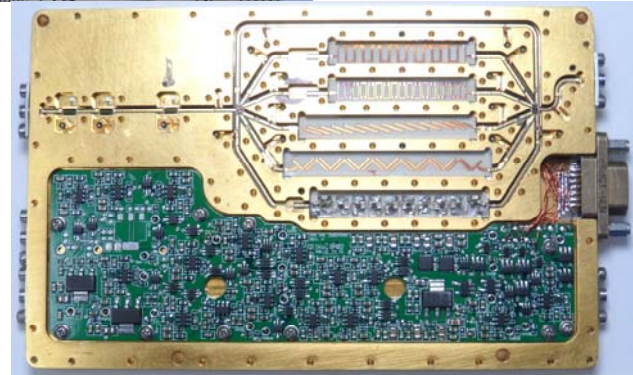
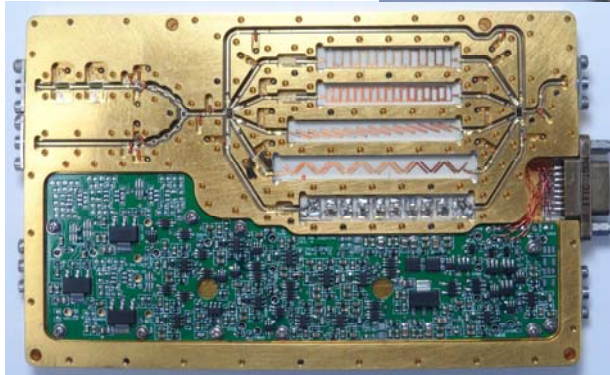
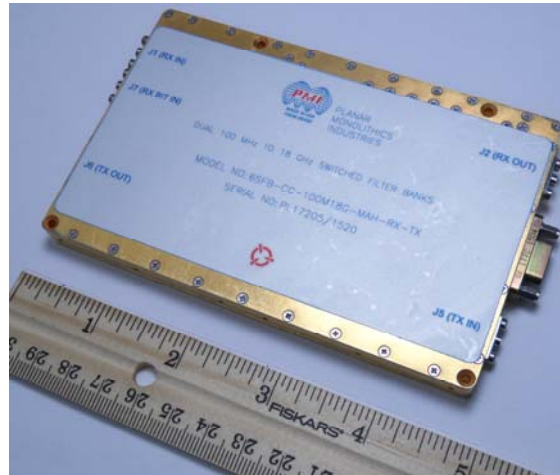




## TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

PMI MODEL NUMBER 6SFB-CC-100M18G-MAH-RX-TX IS AN INTEGRATED MODULE CONTAINING TWO 6-CHANNEL SWITCHED FILTER BANKS COVERING 100 MHz TO 18 GHz. A RECEIVE SWITCHED FILTER BANK HAS 2 INPUTS, ONE WITH 18 dB GAIN AND ONE WITH 10 dB INSERTION LOSS. THE ABSORPTIVE INPUT SWITCH HAS 100 dB ISOLATION BETWEEN THE 2 INPUTS. A TRANSMIT SWITCHED FILTER BANK HAS 32 dB TYPICAL GAIN WHILE ALLOWING 1 OF 6 FILTER PATHS TO BE CHOSEN. BOTH FILTER BANKS CAN BE USED SIMULTANEOUSLY IN DIFFERENT BANDS. THE UNIT MEASURES ONLY 4.80" X 3.08" X 0.365".



April 29, 2015

Project Engineer:  
Dave Durbin

Drafted By:  
Dave Durbin

Assembled By:  
Rose Routhier

Tested By:  
Fabio Hoyos, Sebastian Palacio, Bob Wakenight

Page 1 of 42



**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

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- S-Parameter Data J7 (RX BIT IN) to J2 (RX OUT)..... Pages 15 to 20
- S-Parameter Data J5 (TX IN) to J6 (TX OUT)..... Pages 21 to 26
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- Switching Speed J7 (RX BIT IN) to J2 (RX OUT)..... Pages 32 to 36
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- Isolation J1 (RX IN) to J7 (RX BIT IN)..... Page 42



# TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

## OUTLINE DRAWING

REVISIONS				
DATE	BY	DESCRIPTION	APP'D	APP'D
	AL	ORIGINAL RELEASE		
	RS	ECN# 15-0015		

**DESCRIPTION**

PMI MODEL NUMBER 6SFB-CC-100M18G-MAH-RX-TX IS AN INTEGRATED MODULE CONTAINING TWO CHANNEL SWITCHED FILTER BANKS COVERING 100 MHz TO 18 GHz. A RECEIVE SWITCHED FILTER BANK HAS 2 INPUTS, ONE WITH 18 dB GAIN AND ONE WITH 10 dB INSERTION LOSS. THE ABSORPTIVE INPUT SWITCH HAS 100 dB ISOLATION BETWEEN THE 2 INPUTS. A TRANSMIT SWITCHED FILTER BANK HAS 32 dB TYPICAL GAIN WHILE ALLOWING 1 OF 6 FILTER PATHS TO BE CHOSEN, BOTH FILTER BANKS CAN BE USED SIMULTANEOUSLY IN DIFFERENT BANDS, THE UNIT MEASURES ONLY 4.80" X 3.06" X 0.365".

**SPECIFICATIONS:**

- INPUTS:**
  - J1 INPUTS: RF RECEIVE INPUT
    - FREQUENCY: 100 MHz TO 18.0 GHz
    - POWER LEVEL: -80 dBm TO +10 dBm
  - J5 INPUT: RF TRANSMIT INPUT
    - FREQUENCY: 100 MHz TO 18.0 GHz
    - POWER LEVEL: -15 dBm TO +20 dBm TYPICAL
  - J7 INPUT: RF BUILT-IN-TEST (BIT) RECEIVE INPUT
    - FREQUENCY: 100 MHz TO 18.0 GHz
    - POWER LEVEL: -15 dBm TO +20 dBm TYPICAL
- OUTPUTS:**
  - J2 OUTPUT: RF RECEIVE OUTPUT
    - FREQUENCY: 100 MHz TO 18.0 GHz
    - POWER LEVEL: -42 dBm TO +8 dBm TYPICAL
  - J6 OUTPUT: RF TRANSMIT OUTPUT
    - FREQUENCY: 100 MHz TO 18.0 GHz
    - POWER LEVEL: 0 dBm TO +10 dBm TYPICAL

**RECEIVE SWITCHED FILTER BANK:**

- J1 PATH GAIN: 18 dB TYPICAL
- J7 PATH INSERTION LOSS: 10 dB TYPICAL
- ISOLATION: J1, J7 100 dB

**TRANSMIT SWITCHED FILTER BANK:**

- GAIN: 32 dB TYPICAL

**RECEIVE AND TRANSMIT SWITCHED FILTER BANKS:**

- VSWR OVER 90% PASSBAND: 2:1 MAX
- SWITCHING SPEED: 100 ns TYPICAL
- THRU CHANNEL PASSBAND: 100 MHz TO 18 GHz
- CHANNEL 1 CENTER FREQUENCY: 3400 MHz
  - 3 dB BANDWIDTH: 2000 MHz
  - REJECTION: -40 dBc TYP 100 MHz ± 2 GHz, -30 dBc MIN
  - 40 dBc TYP 3.6 GHz ± 18 GHz, -30 dBc MIN
- CHANNEL 2 CENTER FREQUENCY: 5400 MHz
  - 3 dB BANDWIDTH: 2000 MHz
  - REJECTION: -40 dBc TYP 100 MHz ± 4 GHz, -30 dBc MIN
  - 40 dBc TYP 6.8 GHz ± 18 GHz, -30 dBc MIN
- CHANNEL 3 CENTER FREQUENCY: 7400 MHz
  - 3 dB BANDWIDTH: 2000 MHz
  - REJECTION: -40 dBc TYP 100 MHz ± 6 GHz, -30 dBc MIN
  - 40 dBc TYP 9.8 GHz ± 18 GHz, -30 dBc MIN
- CHANNEL 4 CENTER FREQUENCY: 9400 MHz
  - 3 dB BANDWIDTH: 2000 MHz
  - REJECTION: -40 dBc TYP 100 MHz ± 8 GHz, -30 dBc MIN
  - 40 dBc TYP 12.8 GHz ± 18 GHz, -30 dBc MIN
- CHANNEL 5 CENTER FREQUENCY: 11400 MHz
  - 3 dB BANDWIDTH: 2000 MHz
  - REJECTION: -40 dBc TYP 100 MHz ± 10 GHz, -30 dBc MIN
  - 40 dBc TYP 15.8 GHz ± 18 GHz, -30 dBc MIN

- CONTROL LOGIC:** TTL (V<sub>I</sub>: 0 - 0.8 VOLTS), '1' 2 - 5 VOLTS
- TTL 1:** RECEIVE FILTER BANK INPUT SELECT
  - 0: RX INPUT (J1)
  - 1: RX BUILT-IN-TEST INPUT (J7)
- TTL 2:** RECEIVE FILTER SELECT
  - 000: THRU CHANNEL
  - 001: CHANNEL 1
  - 010: CHANNEL 2
  - 011: CHANNEL 3
  - 100: CHANNEL 4
  - 101: CHANNEL 5
  - 110: NOT DEFINED
  - 111: NOT DEFINED
- TTL 8:** TRANSMIT FILTER SELECT
  - 000: THRU CHANNEL
  - 001: CHANNEL 1
  - 010: CHANNEL 2
  - 011: CHANNEL 3
  - 100: CHANNEL 4
  - 101: CHANNEL 5
  - 110: NOT DEFINED
  - 111: NOT DEFINED
- POWER SUPPLIES:**
  - +12V: 600 mA MAX
  - +5V: 550 mA MAX
  - +3.3V: 0 mA \*NOT NEEDED
  - 12V: 300 mA MAX
- SIZE:** 4.80" x 3.06" x 0.365"
- RF CONNECTORS:** SMPM (F)
- FINISH:** GOLD PLATED

PIN	FUNCTION
1	TTL1
2	TTL2A (LSB)
3	TTL2B
4	TTL2C
5	TTL8A (LSB)
6	TTL8B
7	TTL8C
8	GND
9	+12V
10	GND
11	+5V
12	GND
13	+3.3V
14	GND
15	-12V

**PLANAR MONOLITHICS INDUSTRIES, INC.**  
7311-F GROVE ROAD  
FREDERICK, MARYLAND 21704 USA  
TEL: 301-662-5019 FAX: 301-662-1731  
WEBSITE: www.pmi-rf.com  
E-MAIL: sales@pmi-rf.com  
ISO 9001 CERTIFIED

**PMI CONFIDENTIAL AND PROPRIETARY**

APPROVALS	DATE
DESIGN: <i>[Signature]</i>	02/16/18
REVIEW:	
TEST:	

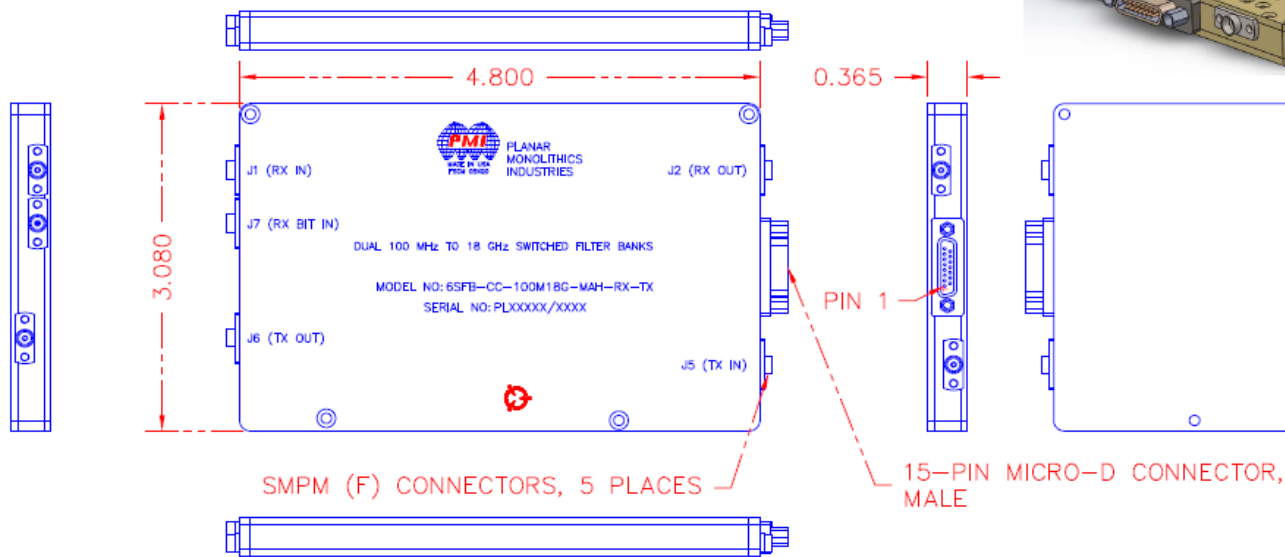
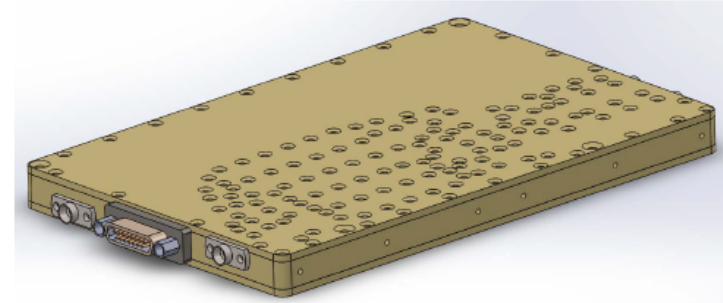
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SCALE: N/S			1 OF 3



**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

**MECHANICAL OUTLINE:**

REVISIONS			
SIZE	EDITION	DATE	APPROVED
A1	ORIGINAL RELEASE	12/22/14	
B1	ECN# 15-0015	8/11/15	



PMI CONFIDENTIAL AND PROPRIETARY

ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
X.XX ±0.020  
X.XXX ±0.010

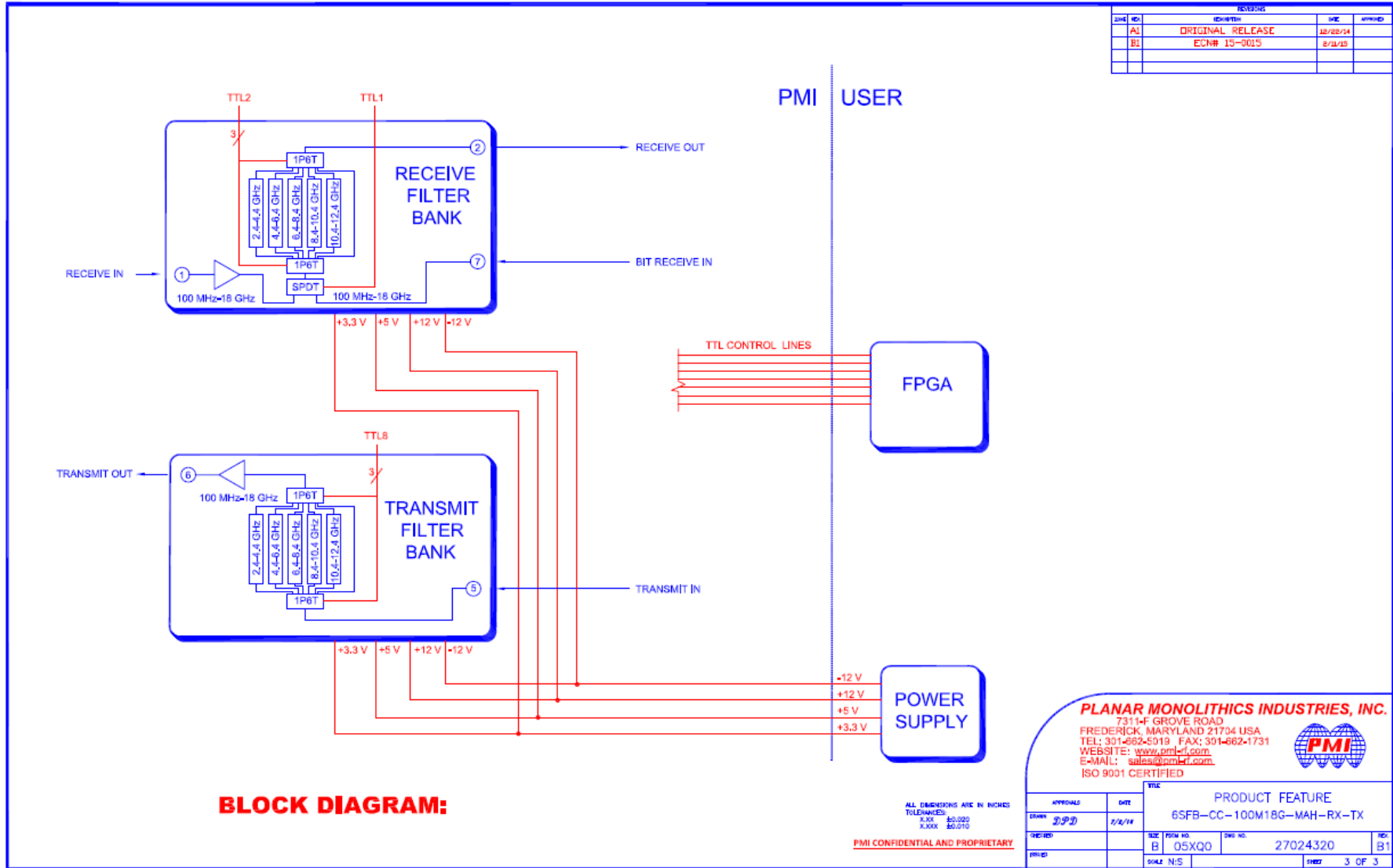
**PLANAR MONOLITHICS INDUSTRIES, INC.**  
7311-F GROVE ROAD  
FREDERICK, MARYLAND 21704 USA  
TEL: 301-662-5019 FAX: 301-662-1731  
WEBSITE: [www.pmlrf.com](http://www.pmlrf.com)  
E-MAIL: [sales@pmlrf.com](mailto:sales@pmlrf.com)  
ISO 9001 CERTIFIED



APPROVALS	DATE	TITLE		
DESIGN: <i>DPD</i>	8/2/15	PRODUCT FEATURE		
CHECKED:		6SFB-CC-100M18G-MAH-RX-TX		
DRAWN:		SIZE: FROM NO.	QWS NO.	REV:
		B 05X00	27024320	B1
		SCALE: N:S	HEET: 2 OF 3	



## TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX





**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

**SUMMARY DATA**

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>65dBm to +15dBm</b>	
9	J6 Output Frequency (RF TX Output)	100MHz-18.0GHz	<b>100MHz-18.0GHz</b> See Plot	
10	J6 Output Power with J5 Input -28dBm	0dBm to +10dBm Typical	<b>+2dBm to +12dB</b>	
11	J1 RX Path Gain	18dB Typical	<b>14dB to 27dB</b>	
12	J7 RX BIT Path Insertion Loss	10dB Typical	<b>5dB to 14dB</b>	
13	(J1 to J2) to (J7 to J2) RX Isolation	100dB Typical	<b>117.68dB</b> See Plot	
14	J5 TX Path Gain	32dB Typical	<b>30dB to 40dB</b>	
15	VSWR Over 90% Passband	2 : 1 Maximum	<b>2.0:1</b> See Plots	
16	Switching Speed	100ns Typical	<b>75.0ns</b> See Plots	



**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

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>-56.41dBc</b> See Plot	
		-40dBc Typical, -30dBc Minimum 4.8GHz-18.0GHz	<b>-51.99dBc</b> See Plot	
21	Channel 1 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-2.0GHz,	<b>-54.51dBc</b> See Plot	
		-40dBc Typical, -30dBc Minimum 4.8GHz-18.0GHz	<b>-54.63dBc</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>-50.20dBc</b> See Plot	
		-40dBc Typical, -30dBc Minimum 6.8GHz-18.0GHz	<b>-38.21dBc</b> See Plot	
25	Channel 2 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-4.0GHz,	<b>-66.58dBc</b> See Plot	
		-40dBc Typical, -30dBc Minimum 6.8GHz-18.0GHz	<b>-38.01dBc</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>-66.39DBc</b> See Plot	
		-40dBc Typical, -30dBc Minimum 8.8GHz-18.0GHz	<b>-35.67dBc</b> See Plot	





**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

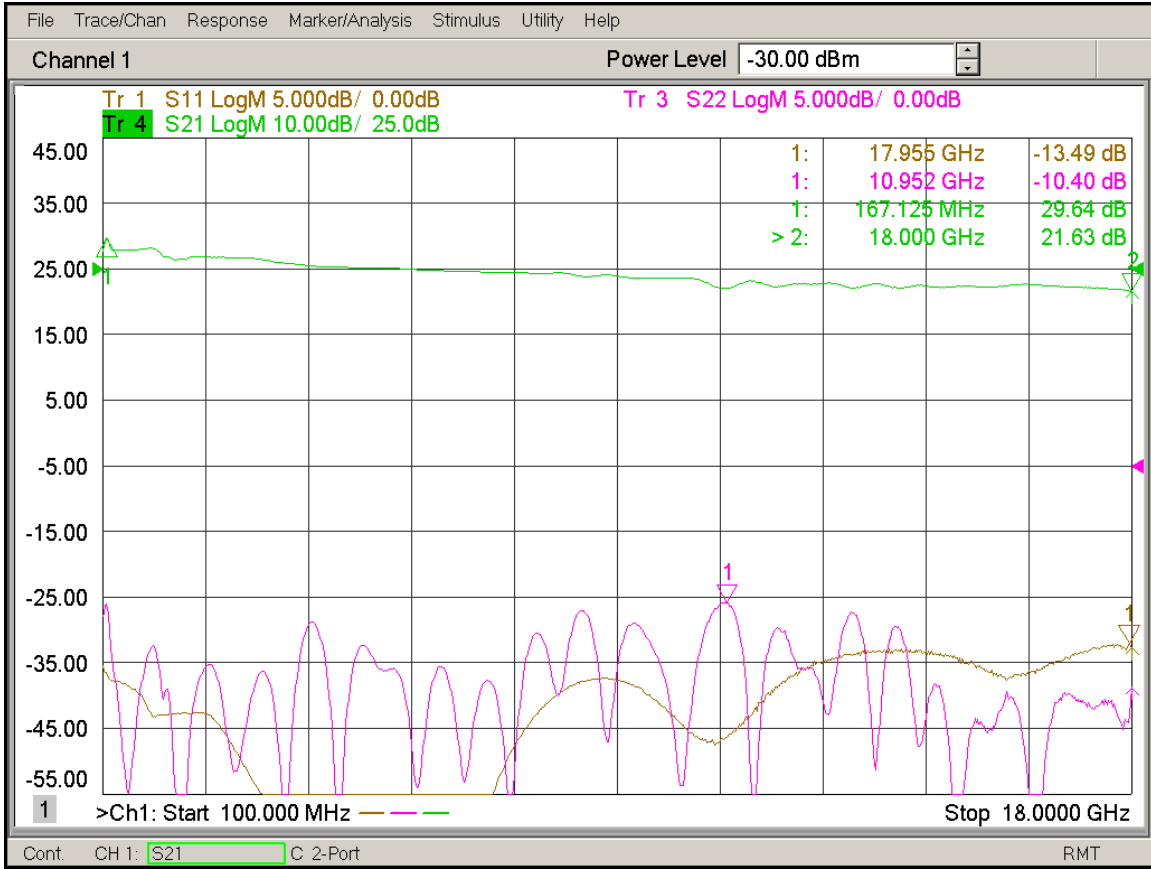
29	Channel 3 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-6.0GHz,	<b>-61.82dBc</b> See Plot	
		-40dBc Typical, -30dBc Minimum 8.8GHz-18.0GHz	<b>-35.80dBc</b> See Plot	
30	Channel 4 Center Frequency	9400MHz	<b>9400MHz</b>	
31	Channel 4 3dB Bandwidth	2000MHz	<b>2000MHz</b>	
32	Channel 4 RX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-8.0GHz,	<b>-44.84dBc</b> See Plot	
		-40dBc Typical, -30dBc Minimum 10.8GHz-18.0GHz	<b>-39.34dBc</b> See Plot	
33	Channel 4 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-8.0GHz,	<b>-56.00dBc</b> See Plot	
		-40dBc Typical, -30dBc Minimum 10.8GHz-18.0GHz	<b>-37.06dBc</b> See Plot	
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,	<b>-49.19dBc</b> See Plot	
		-40dBc Typical, -30dBc Minimum 12.8GHz-18.0GHz	<b>-36.17Bc</b> See Plot	
37	Channel 5 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-10.0GHz,	<b>-54.53dBc</b> See Plot	
		-40dBc Typical, -30dBc Minimum 12.8GHz-18.0GHz	<b>-39.07dBc</b> See Plot	
38	Control Logic	TTL '0': 0V to 0.8V TTL '1': 2V to 5V	<b>Pass</b>	
39	Power Supplies	+12V @ 600mA Max +5V @ 550mA Max +3.3V @ 0A -12V @ 300mA Max	<b>+12V @ 471mA</b> <b>+5V @ 115mA</b> <b>+3.3V @ 0mA</b> <b>-12V @ 132mA</b>	





**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

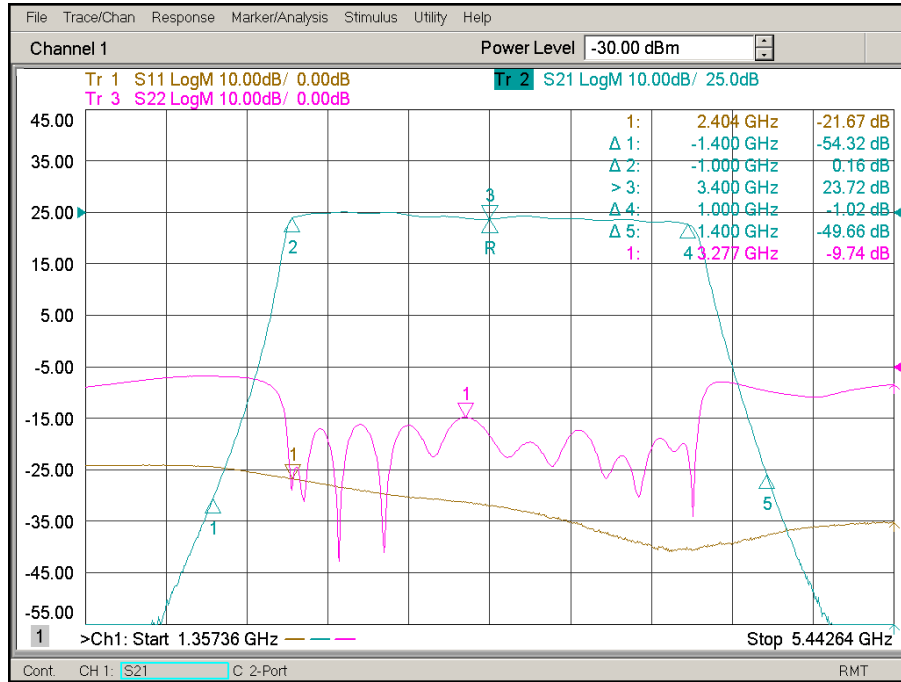
**RX Thru Path (J1 RX IN)**



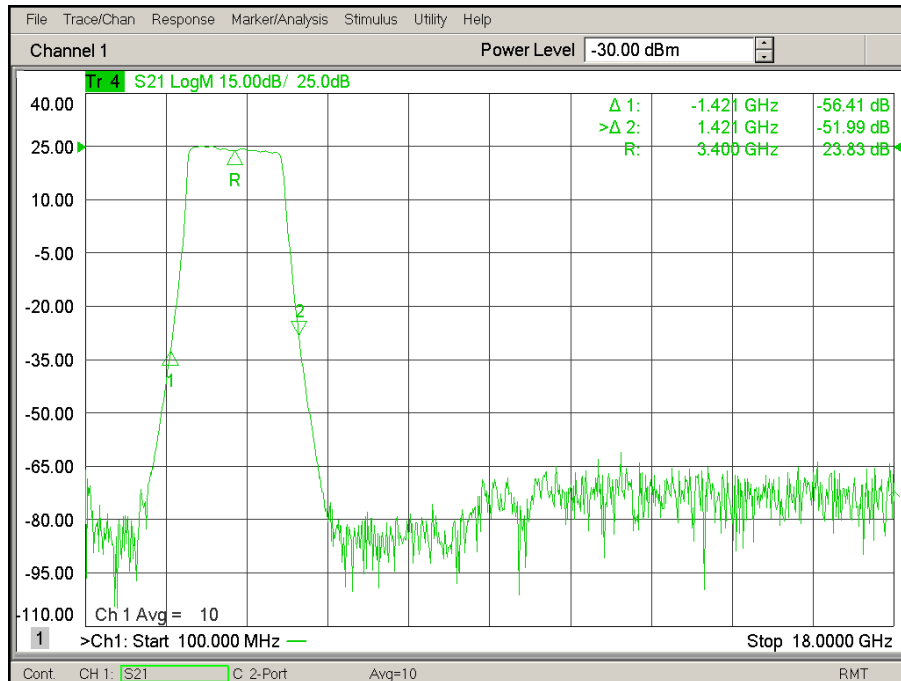


## TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

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



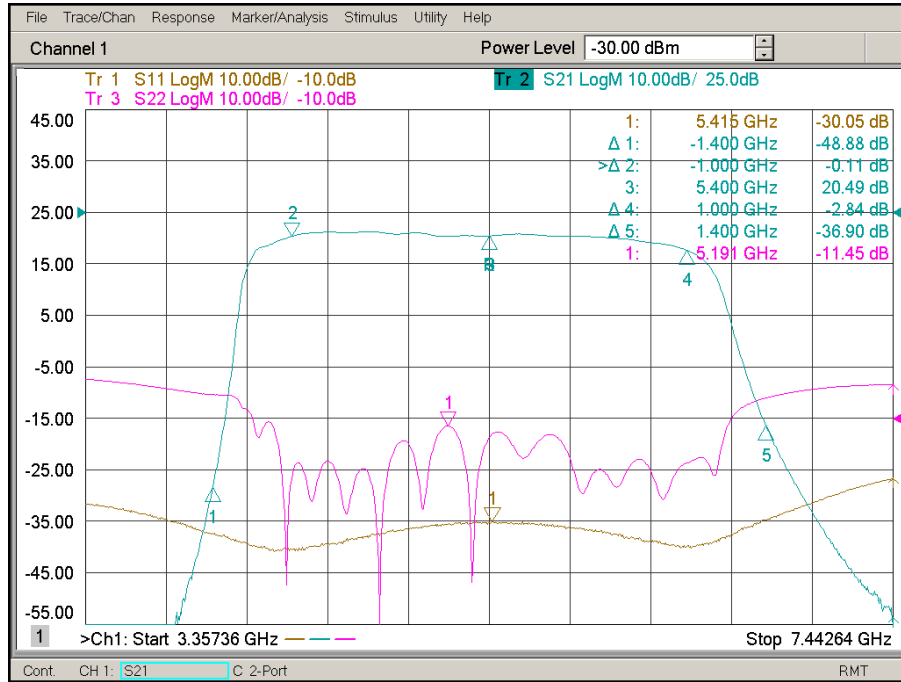
### RX Ch1 Path Broadband (J1 RX IN)



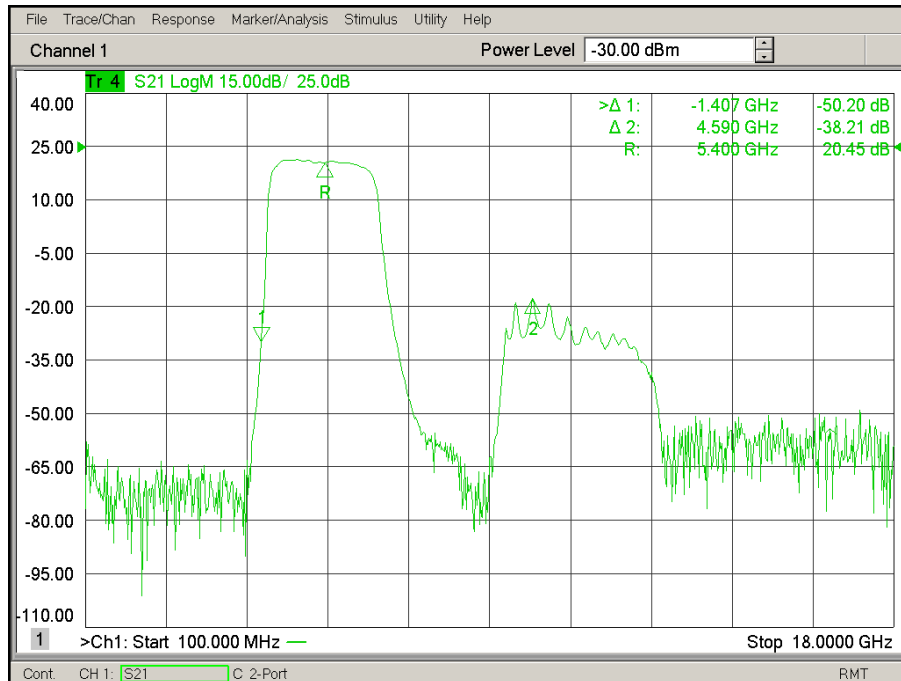


## TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

### RX Ch2 Path Narrow Band (J1 RX IN)



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



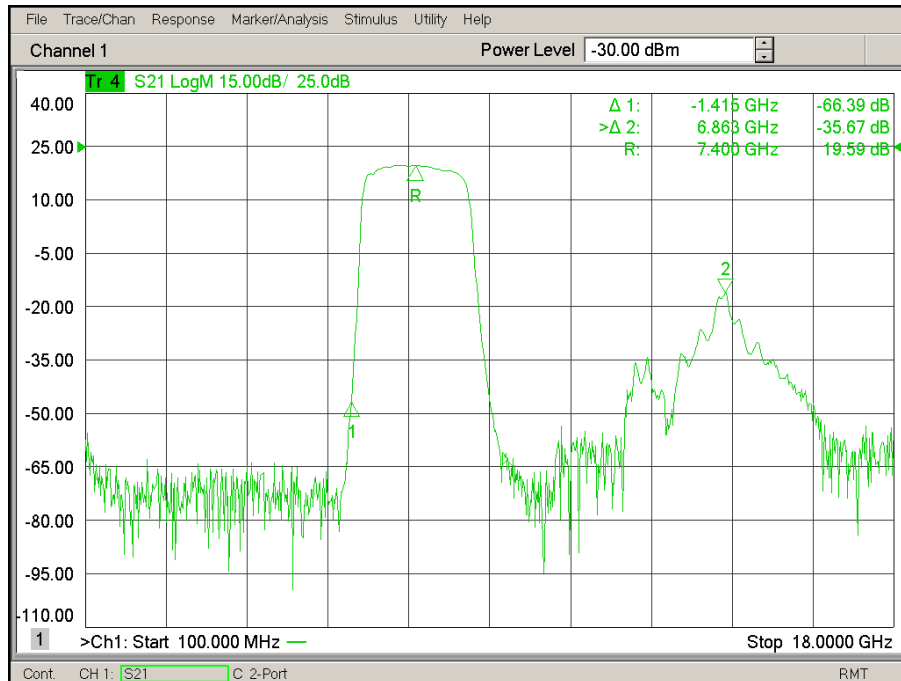


## TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

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



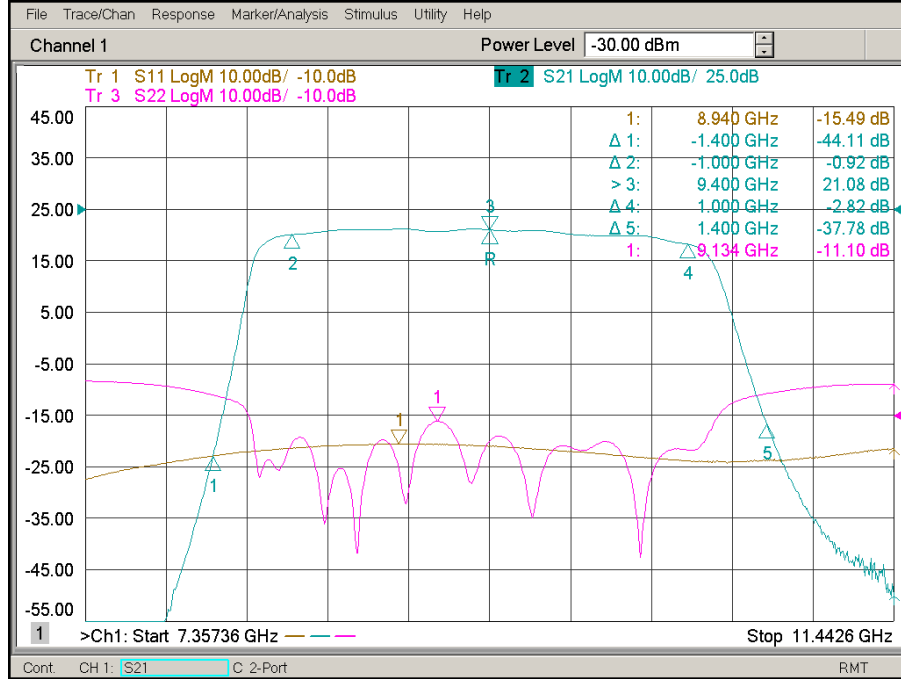
### RX Ch3 Path Broadband (J1 RX IN)



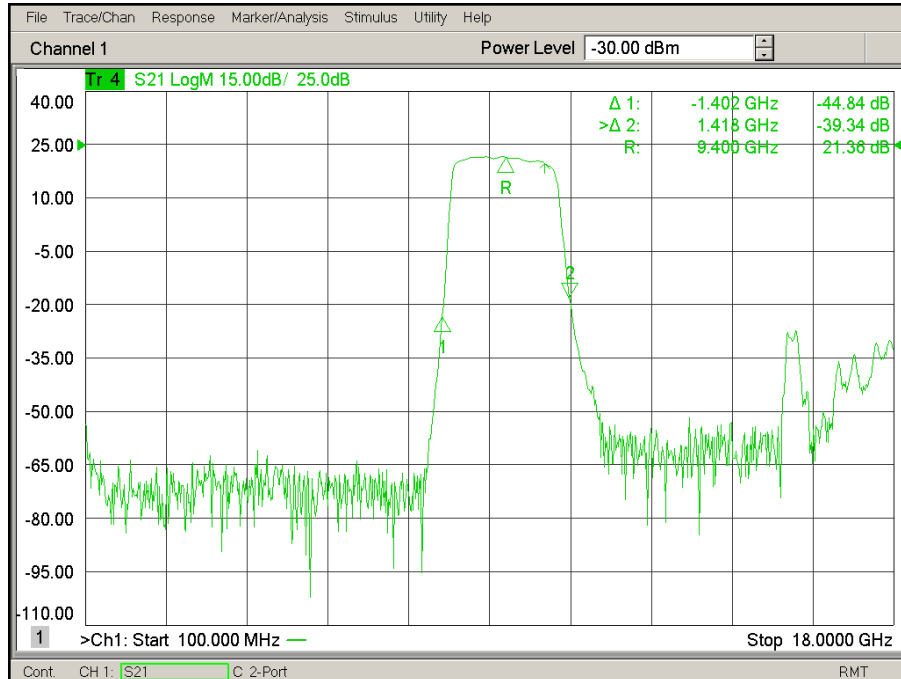


## TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

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



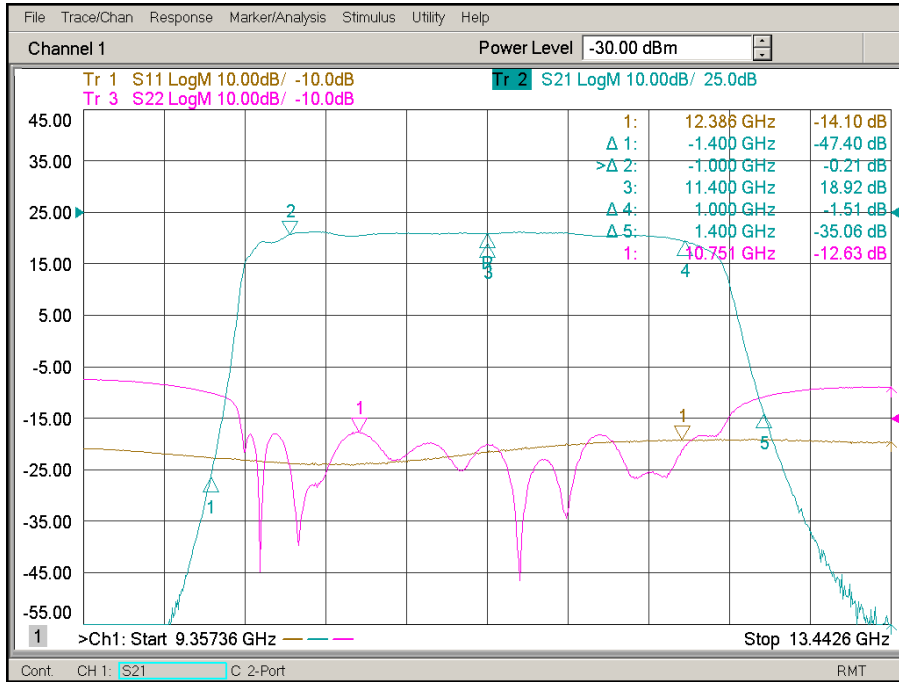
### RX Ch4 Path Broadband (J1 RX IN)



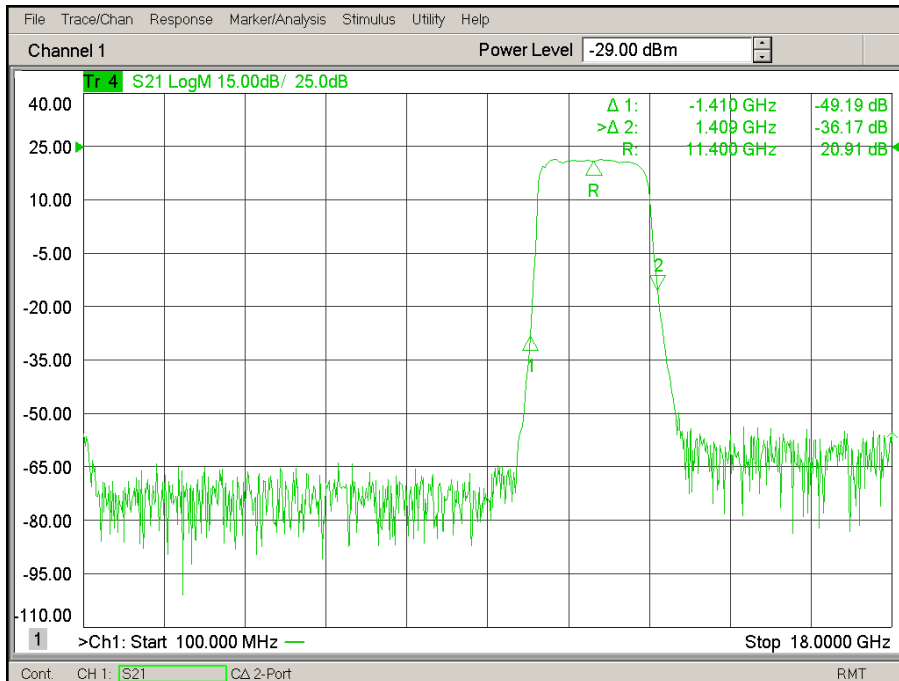


## TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

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



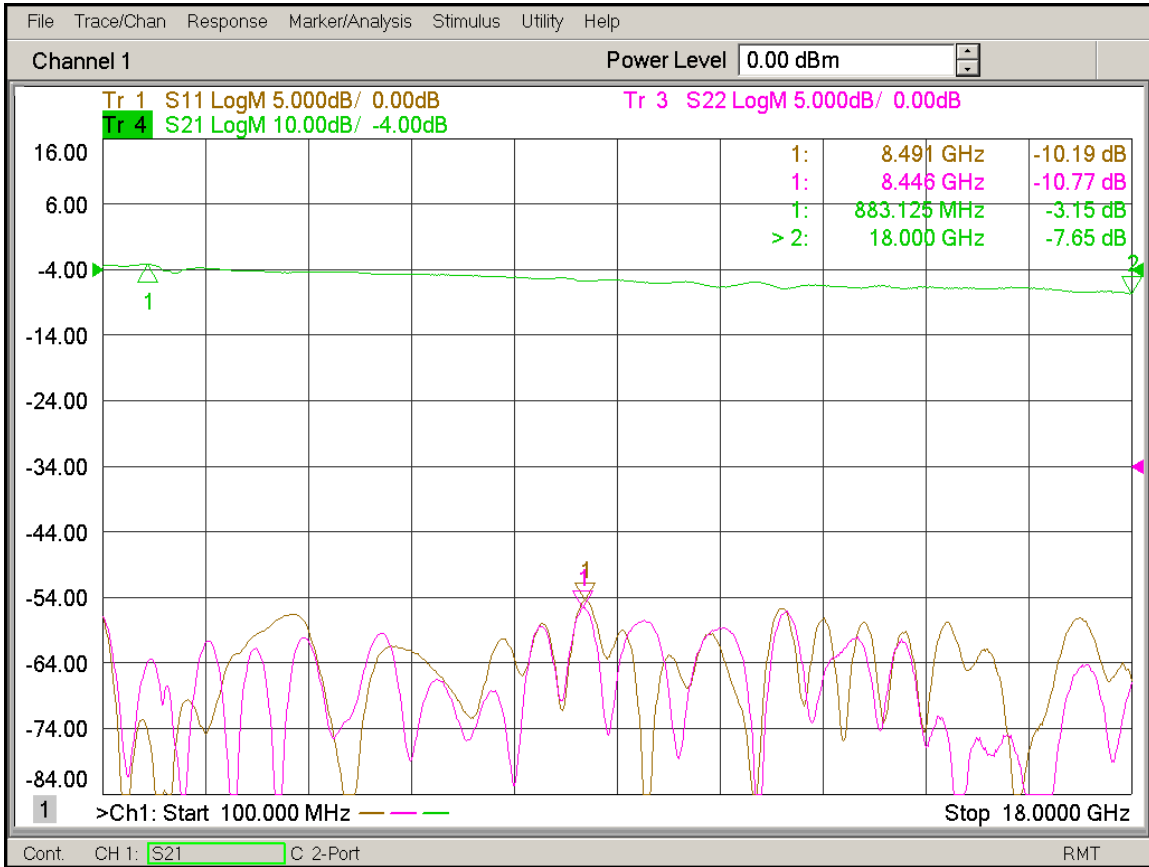
### RX Ch5 Path Broadband (J1 RX IN)





**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

**RX Thru Path (J2 RX BIT IN)**

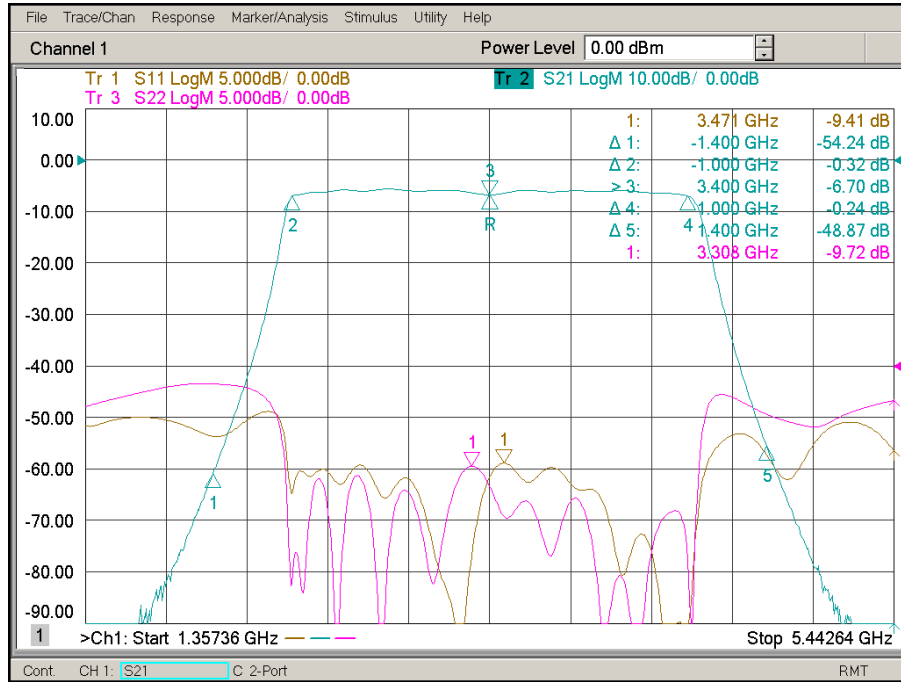




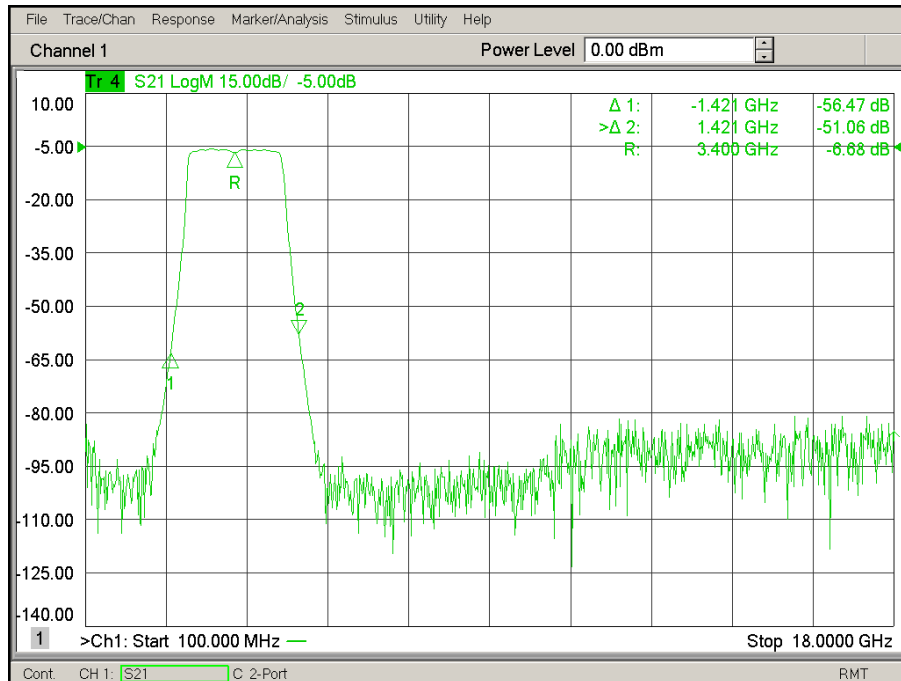


## TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

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



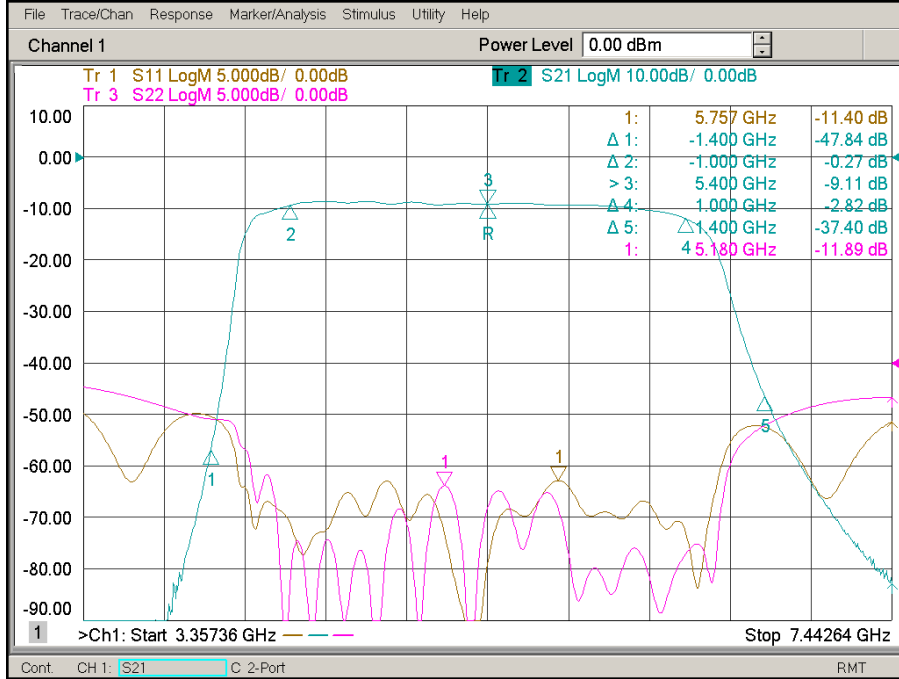
### RX Ch1 Path Broadband (J2 RX BIT IN)



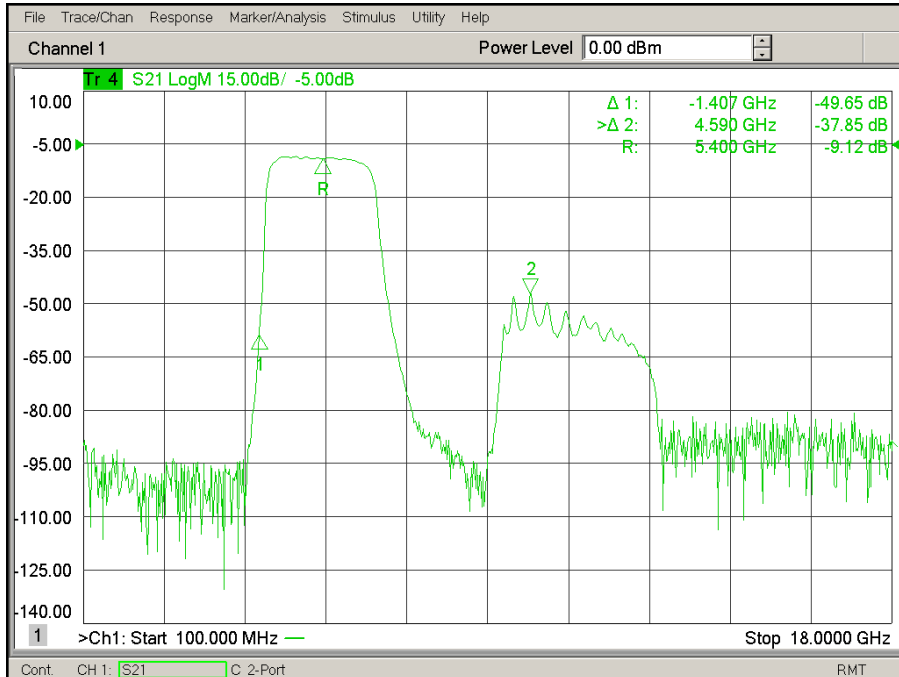


## TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

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



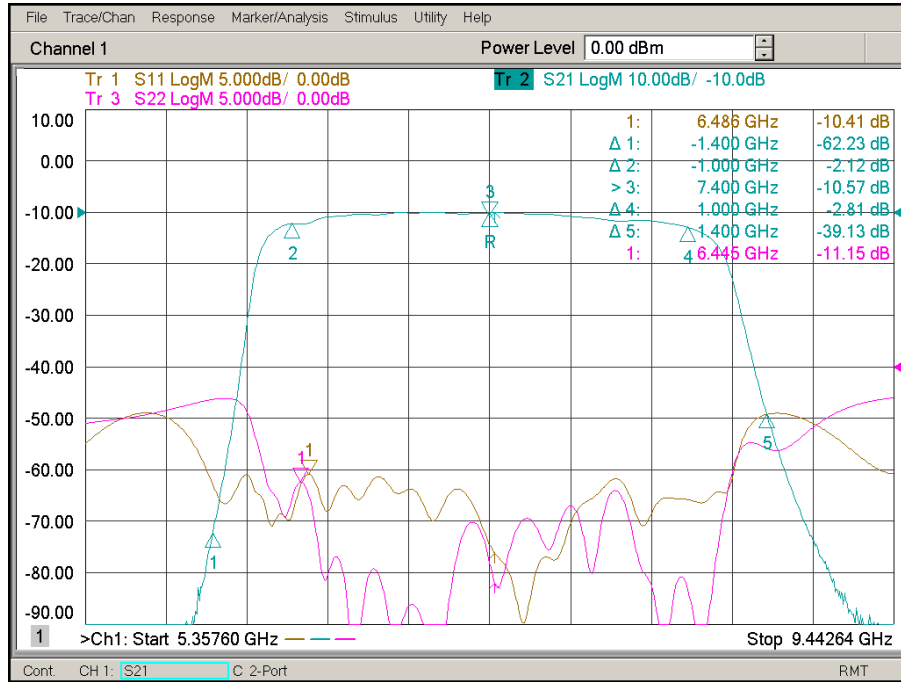
### RX Ch2 Path Broadband (J2 RX BIT IN)



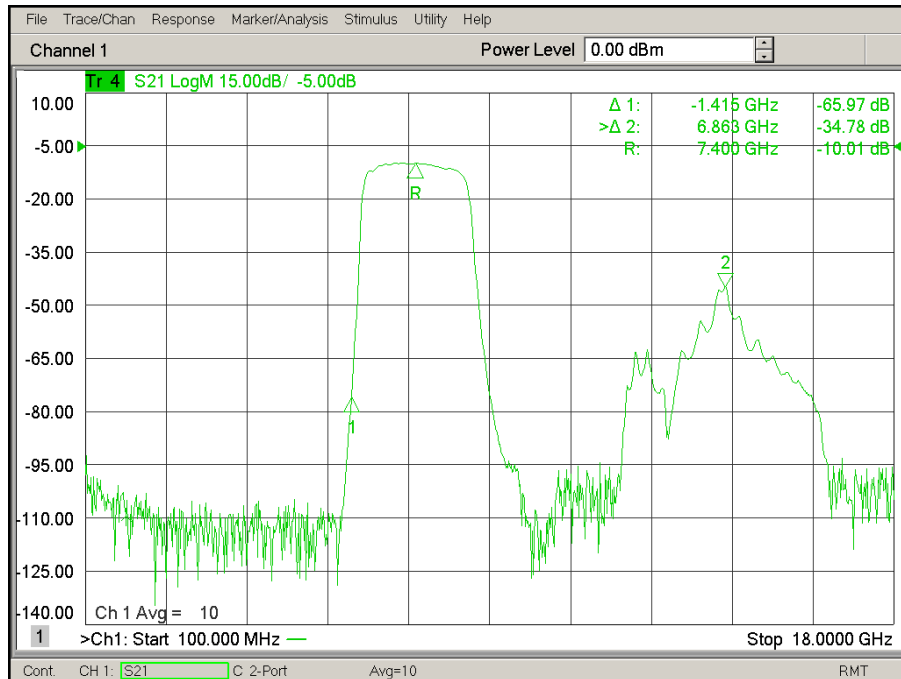


## TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

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



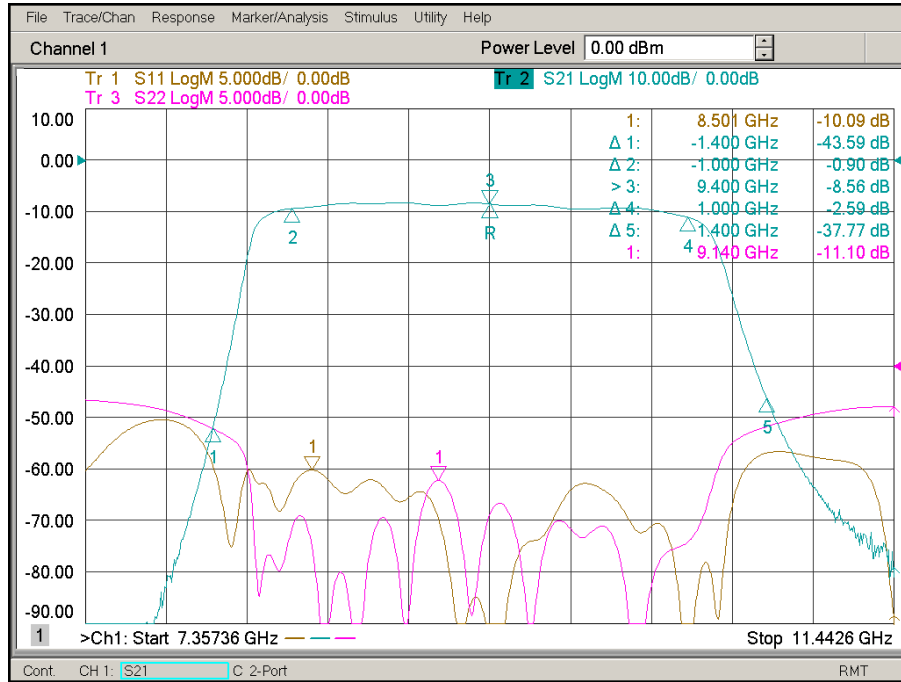
### RX Ch3 Path Broadband (J2 RX BIT IN)



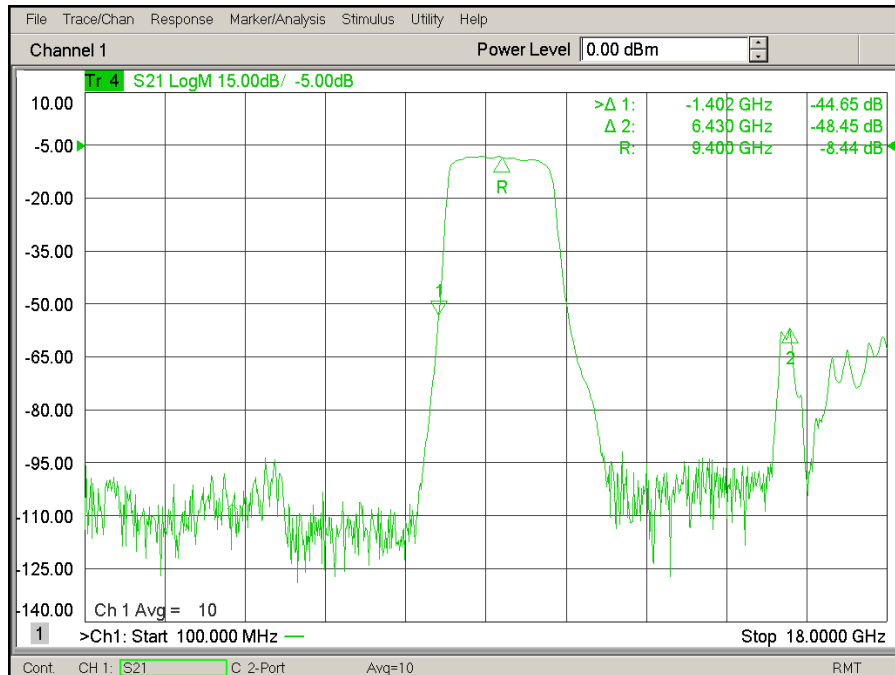


## TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

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



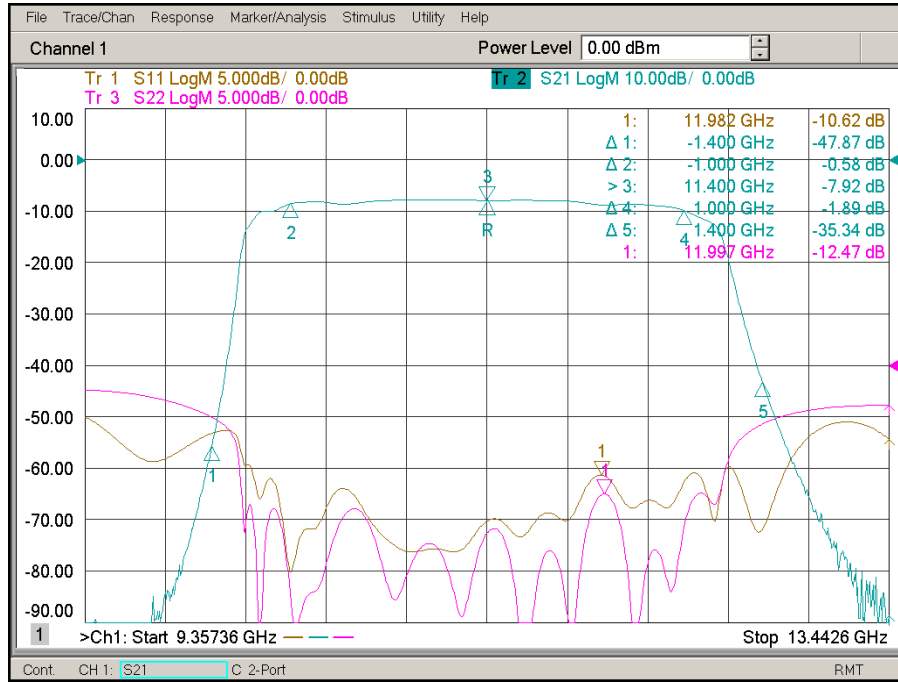
### RX Ch4 Path Broadband (J2 RX BIT IN)



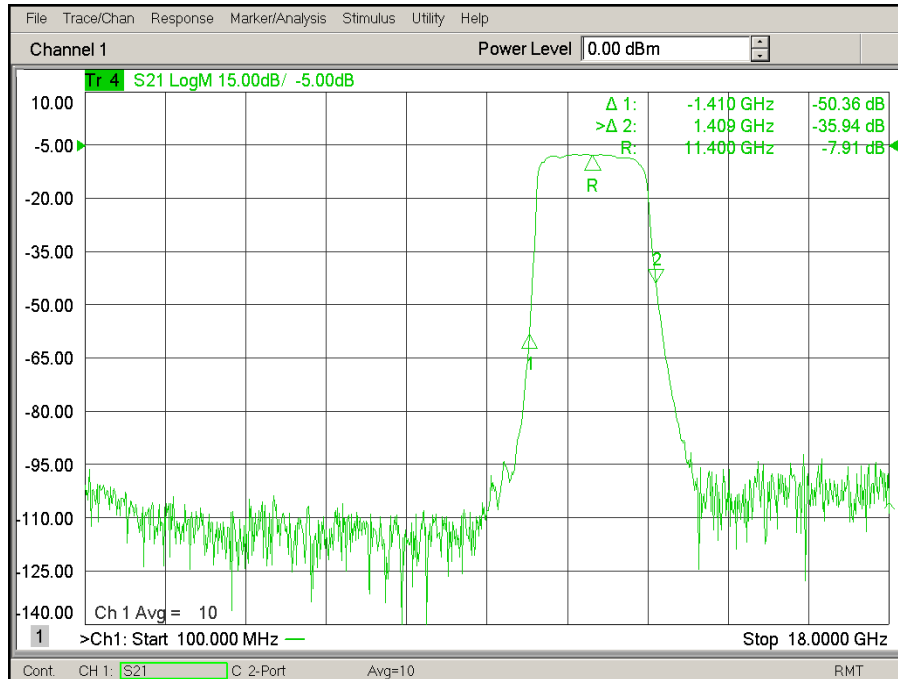


## TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

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



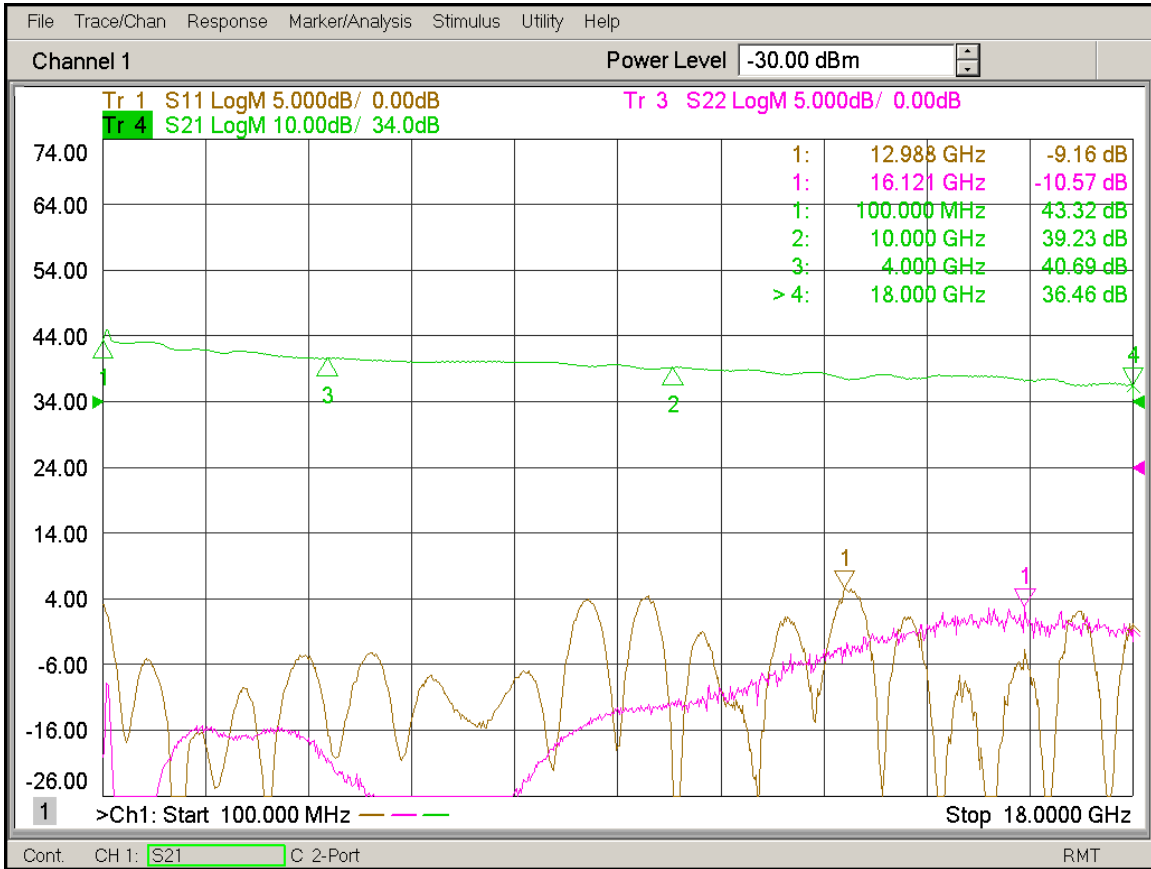
### RX Ch5 Path Broadband (J2 RX BIT IN)





**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

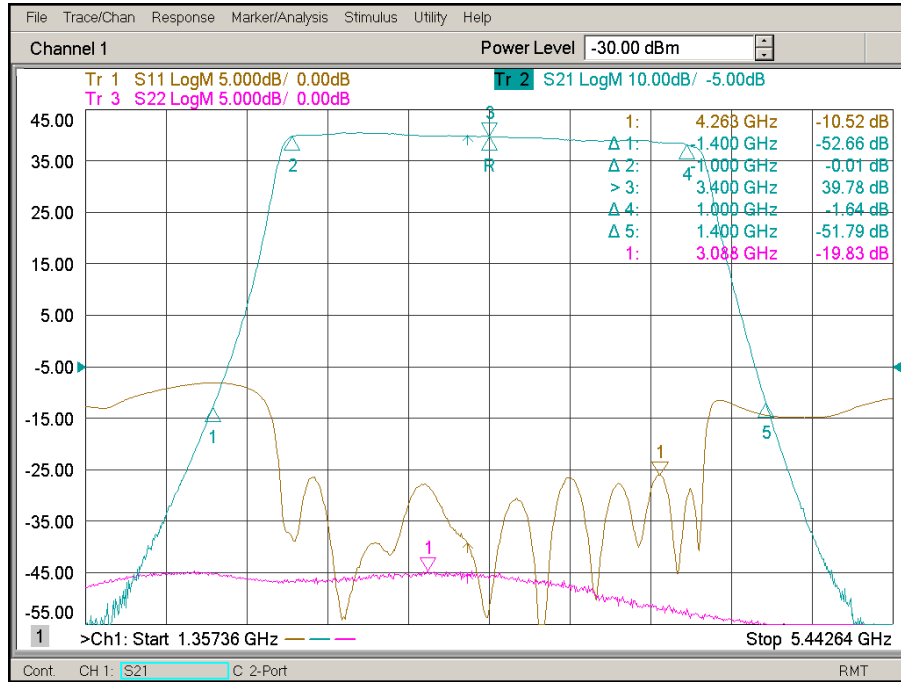
**TX Thru Path**



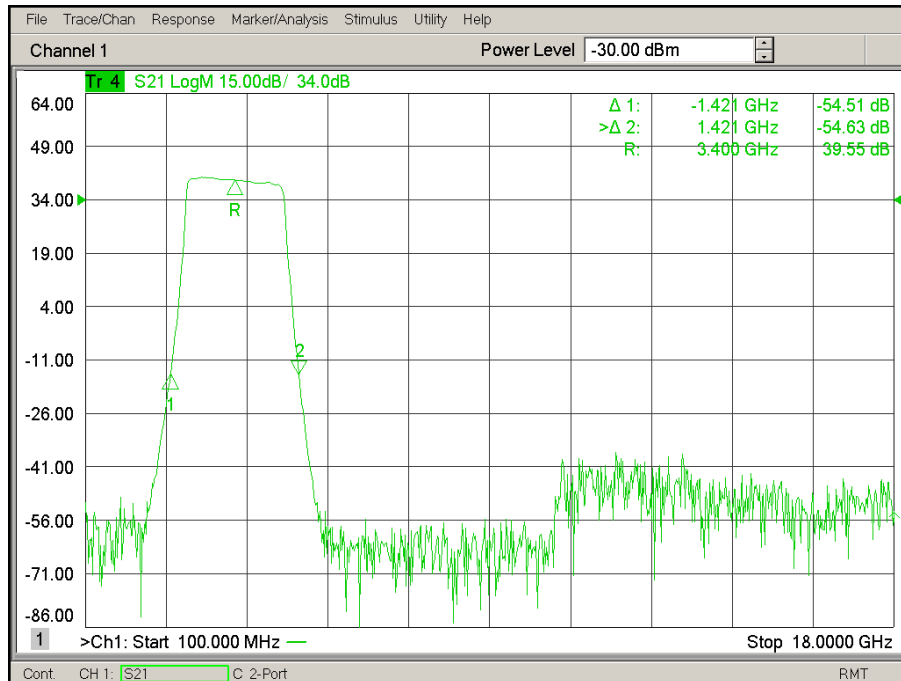


## TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

### TX Ch1 Path Narrow Band



### TX Ch1 Path Broadband

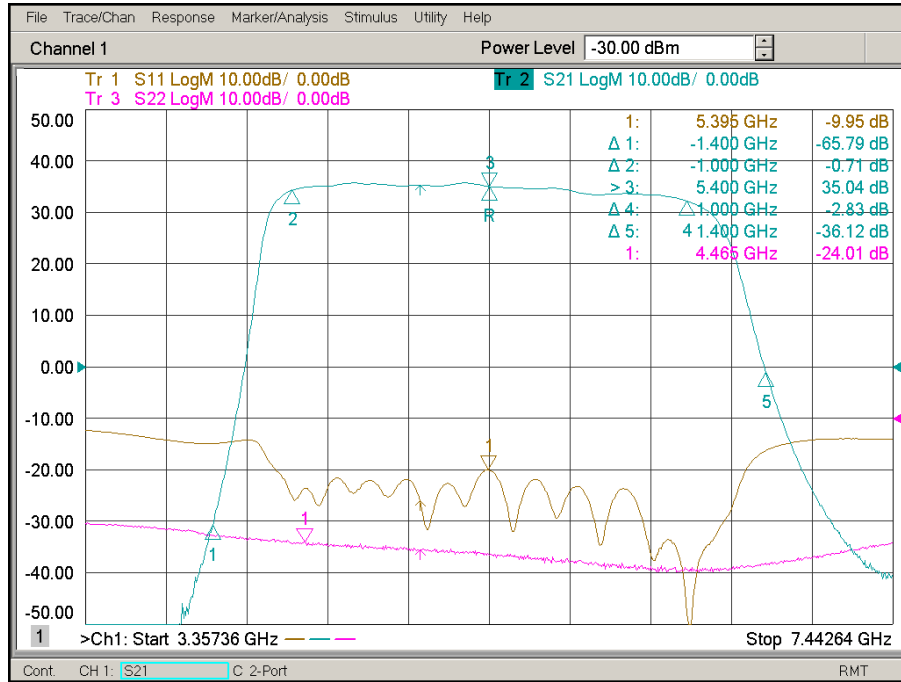




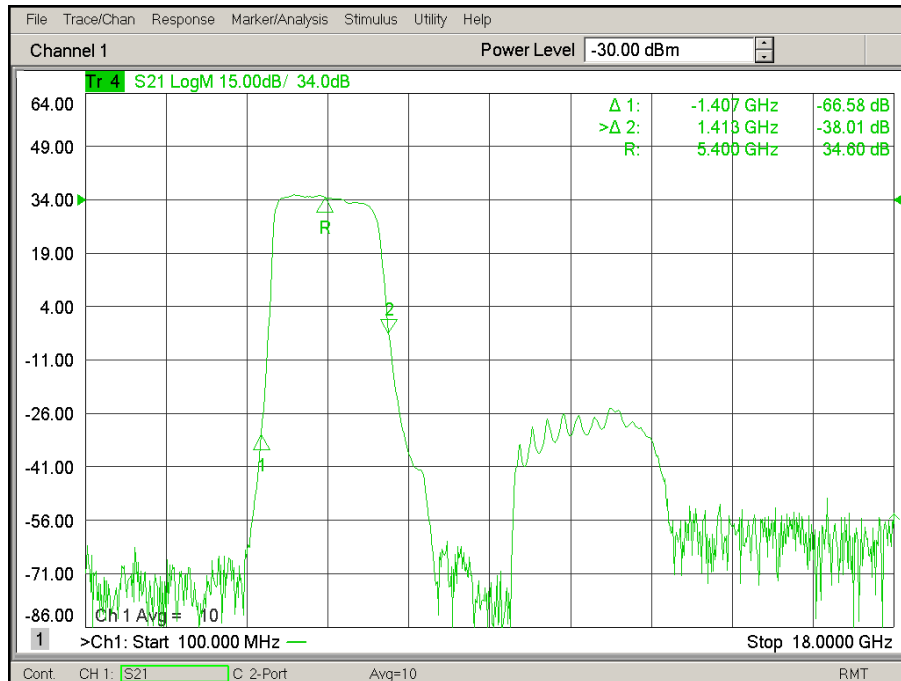


# TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

## TX Ch2 Path Narrow Band



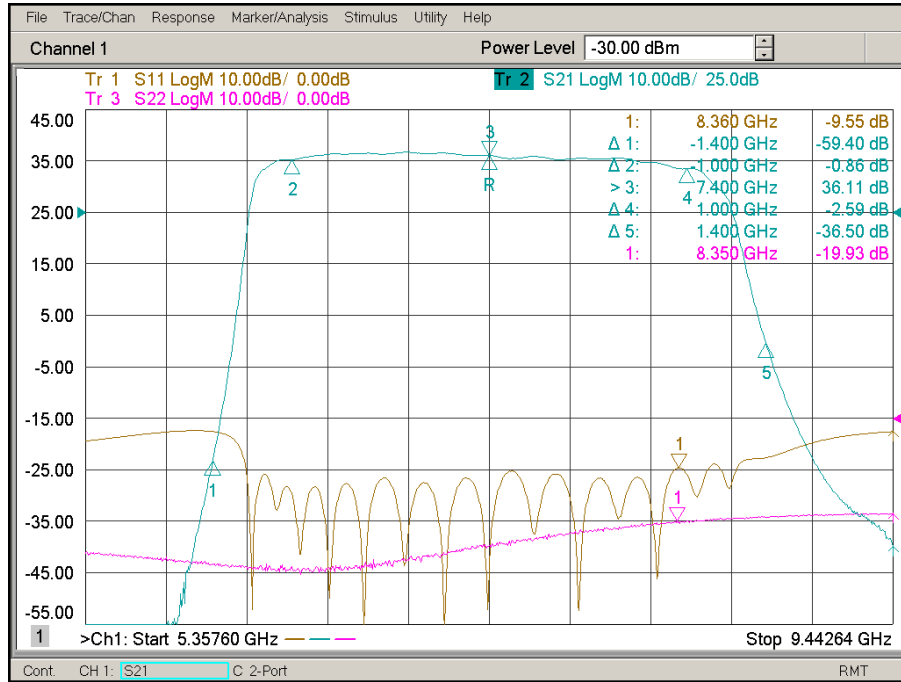
## TX Ch2 Path Broadband



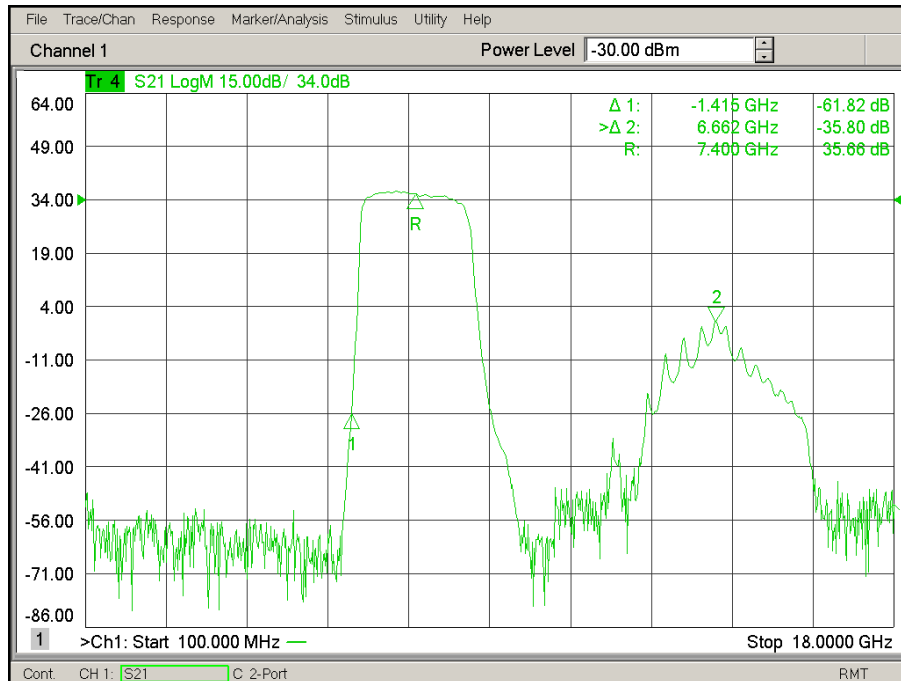


# TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

## TX Ch3 Path Narrow Band



## TX Ch3 Path Broadband



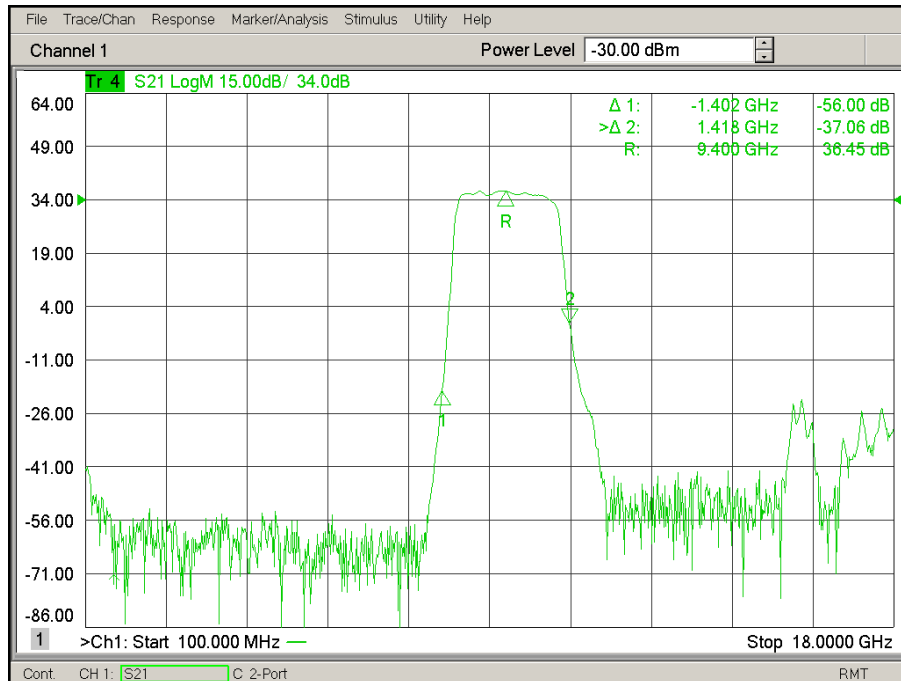


## TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

### TX Ch4 Path Narrow Band



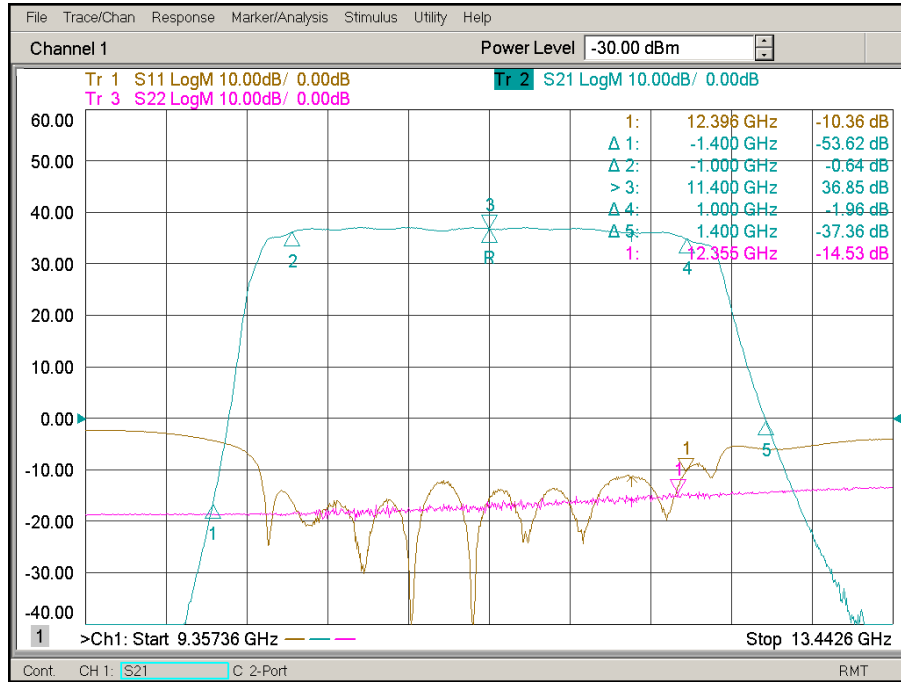
### TX Ch4 Path Broadband



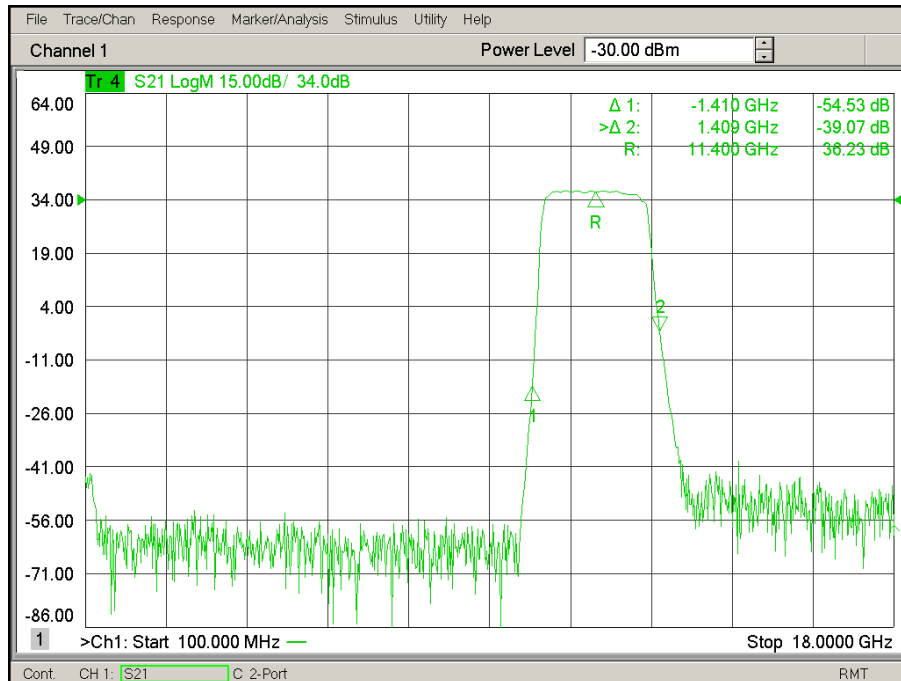


## TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

### TX Ch5 Path Narrow Band



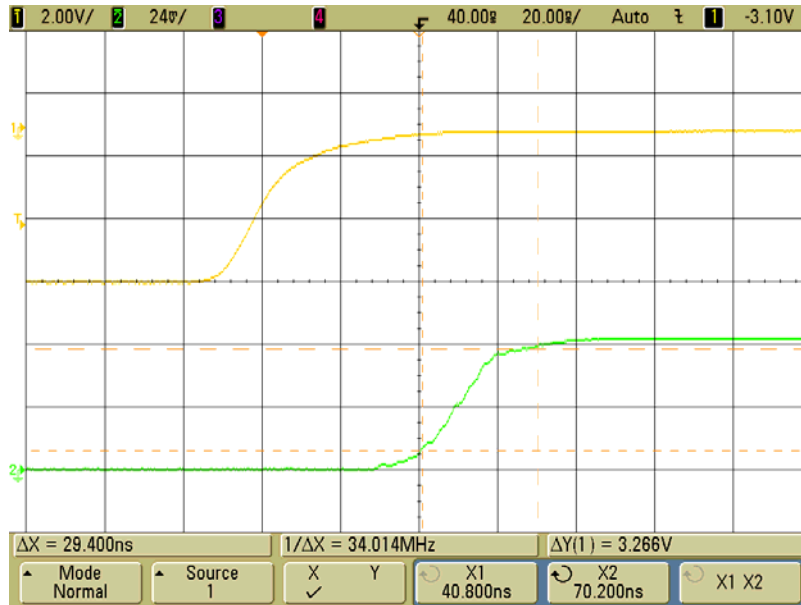
### TX Ch5 Path Broadband





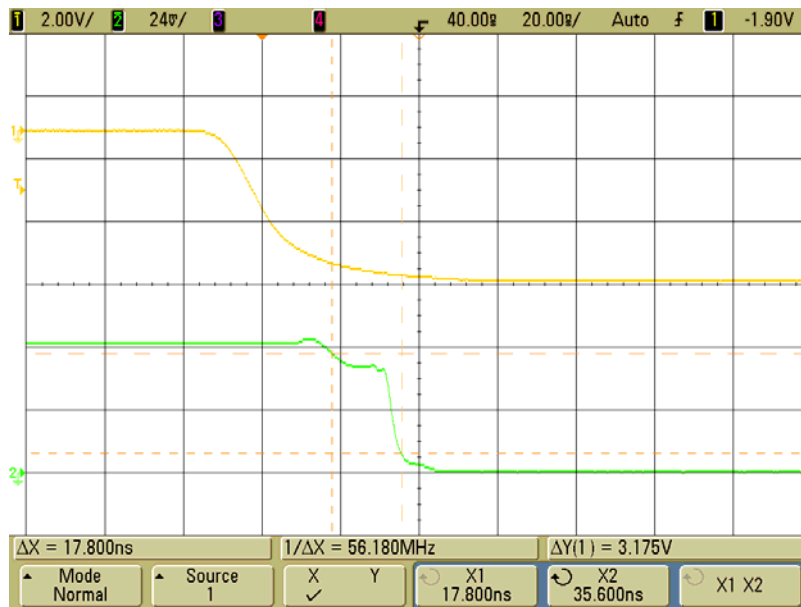
**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

**Switching Speed RX Channel 1 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed RX Channel 1 OFF**

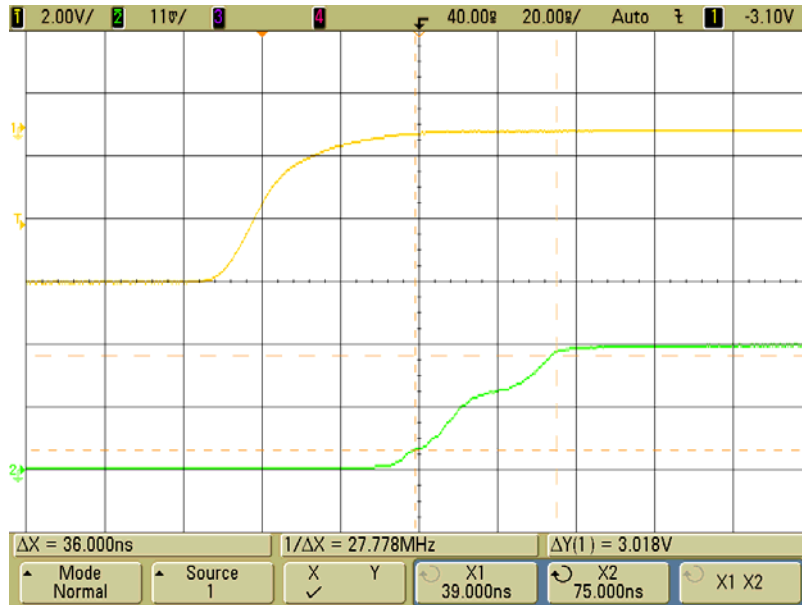


Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



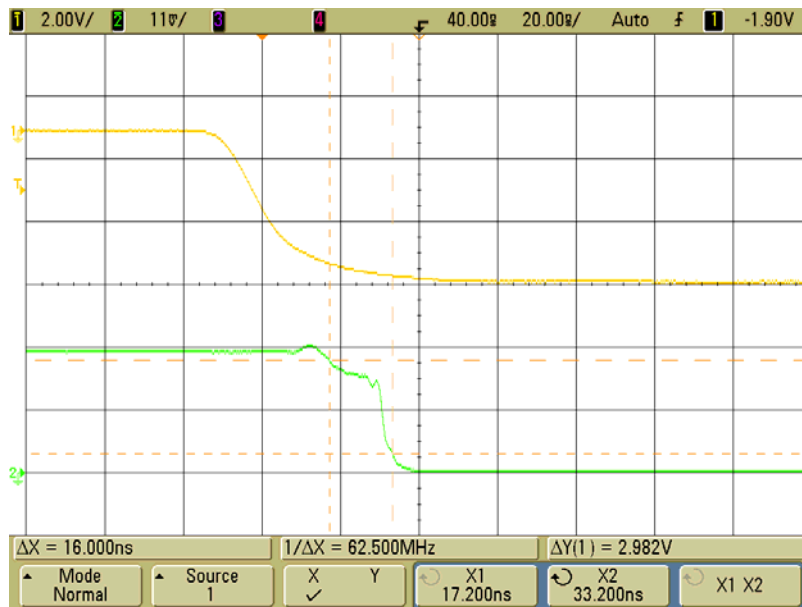
## TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

### 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

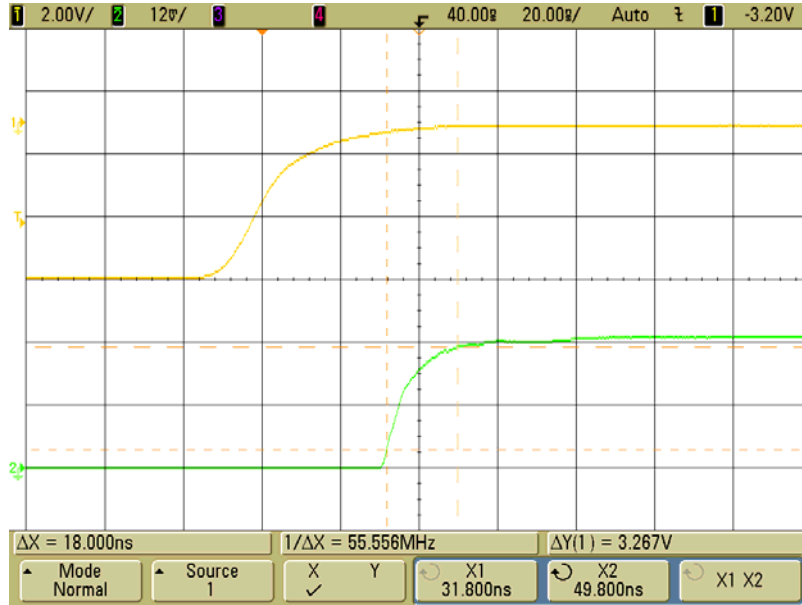






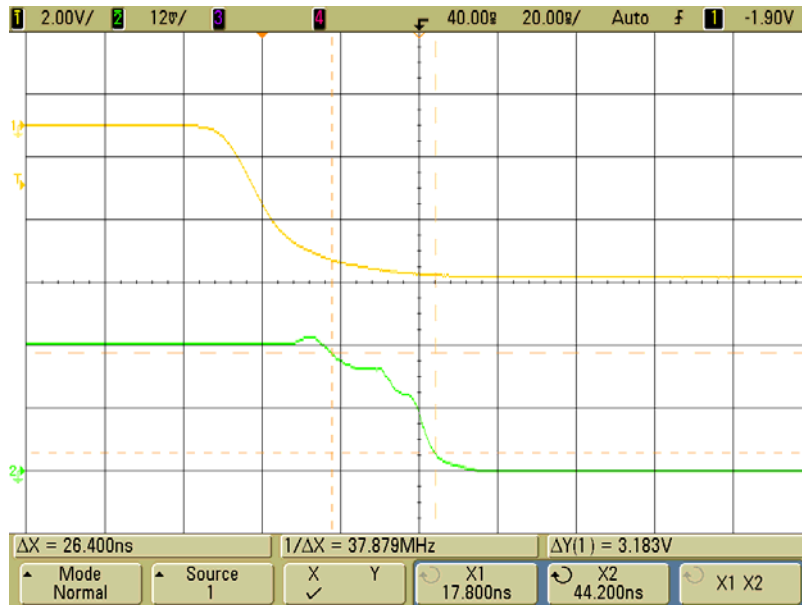
**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

**Switching Speed RX Channel 4 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed RX Channel 4 OFF**

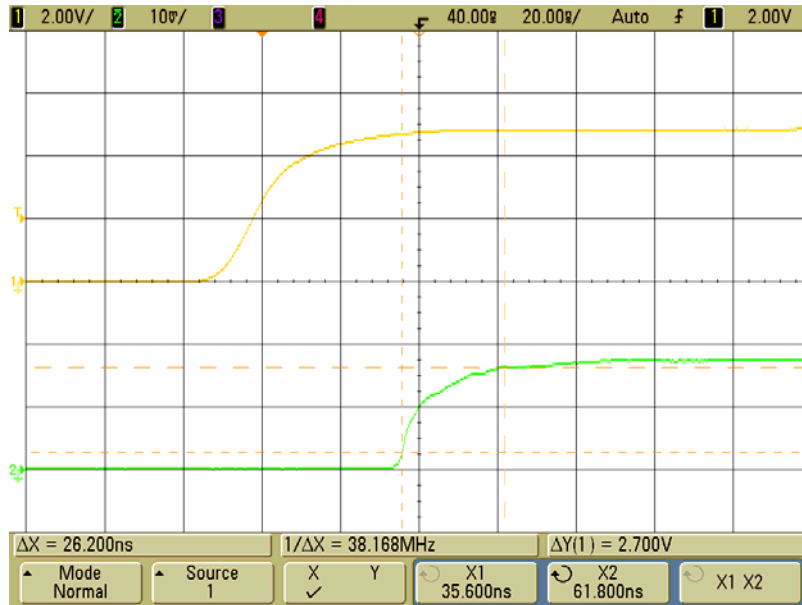


Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



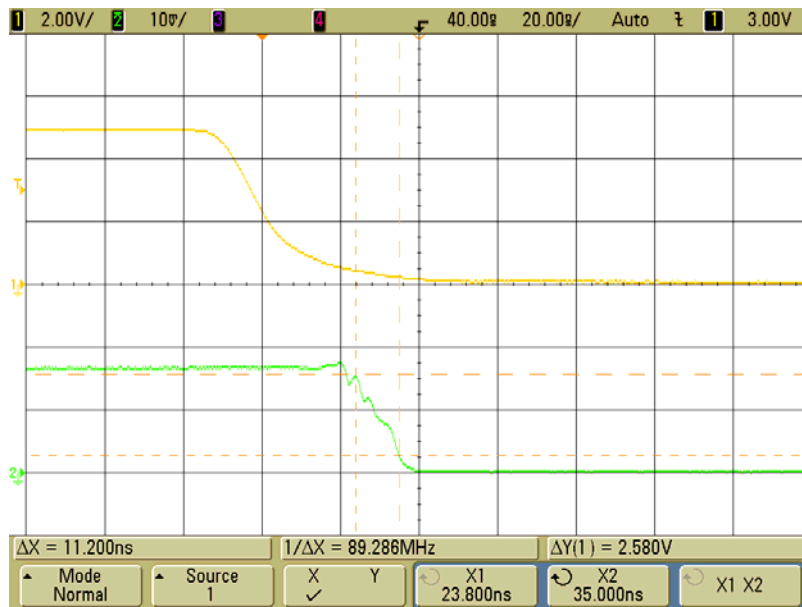
**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

**Switching Speed RX Channel 5 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed RX Channel 5 OFF**

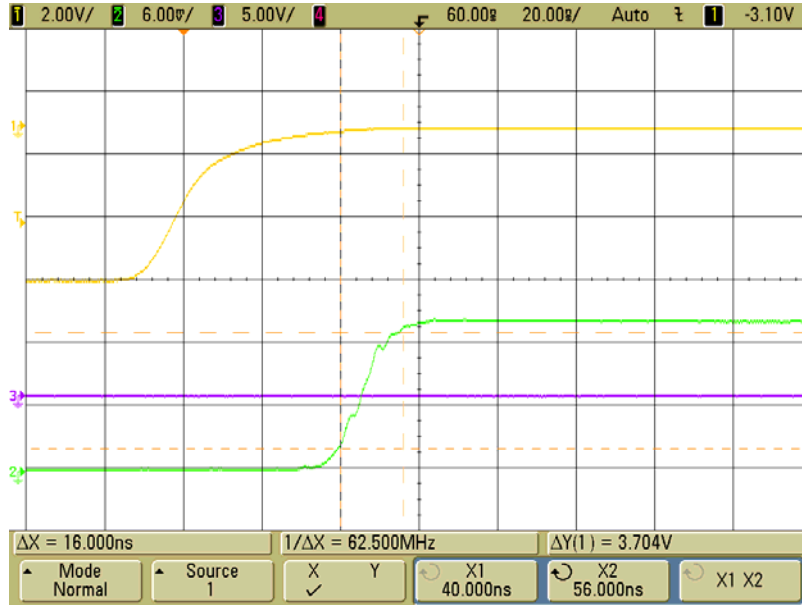


Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



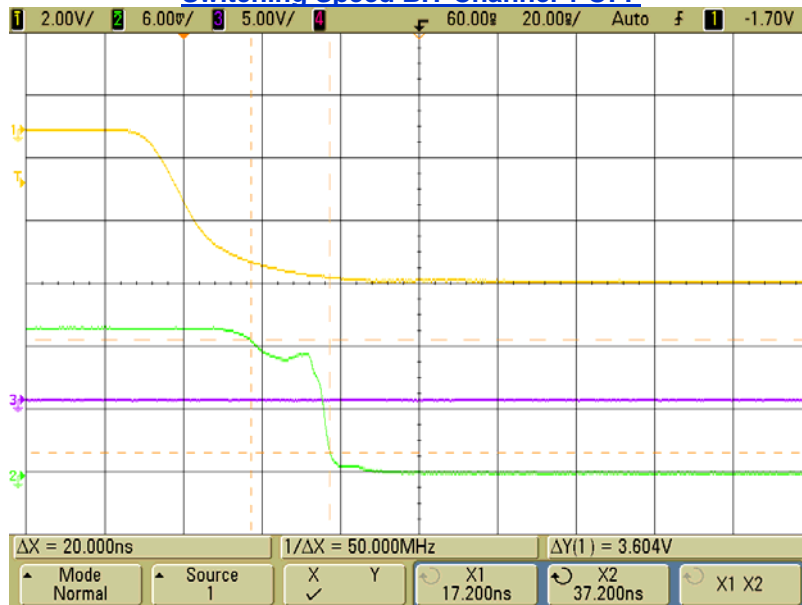
**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

**Switching Speed BIT Channel 1 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed BIT Channel 1 OFF**

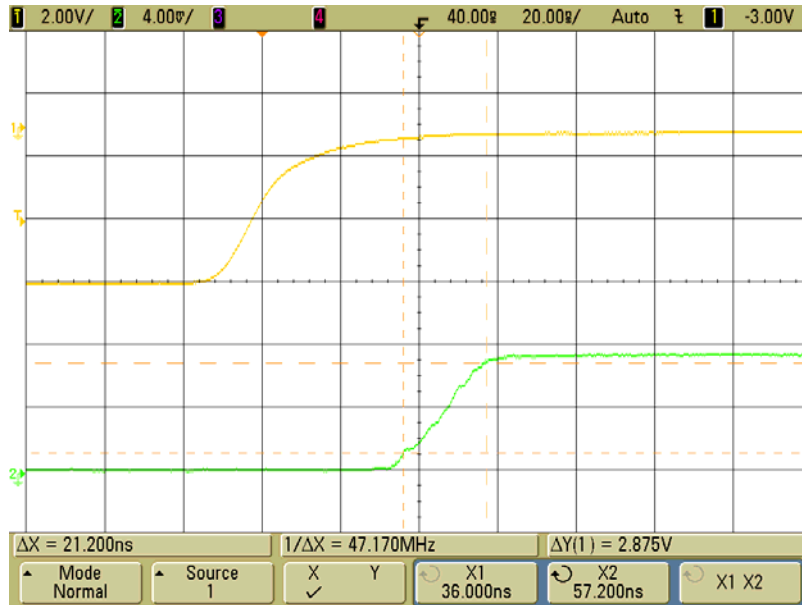


Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



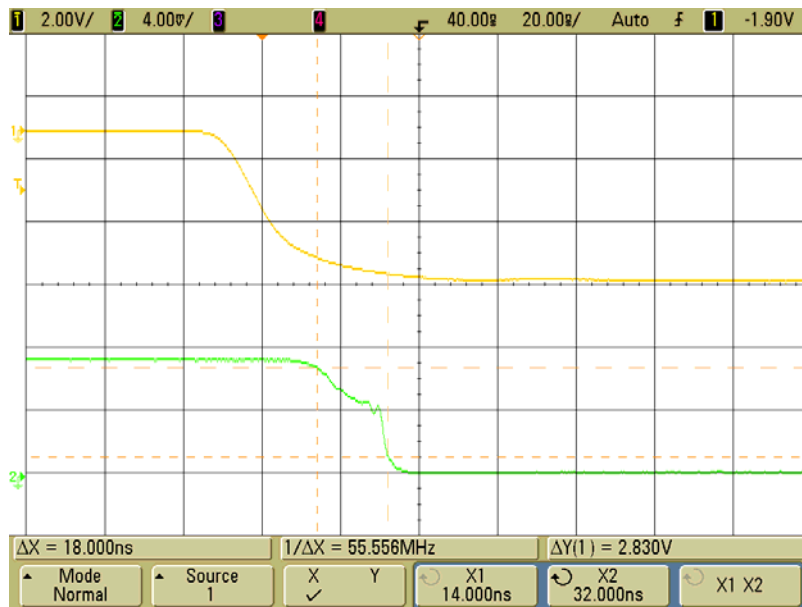
# TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

## Switching Speed BIT Channel 2 ON



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

## Switching Speed BIT Channel 2 OFF

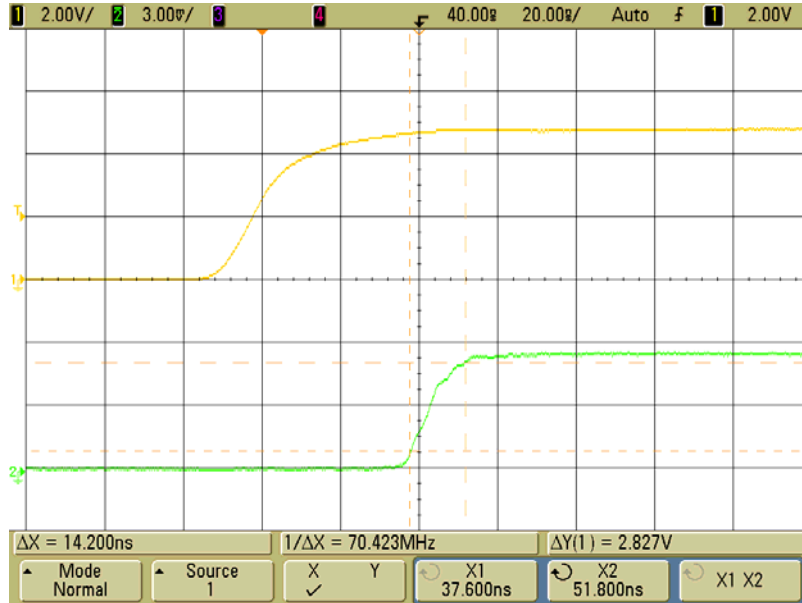


Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



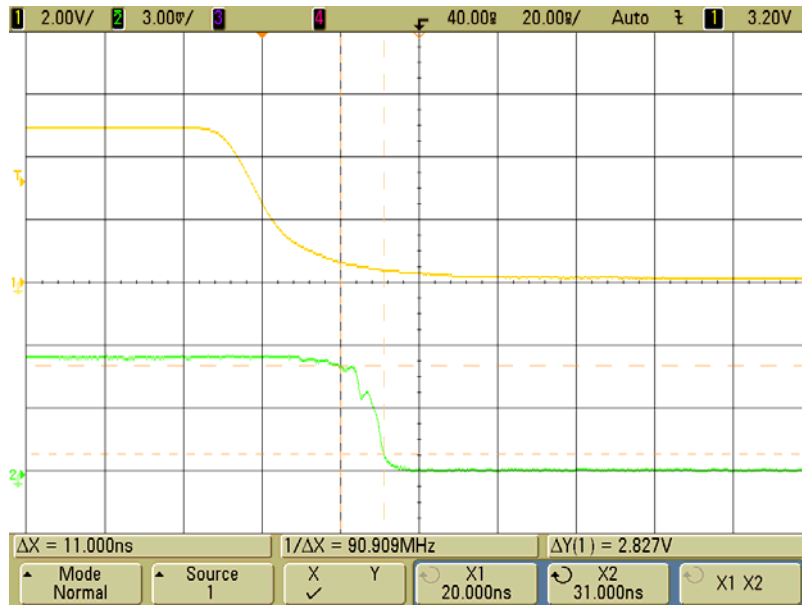
**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

**Switching Speed BIT Channel 3 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed BIT Channel 3 OFF**

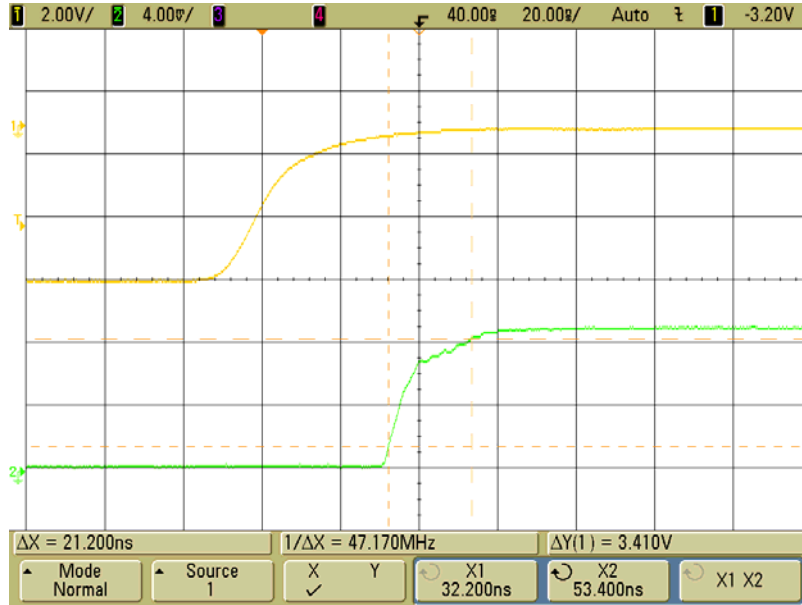


Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



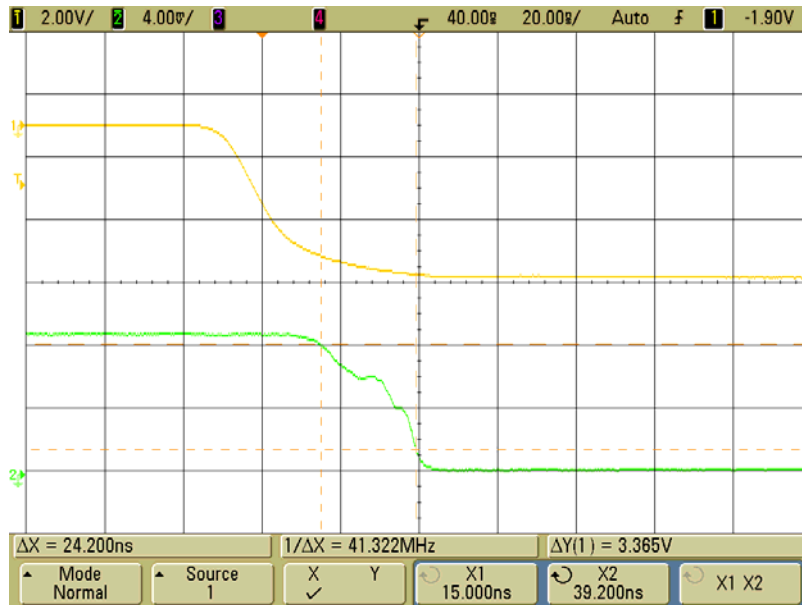
**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

**Switching Speed BIT Channel 4 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed BIT Channel 4 OFF**

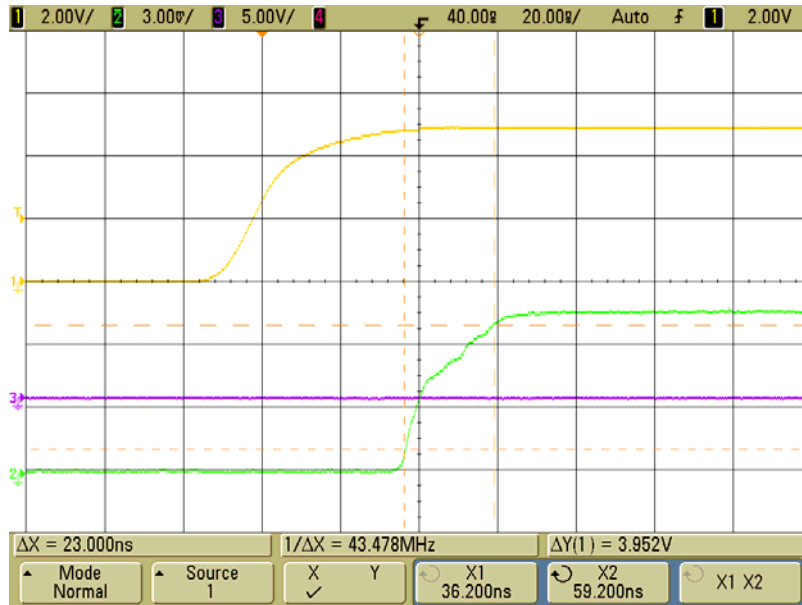


Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



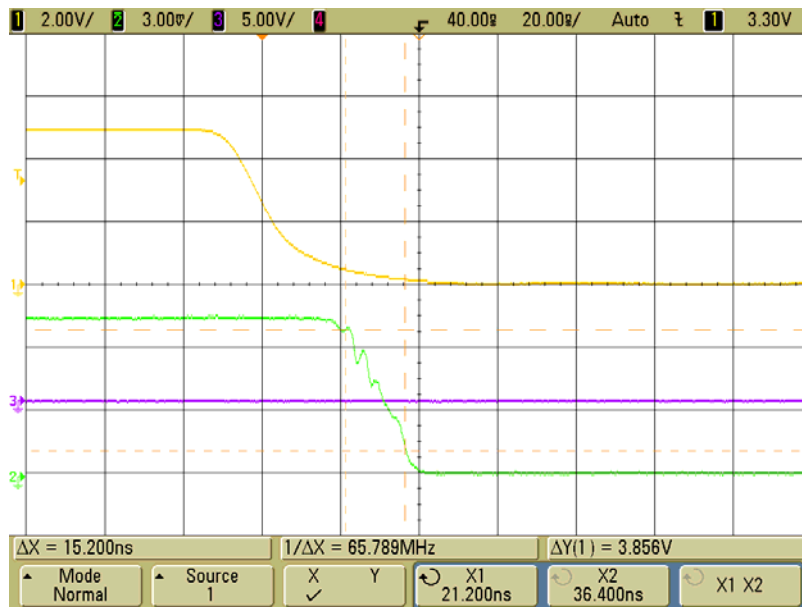
**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

**Switching Speed BIT Channel 5 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed BIT Channel 5 OFF**



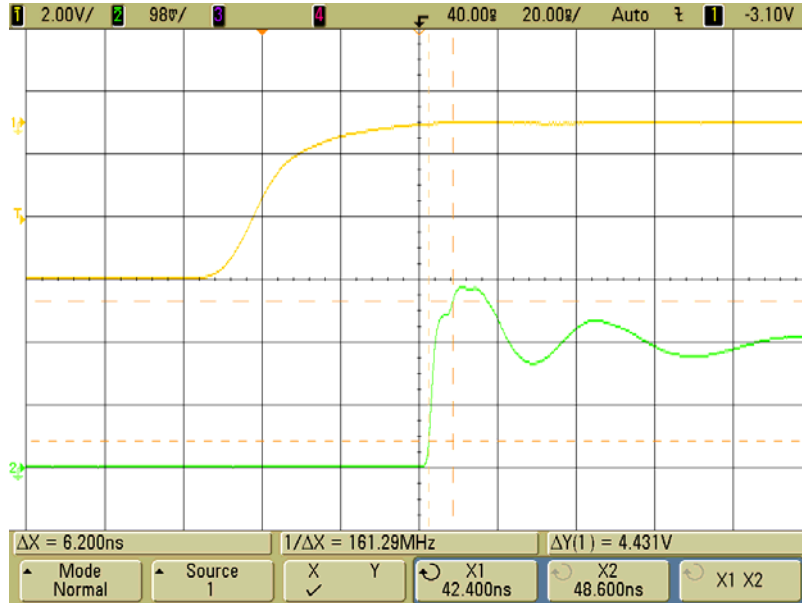
Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector





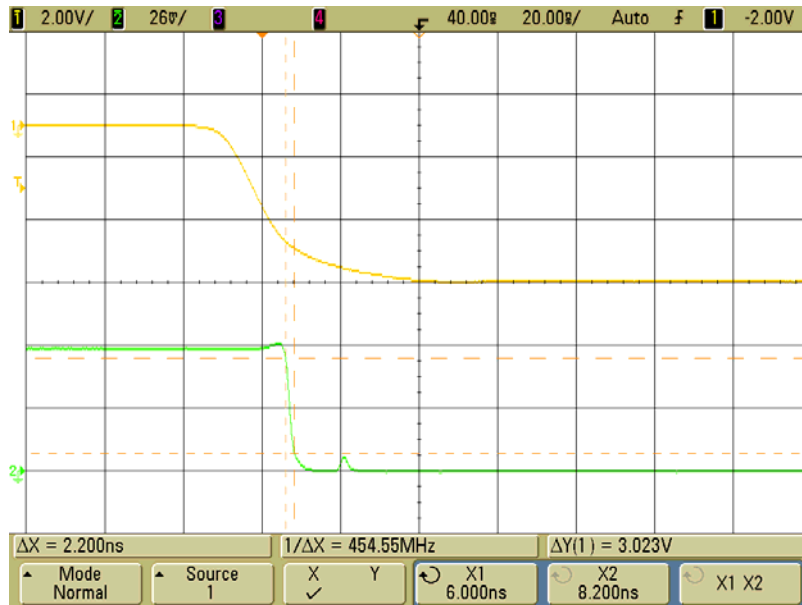
## TYPICAL CHARACTERISTICS ON 6SFB-CC-100M18G-MAH-RX-TX

### Switching Speed TX Channel 1 ON



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

### Switching Speed TX Channel 1 OFF

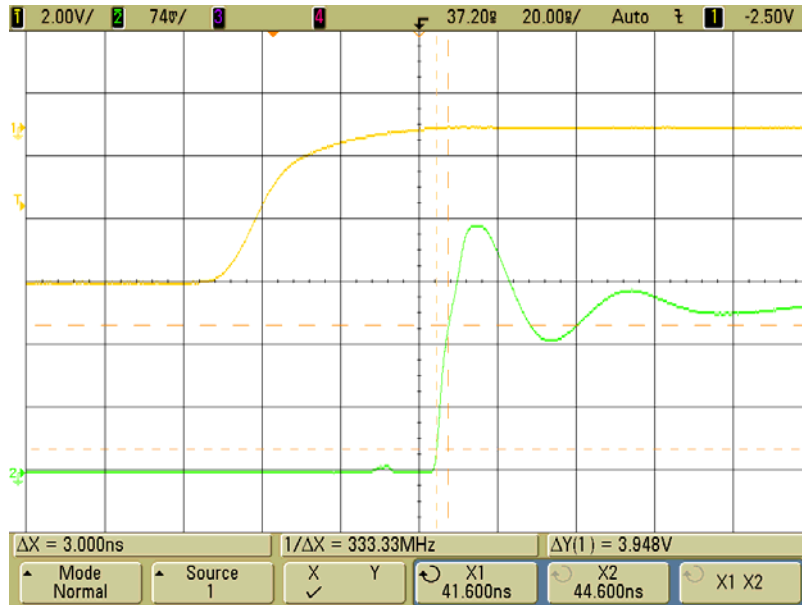


Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



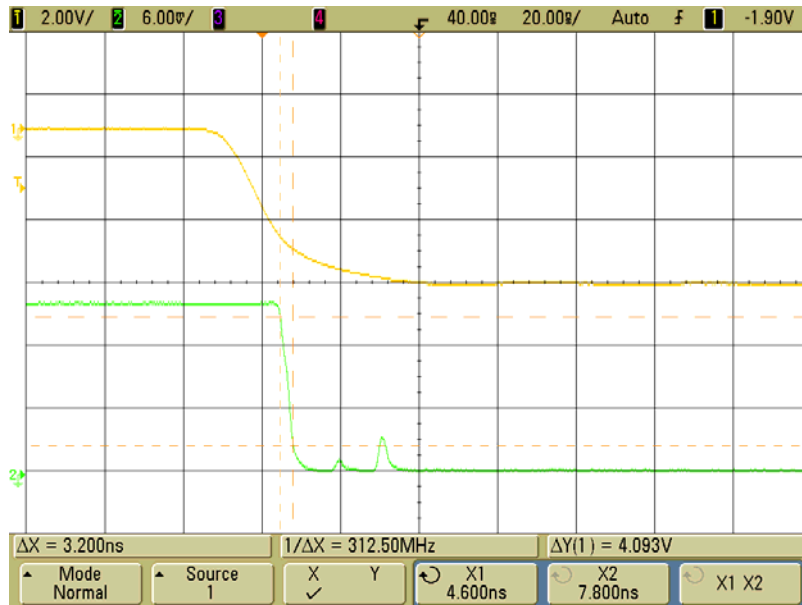
**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

**Switching Speed TX Channel 2 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed TX Channel 2 OFF**

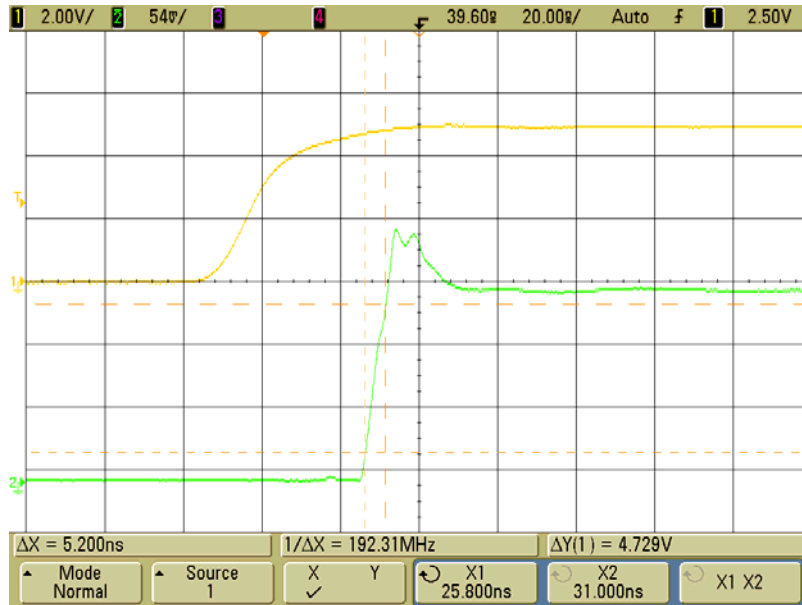


Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



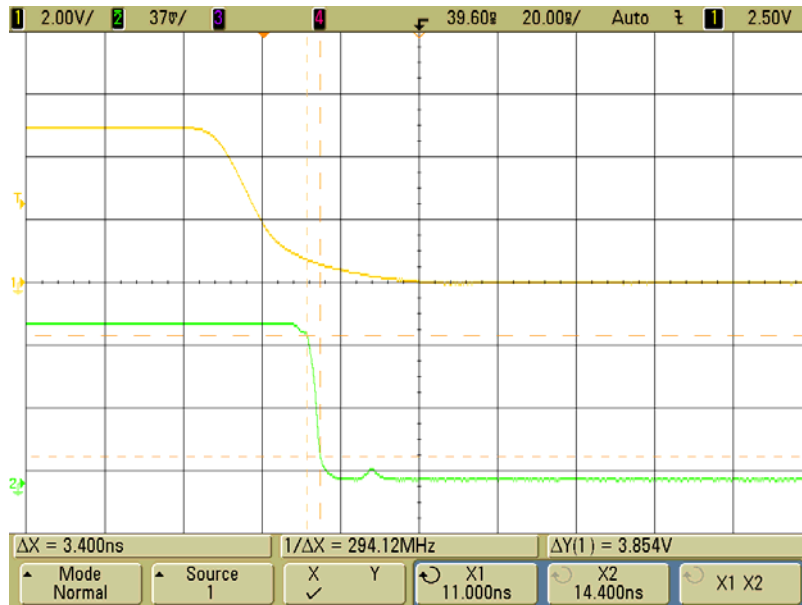
**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

**Switching Speed TX Channel 3 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed TX Channel 3 OFF**

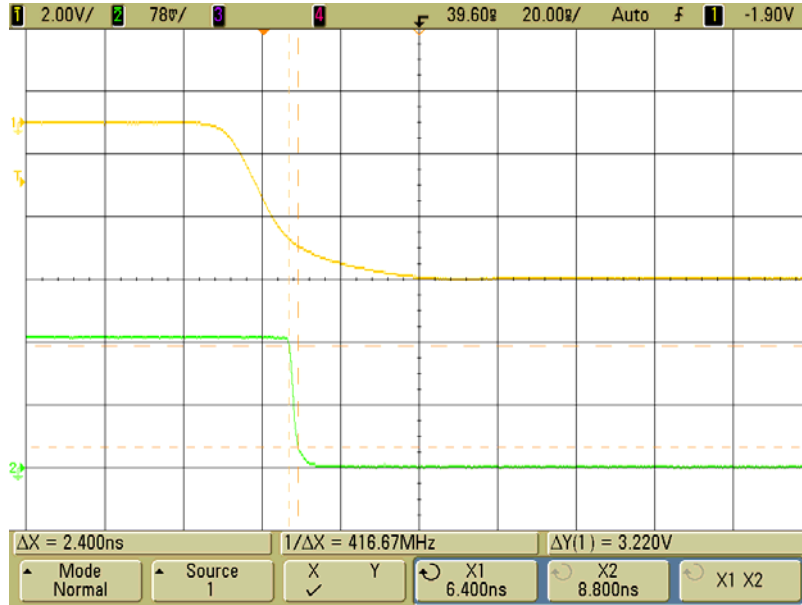


Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



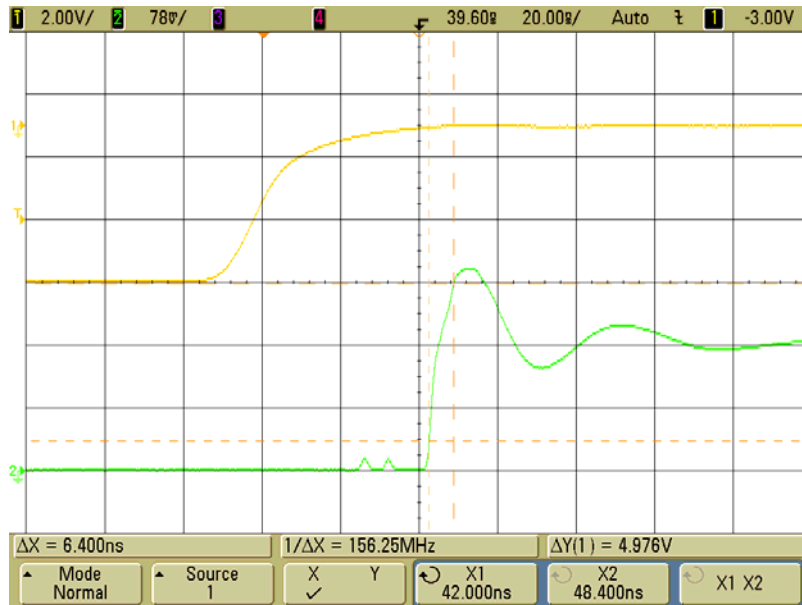
**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

**Switching Speed TX Channel 4 ON**



Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector

**Switching Speed TX Channel 4 OFF**

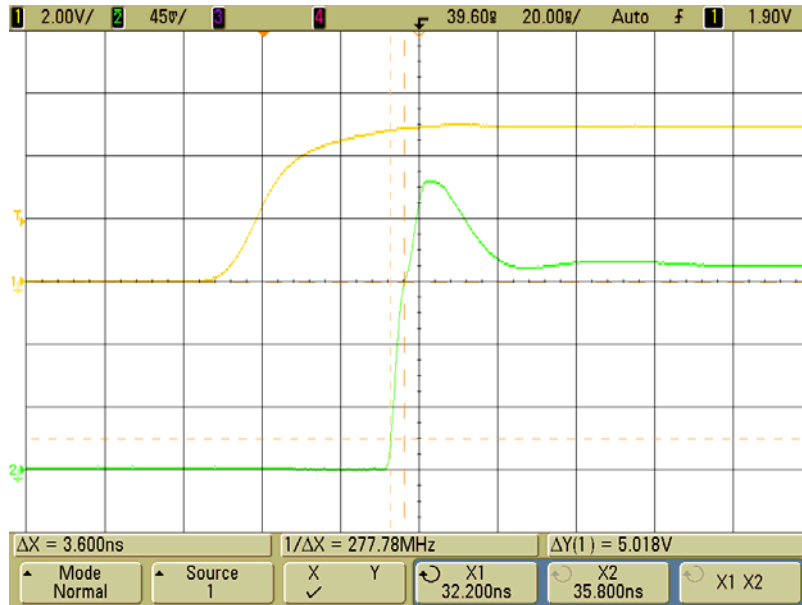


Yellow Trace TTL Input Signal  
Green Trace RF Output of Detector



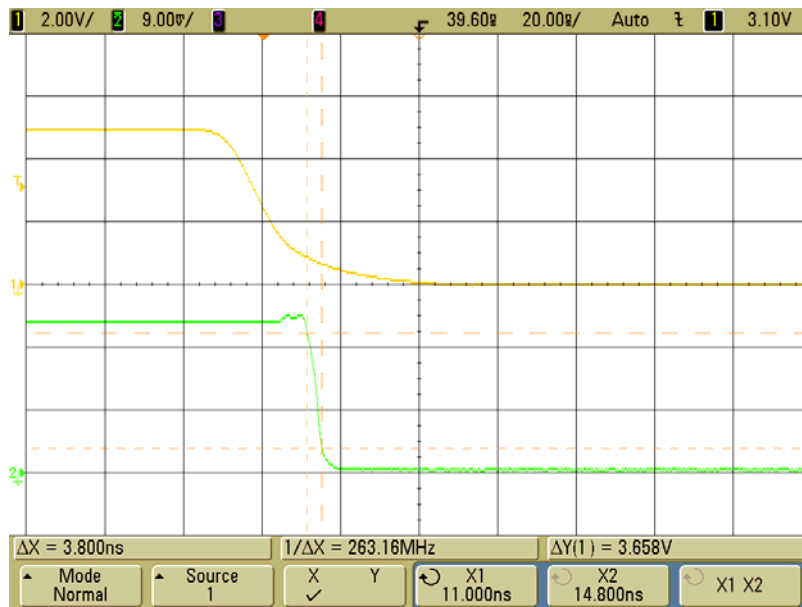
**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

**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



**TYPICAL CHARACTERISTICS  
ON  
6SFB-CC-100M18G-MAH-RX-TX**

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

