



Typical Characteristics For P2T-1G18G-65-T-SFF

PMI MODEL P2T-1G18G-65-T-SFF IS AN ABSORPTIVE, HIGH SPEED, SINGLE POLE TWO THROW SWITCH CAPABLE OF SWITCHING WITHIN 100 ns MAXIMUM. THE FREQUENCY RANGE IS 1.0 GHz TO 18.0 GHz. THIS SWITCH HAS 65 dB ISOLATION.



February 29, 2016

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Product Feature & Mechanical Drawing:

DESCRIPTION

PMI MODEL P2T-1G18G-65-T-SFF IS AN ABSORPTIVE, HIGH SPEED, SINGLE POLE TWO THROW SWITCH CAPABLE OF SWITCHING WITHIN 100 ns MAXIMUM. THE FREQUENCY RANGE IS 1.0 GHz TO 18.0 GHz. THIS SWITCH HAS 65 dB ISOLATION.

SPECIFICATIONS

- FREQUENCY RANGE: 1.0 GHz TO 18.0 GHz
- IMPEDANCE: 50 Ω
- INPUT POWER: +30dBm MAX (SURVIVAL)
+20dBm MAX (OPERATING)
- INPUT VSWR: 2.0:1 MAX
- INSERTION LOSS: 3.5dB MAX
- ISOLATION: 65dB TYP.
- SWITCHING SPEED: 100ns MAX
- DC VOLTAGE: +5VDC, 100mA TYP.
-15VDC, 100mA TYP.
- CONTROL: SOLDER PIN
TTL COMPATIBLE - SEE LOGIC TABLE
- CONNECTORS IN/OUT: SMA (F)
- SIZE: (L) 1.0" X (W) 1.0" X (H) 0.4"
- FINISH: BLUE EPOXY POLIMIDE COATING IAW MIL-C-22750, TYPE I OVER EPOXY POLIMIDE PRIMER IAW MIL-P-23377, TYPE I, CLASS 1 OR 3.

LOGIC TABLE

CTL	J1 - J2	J1 - J3
0	ON	OFF
1	OFF	ON

ENVIRONMENTAL RATINGS

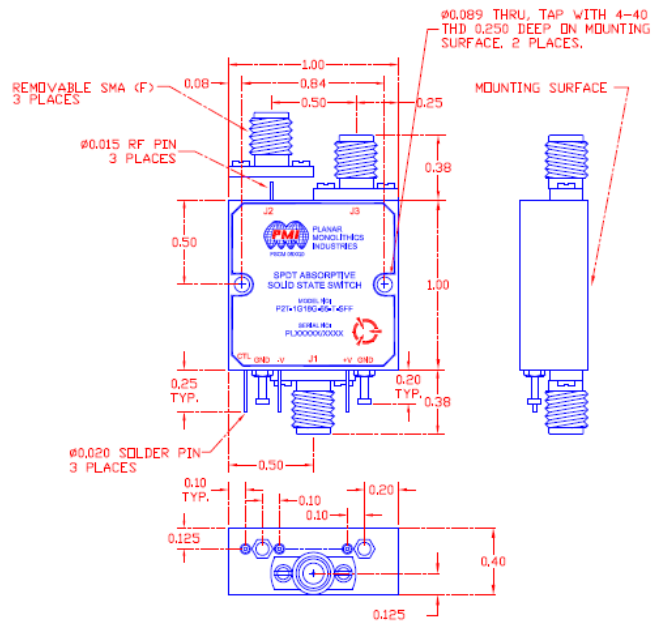
- TEMPERATURE: -55°C TO + 85°C (OPERATING)
-65°C TO +125°C (STORAGE)
- HUMIDITY: MIL-STD-202F, METHOD 103B COND. B
- SHOCK: MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202F, METHOD 107D COND. A

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

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

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	ORIGINAL RELEASE	10/18/15	
	A1	ECN # 16-0097	8/19/16	

MECHANICAL OUTLINE



PMI CONFIDENTIAL AND PROPRIETARY

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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN <i>B. Thomas</i>		10/18/15	PRODUCT FEATURE P2T-1G18G-65-T-SFF		
CHECKED			SIZE A	FSOM NO. 05XQ0	DWG NO. 27026501
ISSUED			SCALE N: S		REV. A1
					SHEET 1 OF 1

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Summary Test Data

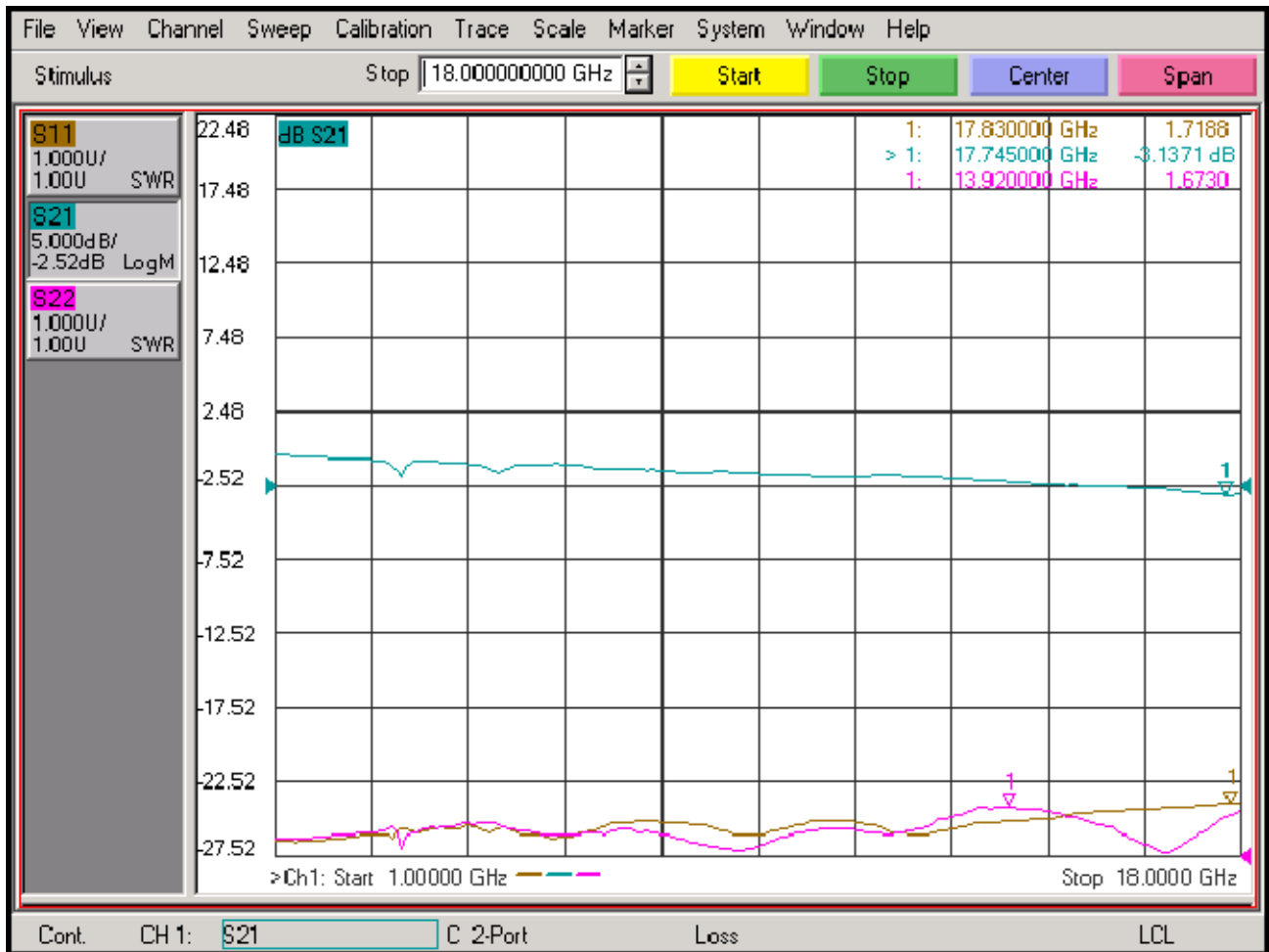
TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range	1.0 TO 18.0 GHz	1.0 TO 18.0 GHz	
2	Insertion Loss	3.5 dB Max	3.14 dB (See Plot)	
3	VSWR	2.0:1 Typ	1.89:1 (See Plot)	
4	Isolation	65 dB Min	80.8 dB (See Plot)	
5	Switching Speed	100 ns Max	49.6 ns	
6	Input Power	+30dBm Max (Survival) +20dBm Max (Operating)	Pass	
7	DC Supply	+5VDC @ 100 mA Typ -15VDC @ 100 mA Typ	24 mA 57 mA	
8	Control Signal	LOGIC TABLE FUNCTION CTL 0 J1-J2 "LOW LOSS" 1 J1-J3 "LOW LOSS"	Pass	

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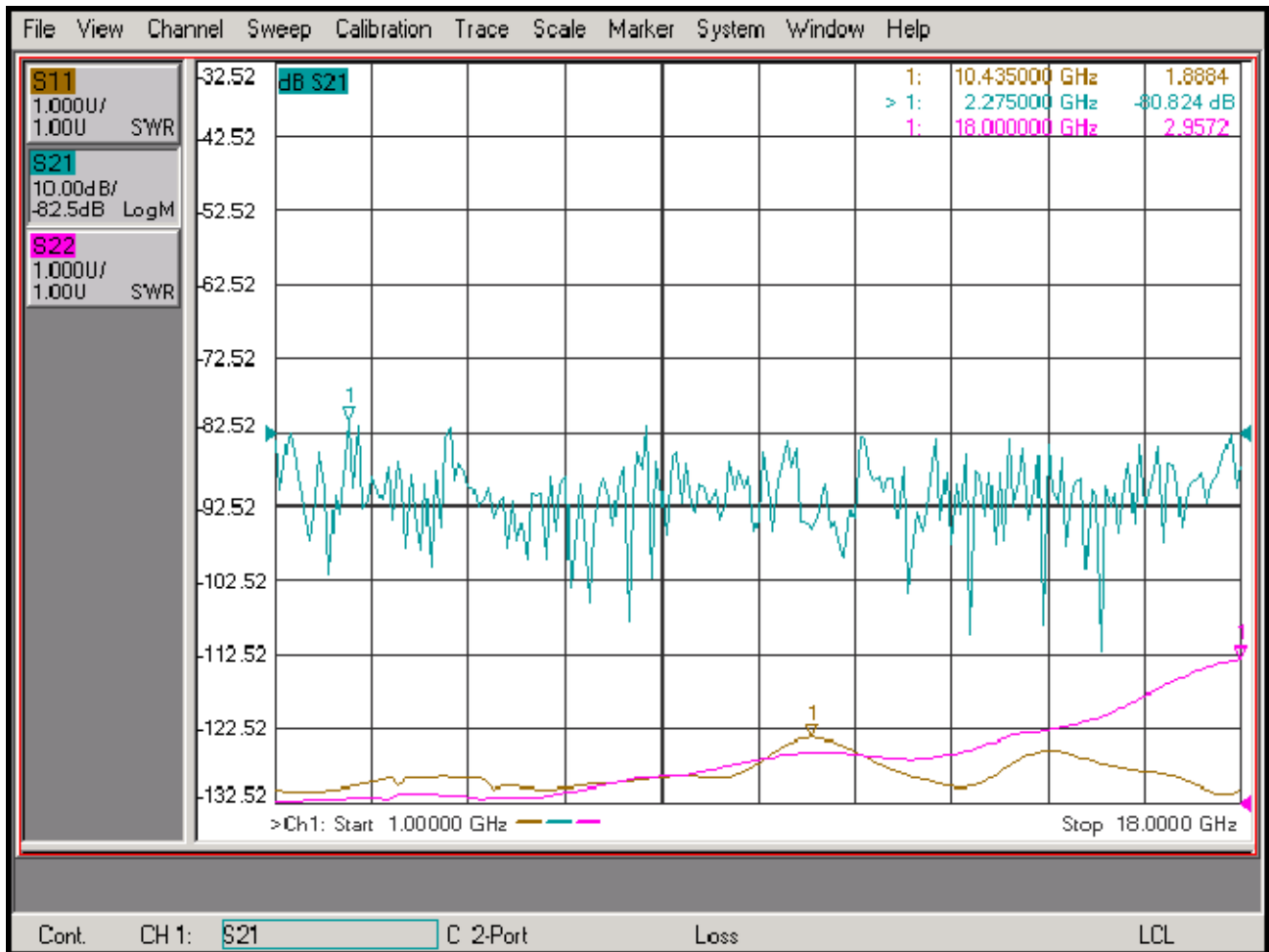
J1 – J2 Insertion Loss and Return Loss:





Typical Characteristics For P2T-1G18G-65-T-SFF

J1 – J2 Isolation and Terminated Return Loss:

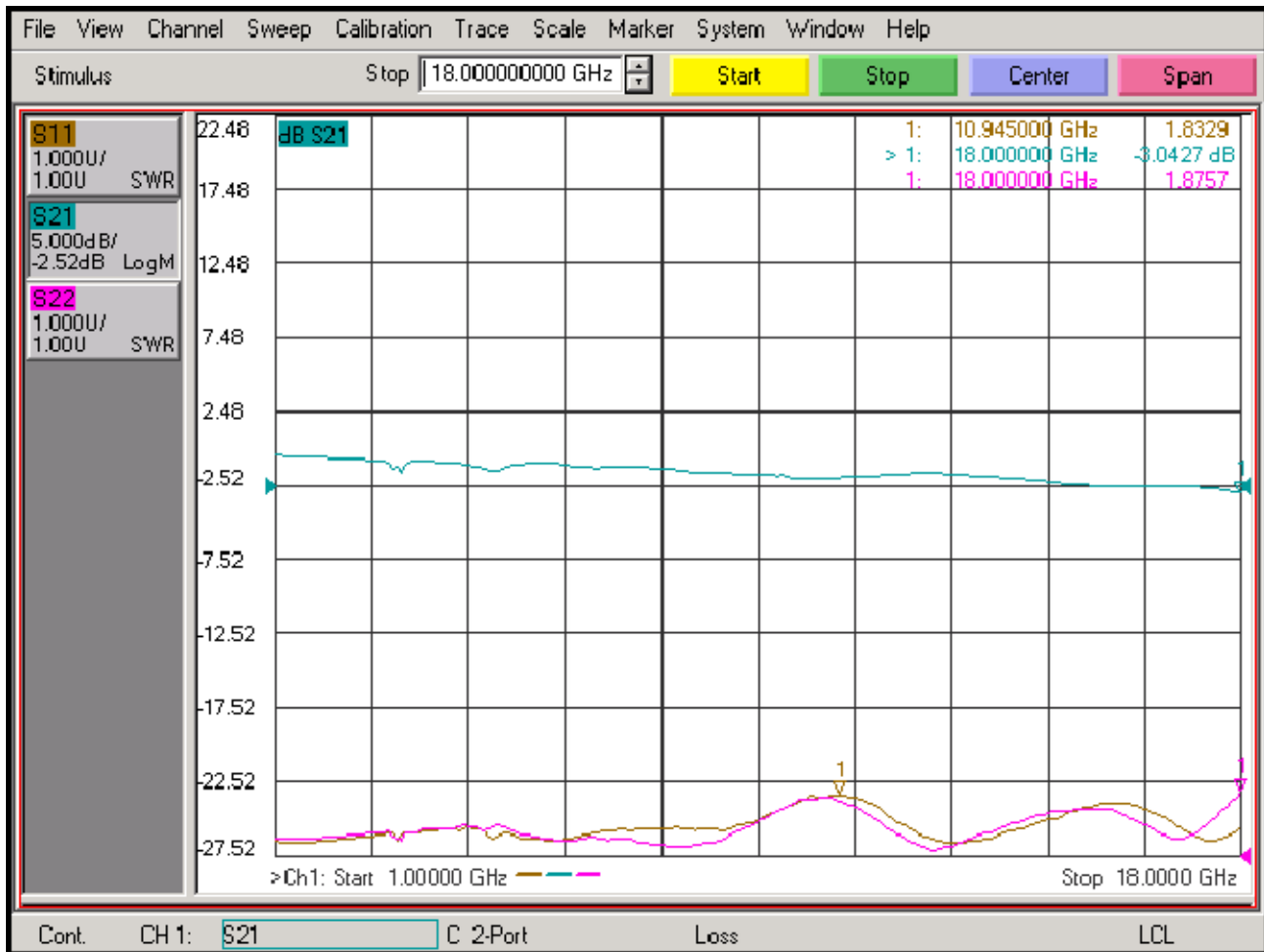


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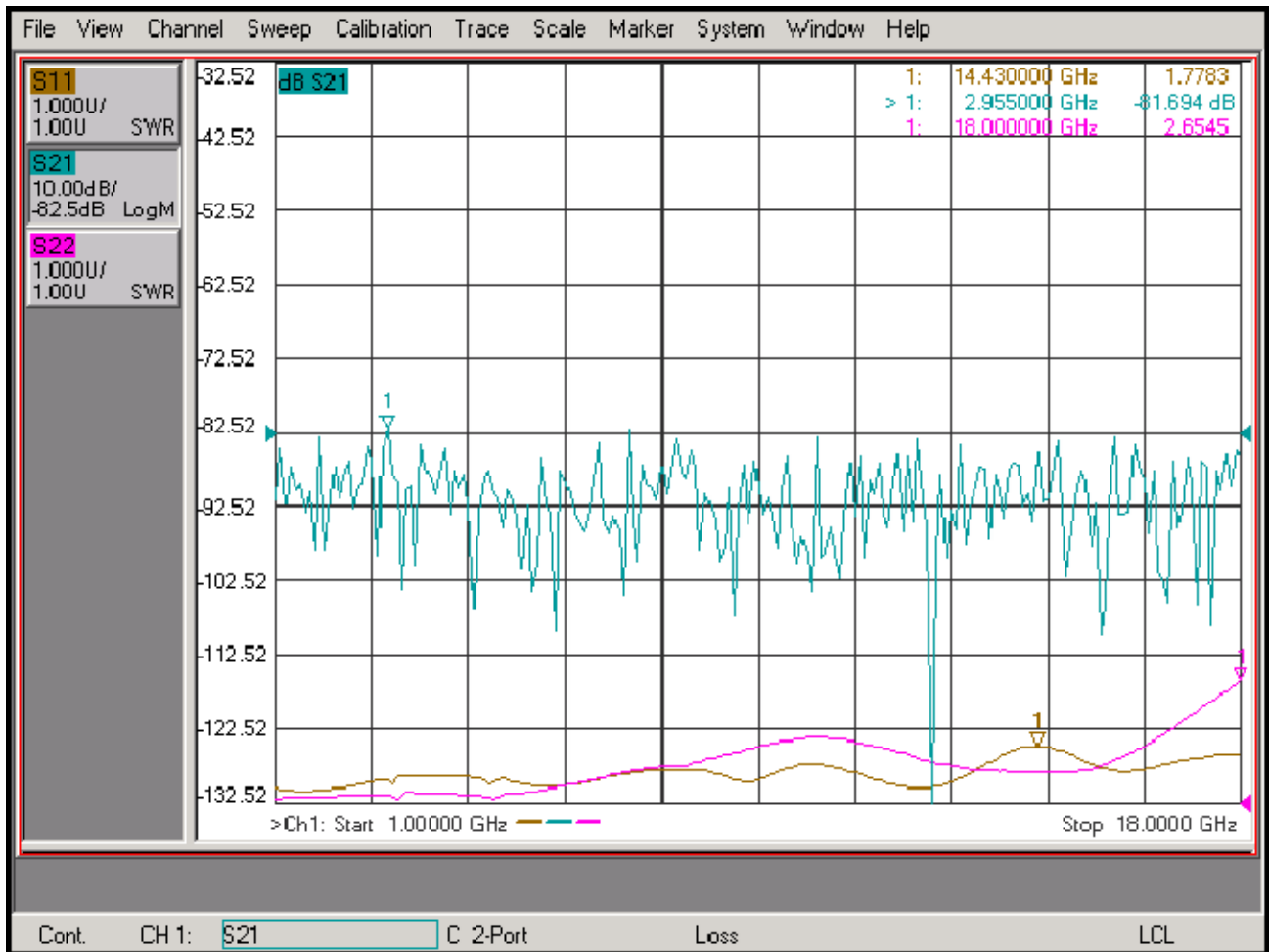
J1 – J3 Insertion Loss and Return Loss:





Typical Characteristics For P2T-1G18G-65-T-SFF

J1 – J3 Isolation and Terminated Return Loss:

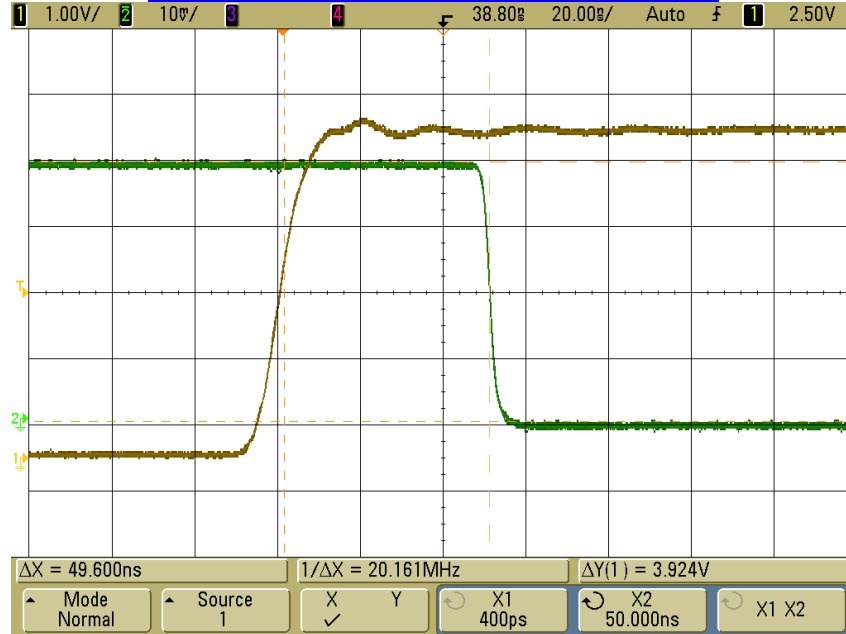




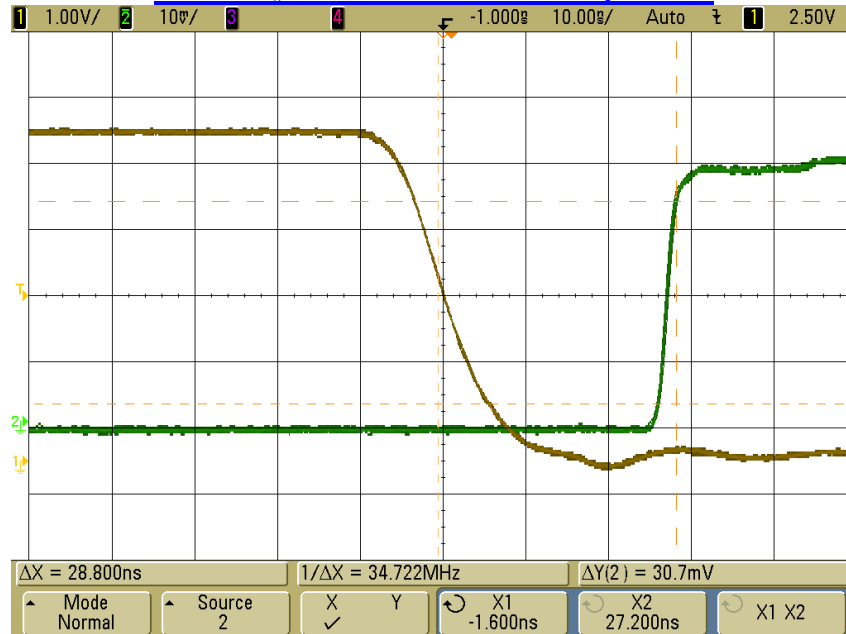
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Switching Speed:

OFF Delay and Fall Time – 20 ns per Div.



ON Delay and Rise Time – 10 ns per Div.



GREEN TRACE : RF
YELLOW TRACE : TTL

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