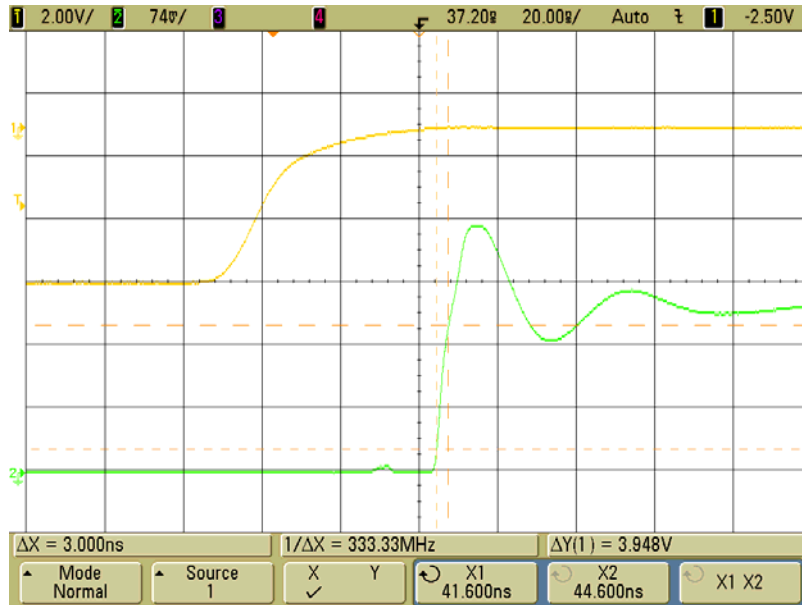
Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



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

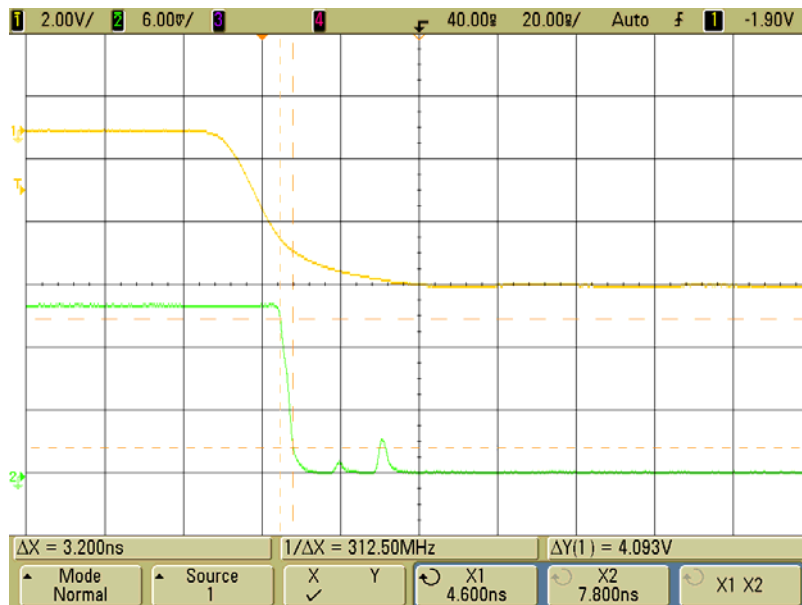
PL17346/1524

**Switching Speed TX Channel 2 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed TX Channel 2 OFF**



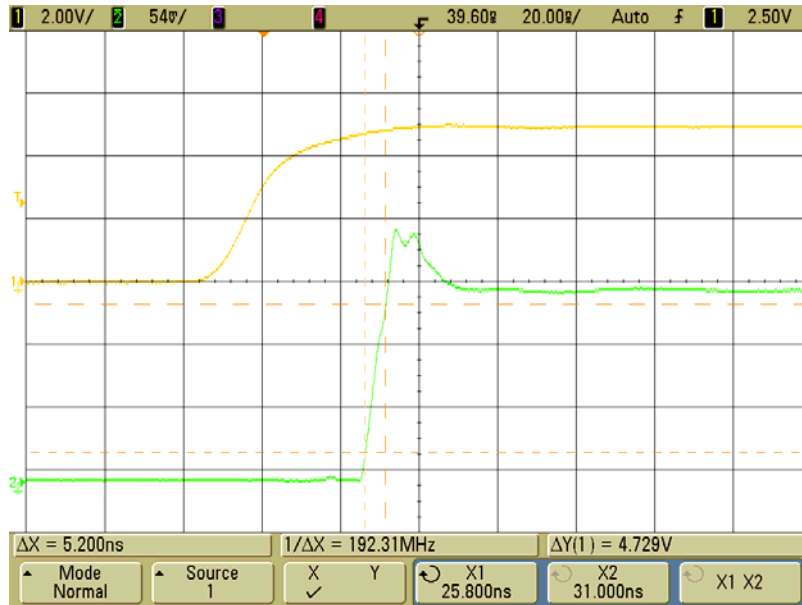
Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



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

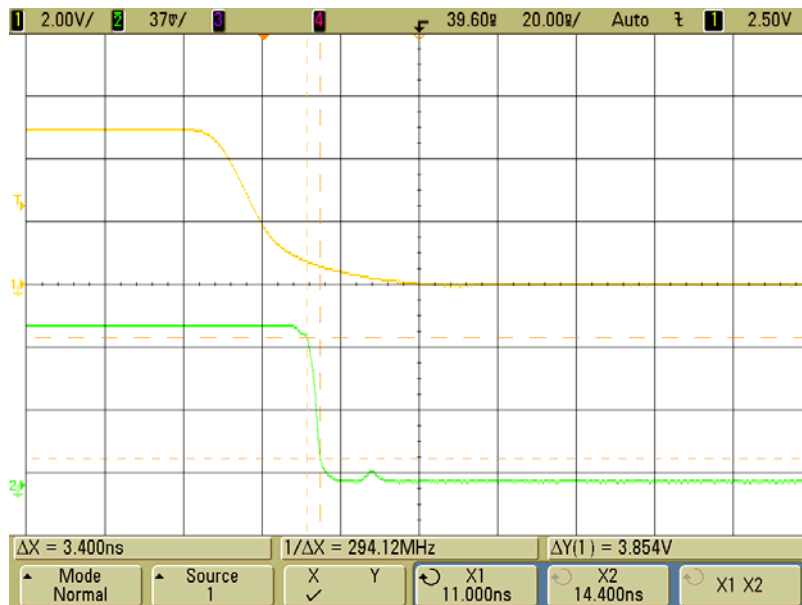
PL17346/1524

**Switching Speed TX Channel 3 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed TX Channel 3 OFF**



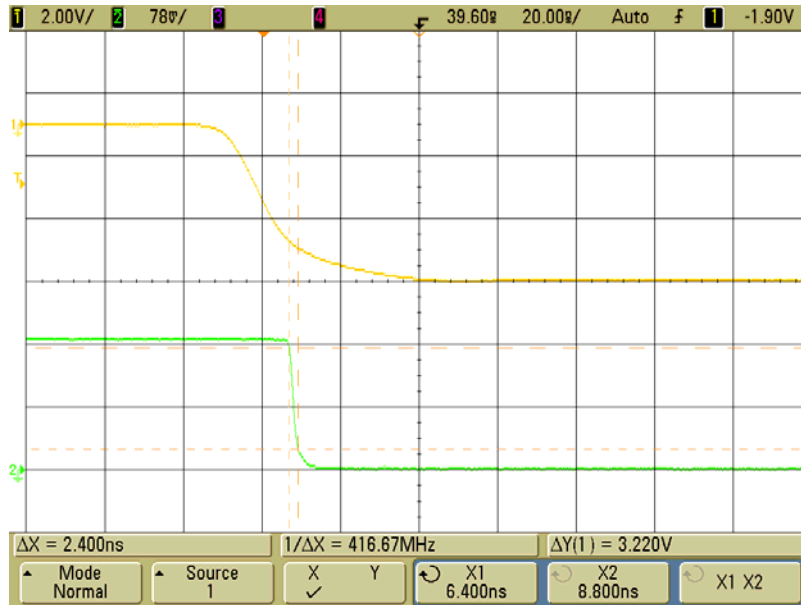
Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



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

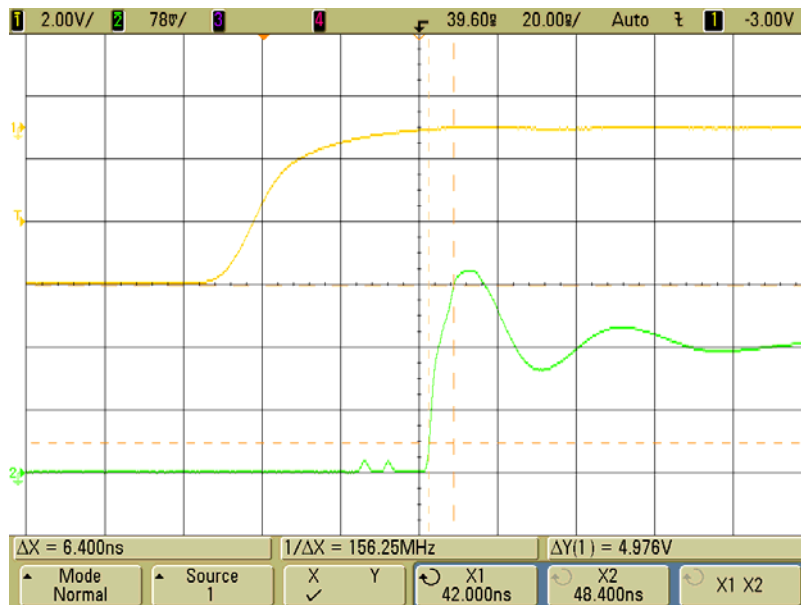
PL17346/1524

**Switching Speed TX Channel 4 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed TX Channel 4 OFF**



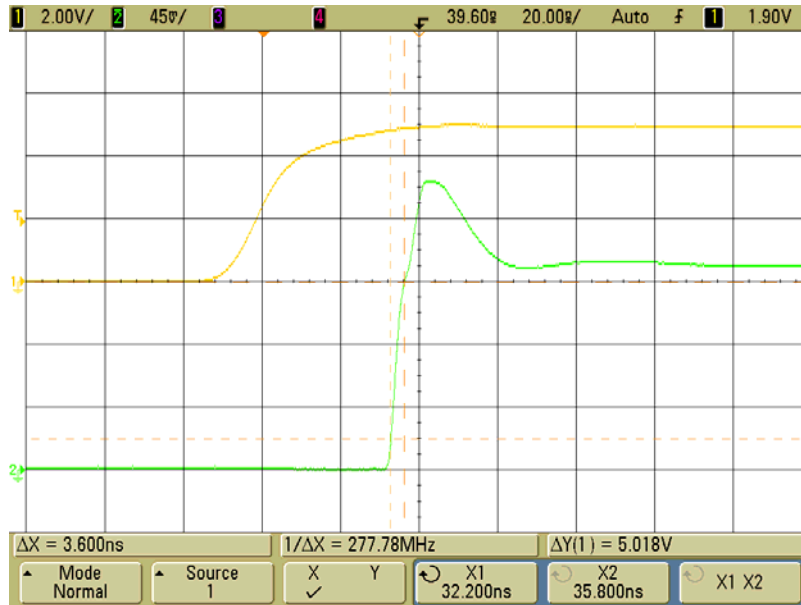
Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



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

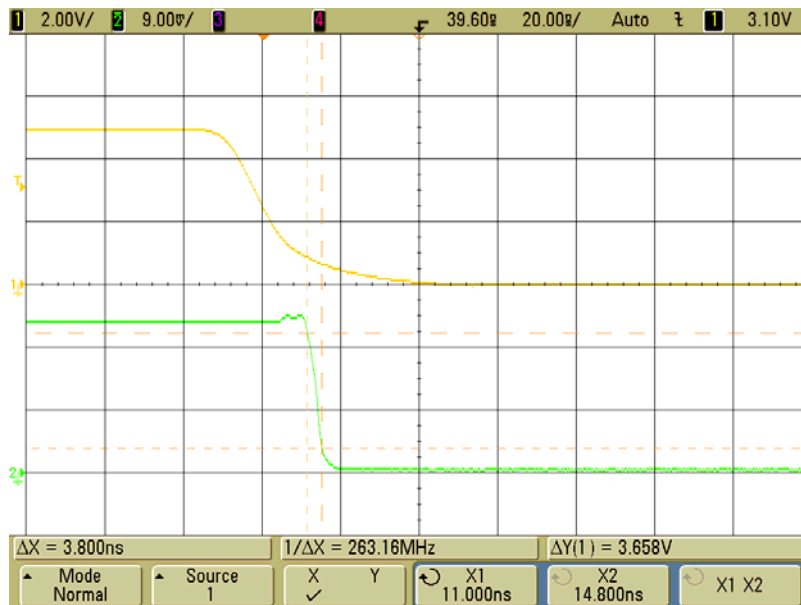
PL17346/1524

**Switching Speed TX Channel 5 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed TX Channel 5 OFF**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



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

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

