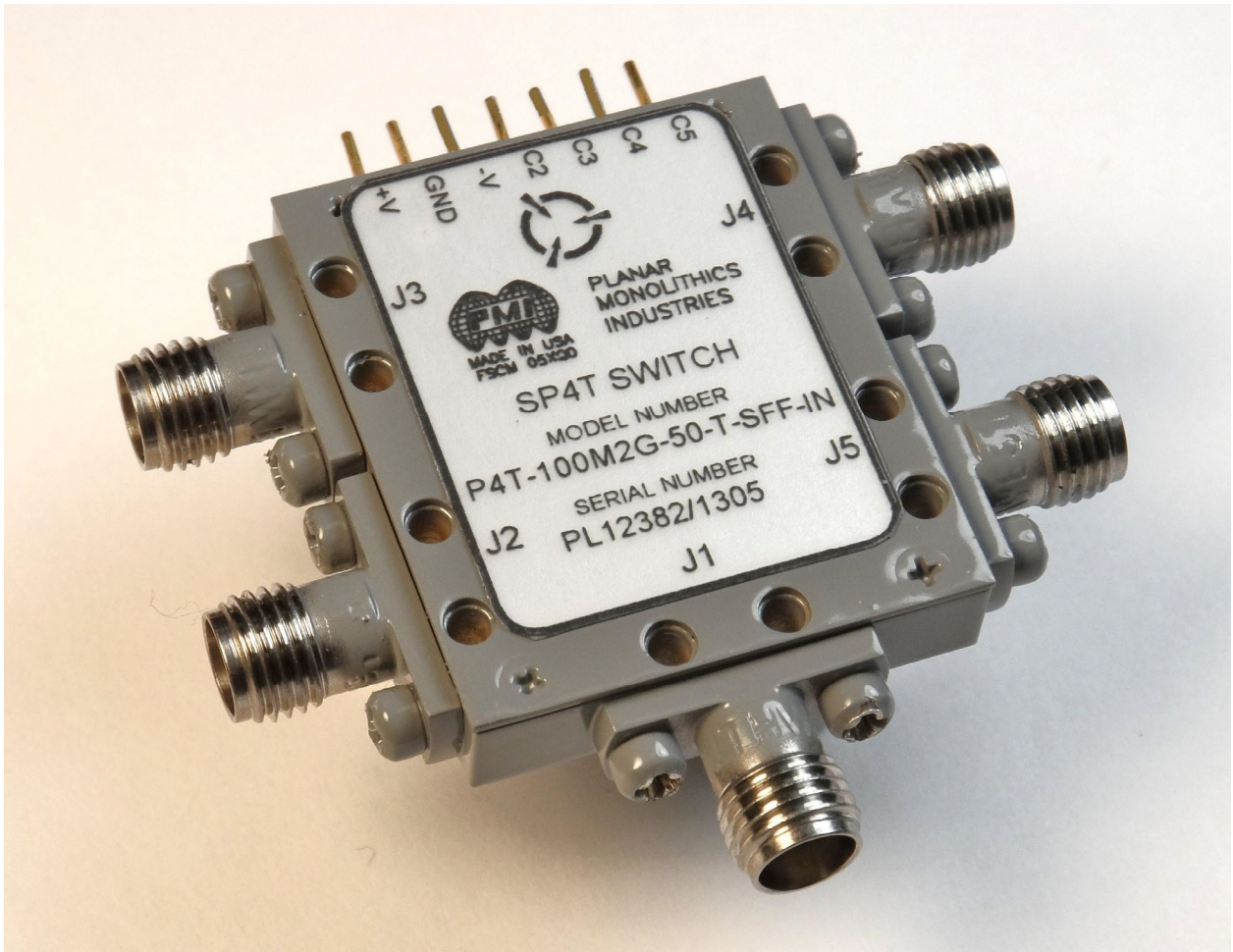




**Typical Characteristics
ON
P4T-100M2G-50-T-SFF-IN**



Designed By:
Kevin Mason
Simon Kuhn
Sebastian Palacio

Tested & Reported By:
Lee Mc Graw
Sebastian Palacio

February 1, 2013



Typical Characteristics ON P4T-100M2G-50-T-SFF-IN

OUTLINE

DESCRIPTION

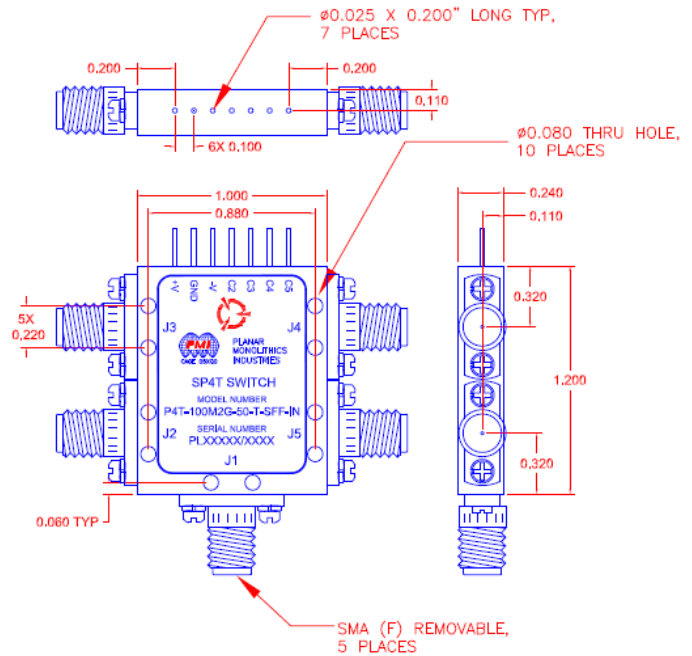
PMI MODEL: P4T-100M2G-50-T-SFF-IN IS A SINGLE POLE FOUR THROW ABSORPTIVE SWITCH. THIS MODEL HAS THE FOLLOWING SPECIFICATIONS.

SPECIFICATIONS

- FREQUENCY RANGE: _____ 0.1 TO 2 GHz
- INSERTION LOSS: _____ 3dB Max
- ISOLATION: _____ 50dB Min
- VSWR (ON/OFF): _____ 2.0:1 Max
- SURVIVAL POWER (ON/OFF): _____ 1W CW
- SWITCHING SPEED (ON/OFF) _____ 25ns
- RISE/FALL TIME: _____ 10ns
- CONTROL LOGIC: _____ TTL "0" = SWITCH ON
TTL "1" = SWITCH OFF
- POWER SUPPLY: _____ +5VDC $\pm 5\%$ @ 135 mA Max
_____ -5VDC $\pm 5\%$ @ 65 mA Max
- CONNECTORS IN/OUT: _____ SMA (F) REMOVABLE
- POWER + CONTROL: _____ SOLDER PINS
- SIZE: _____ (L) 1.0" X (W) 1.2" X (H) 0.24"
- FINISH: _____ PAINTED GRAY

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	11/30/12	
	A2	ECN # 14-0030	02/19/14	

MECHANICAL OUTLINE



PMI CONFIDENTIAL AND PROPRIETARY

ENVIRONMENTAL RATINGS

- TEMPERATURE: _____ -45°C TO +70°C (OPERATING)
_____ -65°C TO +125°C (STORAGE)
- HUMIDITY: _____ MIL-STD-202G, METHOD 103B COND. B
- SHOCK: _____ MIL-STD-202G, METHOD 213B COND. B
- VIBRATION: _____ MIL-STD-202G, METHOD 204D COND. B
- ALTITUDE: _____ MIL-STD-202G, METHOD 105C COND. B
- TEMPERATURE CYCLE: _____ MIL-STD-202G, METHOD 107G COND. A

ALL DIMENSIONS ARE IN INCHES

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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.pmi-rf.com
E-MAIL: sales@pmi-rf.com
ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		REV.
DRAWN <i>sfk</i>		11/30/12	PRODUCT FEATURE		
CHECKED			P4T-100M2G-50-T-SFF-IN		
ISSUED			SIZE A	FSCM NO. 05XQ0	DWG NO. 27017281
			SCALE N:S	SHEET 1 OF 1	



**Typical Characteristics
ON
P4T-100M2G-50-T-SFF-IN**

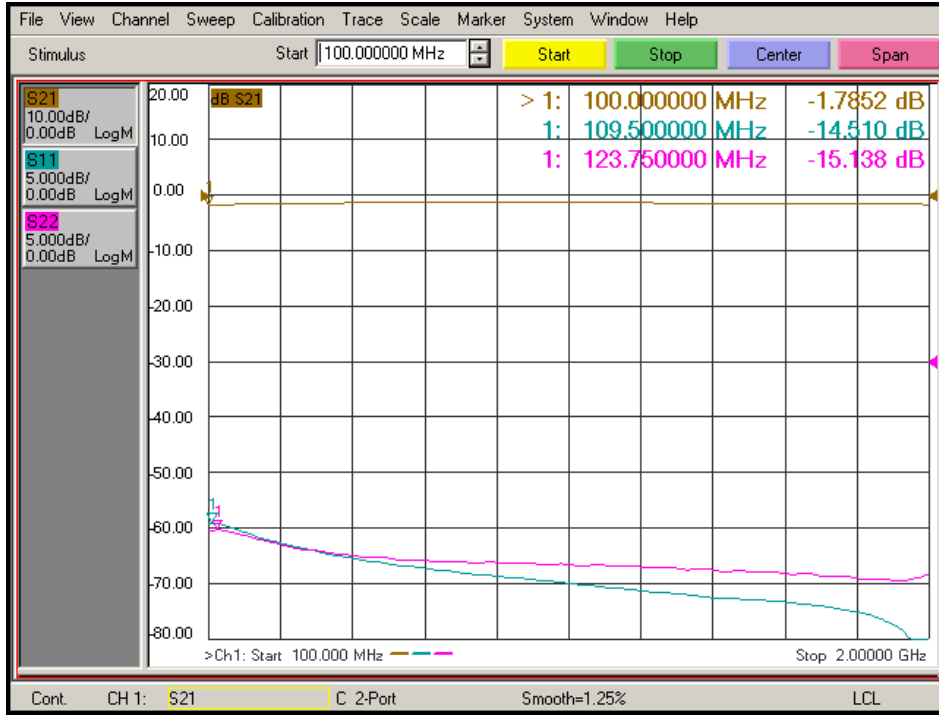
TEST DATA SHEET

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA/QC
1	Frequency Range:	0.1 – 2 GHz	0.1 – 2 GHz See Plots	
2	Insertion Loss:	3dB Max.	1.88dB See Plots	
3	Isolation:	50dB Min.	71.67dB See Plots	
4	VSWR (On/Off):	2.0:1 Max	1.64:1 See Plots	
5	Survival Power (On/Off):	1W CW	Pass	
6	Switching Speed: (On/Off):	25ns	<25ns See Plot	
7	Rise/Fall Time:	10ns	<10ns See Plot	
8	DC Supply:	+5VDC ±5% @ 135 mA Max. -5VDC ±5% @ 65 mA Max.	103mA 64mA	
9	Control Logic:	TTL "0" = Switch ON TTL "1" = Switch OFF	Pass	



**Typical Characteristics
ON
P4T-100M2G-50-T-SFF-IN**

(J1-J2) Insertion Loss and Return Loss



(J1-J3) Insertion Loss and Return Loss



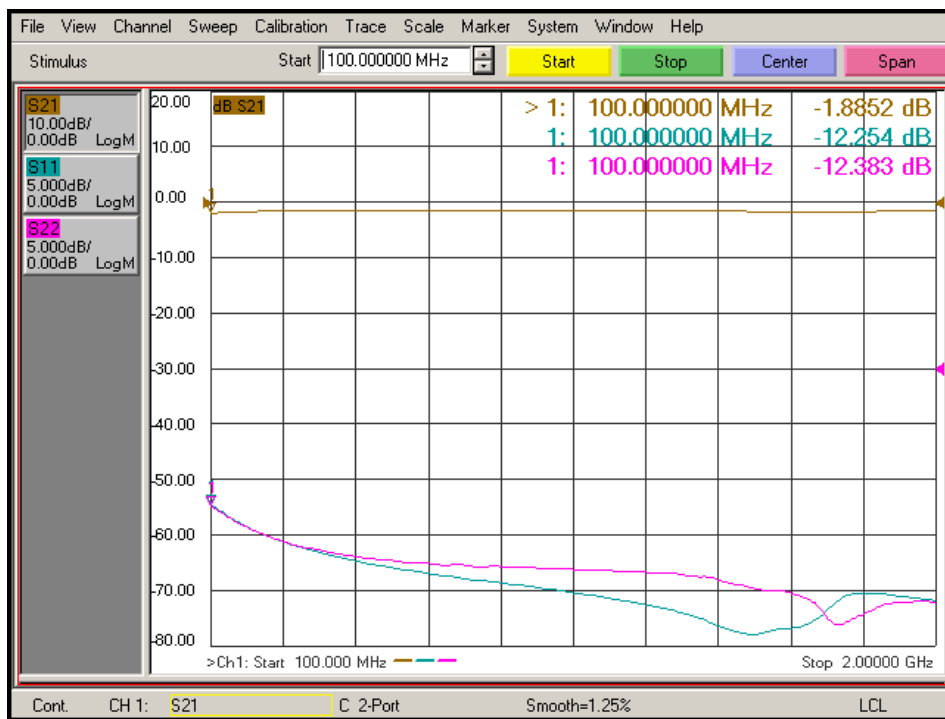


**Typical Characteristics
ON
P4T-100M2G-50-T-SFF-IN**

(J1-J4) Insertion Loss and Return Loss



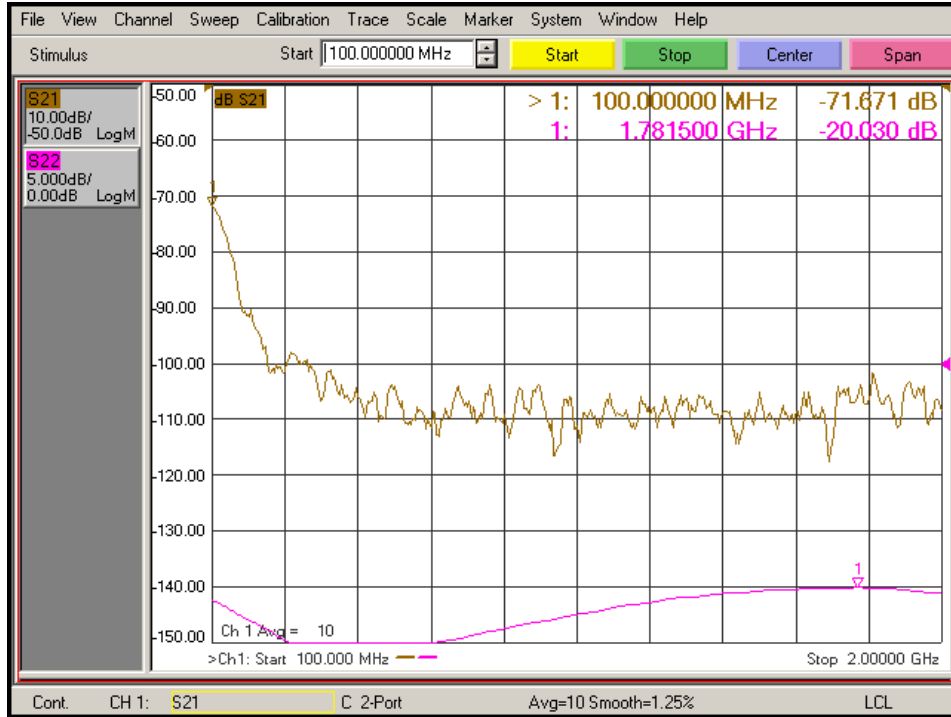
(J1-J5) Insertion Loss and Return Loss



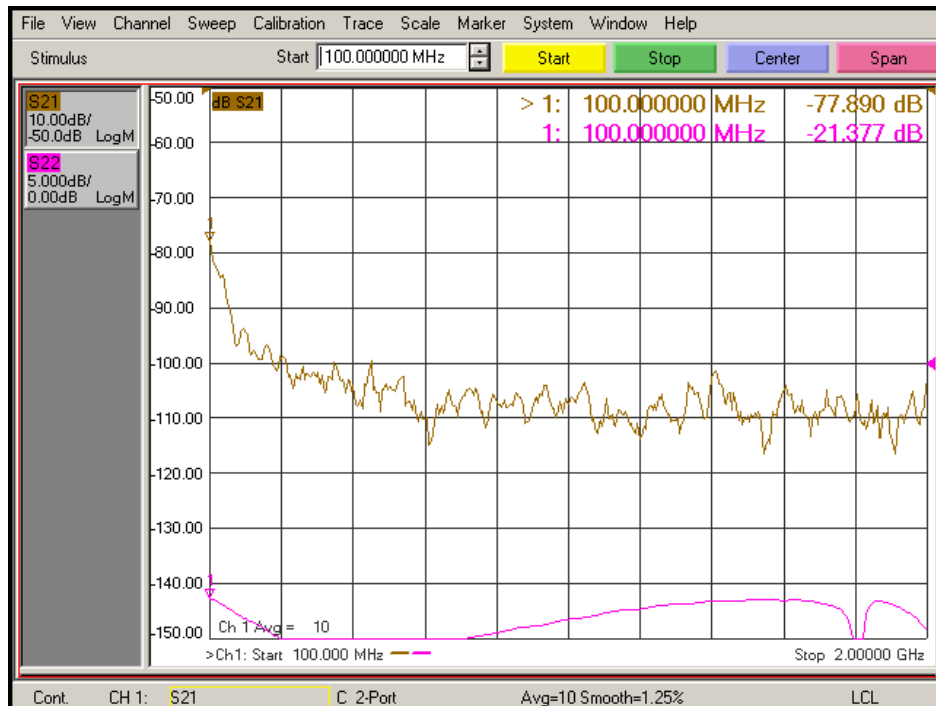


**Typical Characteristics
ON
P4T-100M2G-50-T-SFF-IN**

(J1 – J2) Isolation and Termination Return Loss



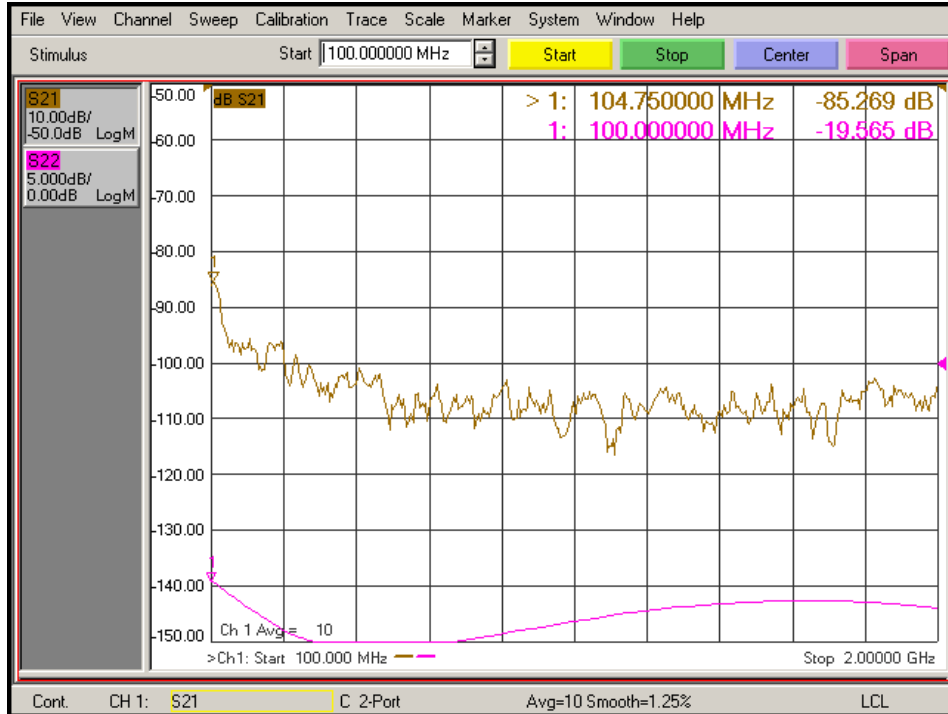
(J1 – J3) Isolation and Termination Return Loss



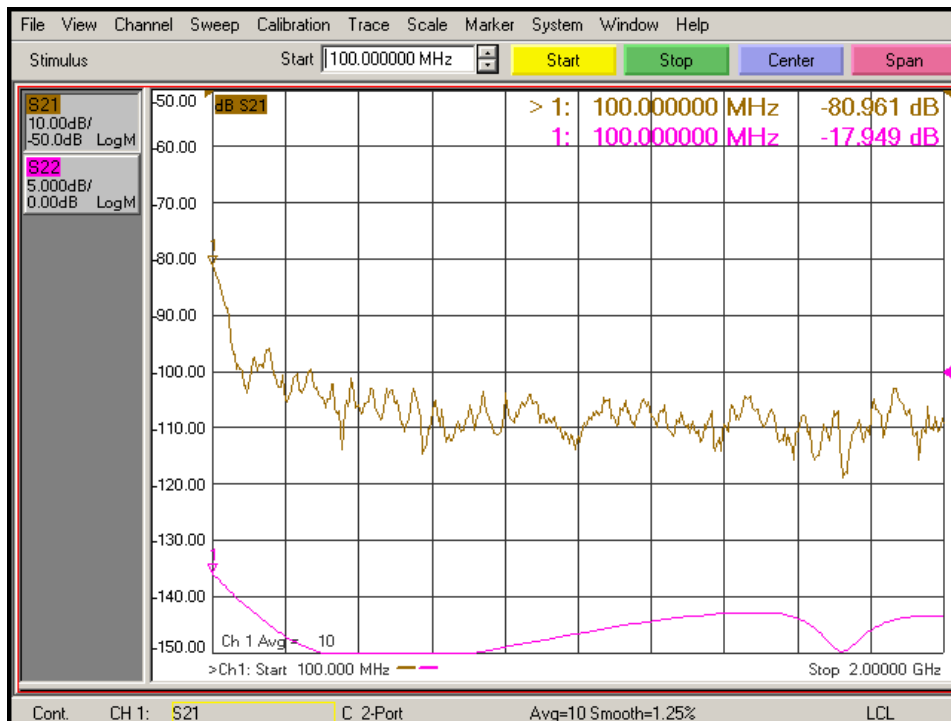


**Typical Characteristics
ON
P4T-100M2G-50-T-SFF-IN**

(J1 – J4) Isolation and Termination Return Loss



(J1 – J5) Isolation and Termination Return Loss

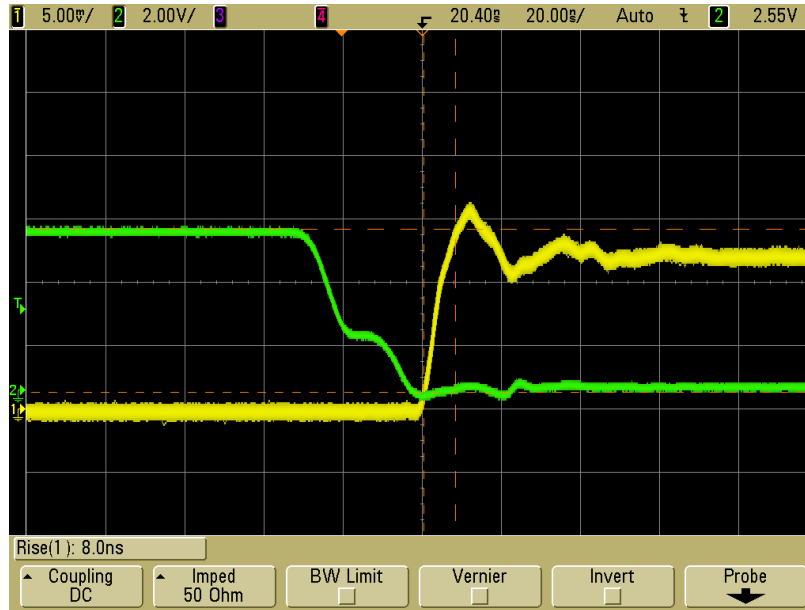




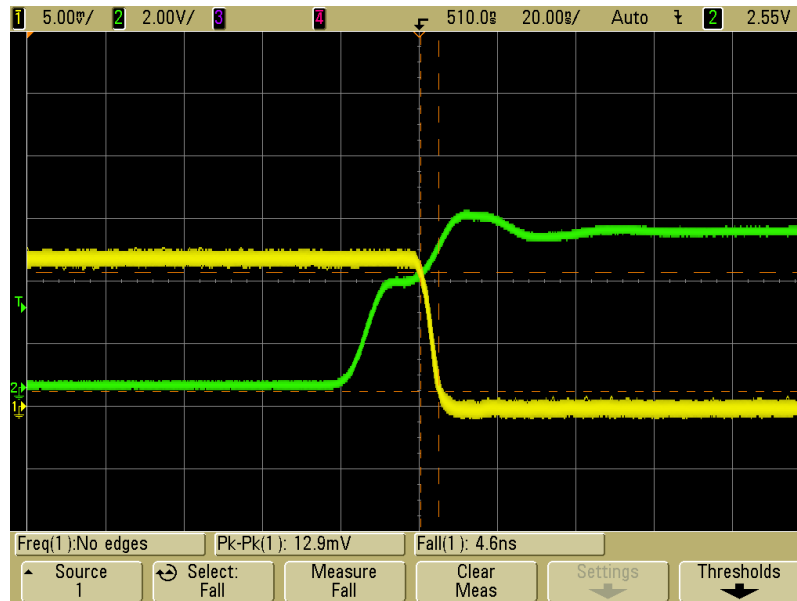
**Typical Characteristics
ON
P4T-100M2G-50-T-SFF-IN**

Switching Speed

Rise Time & ON Delay (20ns per Div.)



Fall Time & OFF Delay (20ns per Div.)



Green Trace: TTL Signal

*Pulsed @ 1MHz, 50% Duty Cycle

Yellow Trace RF Signal

*Input RF signal @ 2GHz, 10dBm