



Typical Characteristics For P2T-1G18G-75-T-SFF

PMI MODEL P2T-1G18G-75-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 75 dB ISOLATION.



February 29, 2016

Designed by: PMI Engineering

Tested by: Jojo Emperador

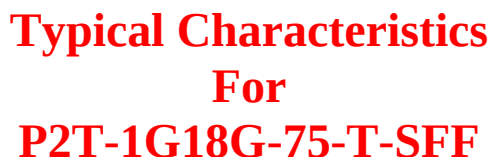
Reported by: Simon Kuhn



Typical Characteristics For P2T-1G18G-75-T-SFF

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DESCRIPTION

SPECIFICATIONS

- **FREQUENCY RANGE:** _____ 1.0 GHz TO 18.0 GHz
- **IMPEDANCE:** _____ 50 Ω
- **INPUT POWER:** _____ +30dBm MAX (SURVIVAL)
+20dBm MAX (OPERATING)
- **INPUT VSWR:** _____ 1.8:1 MAX
- **INSERTION LOSS:** _____ 3.0dB MAX
- **ISOLATION:** _____ 75dB MIN.
- **SWITCHING SPEED:** _____ 100ns MAX
- **DC VOLTAGE:** _____ +5V/DC, 100mA TYP.
-15V/DC, 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:** _____ PAINTED BLUE

LOGIC TABLE

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

ENVIRONMENTAL RATINGS

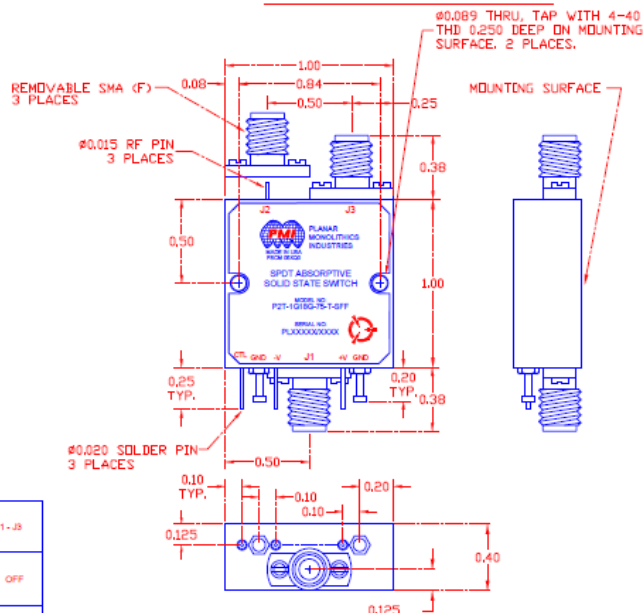
- TEMPERATURE: _____ -55 °C TO +85 °C (OPERATING)
 -65 °C TO +125 °C (STORAGE)
- HUMIDITY: _____ MIL-STD-202, METHOD 103B COND. B
- SHOCK: _____ MIL-STD-202, METHOD 213B COND. B
- VIBRATION: _____ MIL-STD-202, METHOD 204D COND. B
- ALTITUDE: _____ MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE: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

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

PMI CONFIDENTIAL AND PROPRIETARY

MECHANICAL OUTLINE



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ISO 9001 CERTIFIED

		TITLE			
APPROVALS	DATE	PRODUCT FEATURE P2T-1G18G-75-T-SFF			
DRAWN <i>JPH</i>	<i>4/18/20</i>				
REDRAWN		SIZE A	FSOM NO. 05XQ0	DWG NO. 2703900	REV. A1
ISSUED		SCALE N:S			SHEET 1 OF 1

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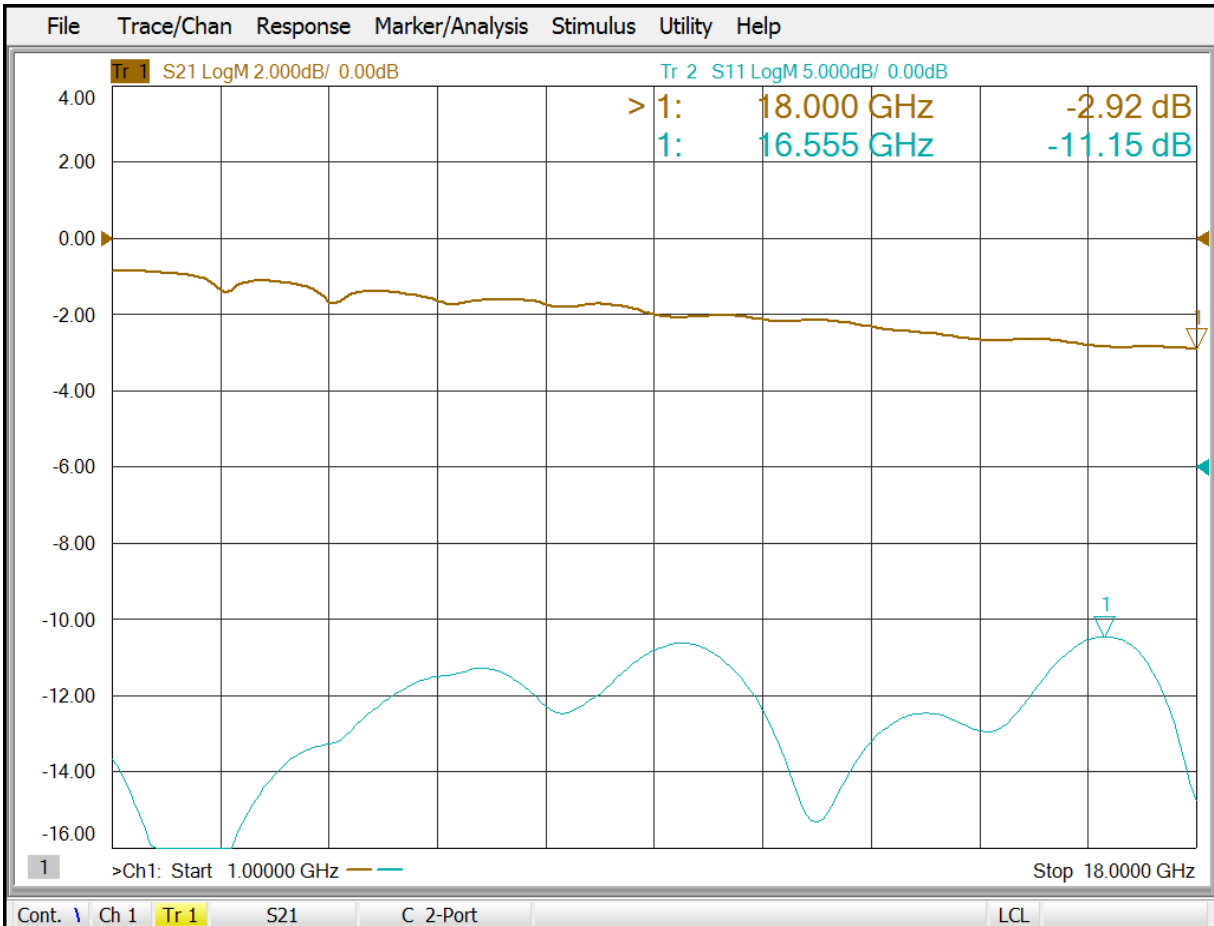
Typical Characteristics For P2T-1G18G-75-T-SFF Summary Test Data

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	3.0 dB Max	2.9 dB (See Plot)	
3	VSWR	2.0:1 Typ	1.7:1 (See Plot)	
4	Isolation	75 dB Min	76 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	23 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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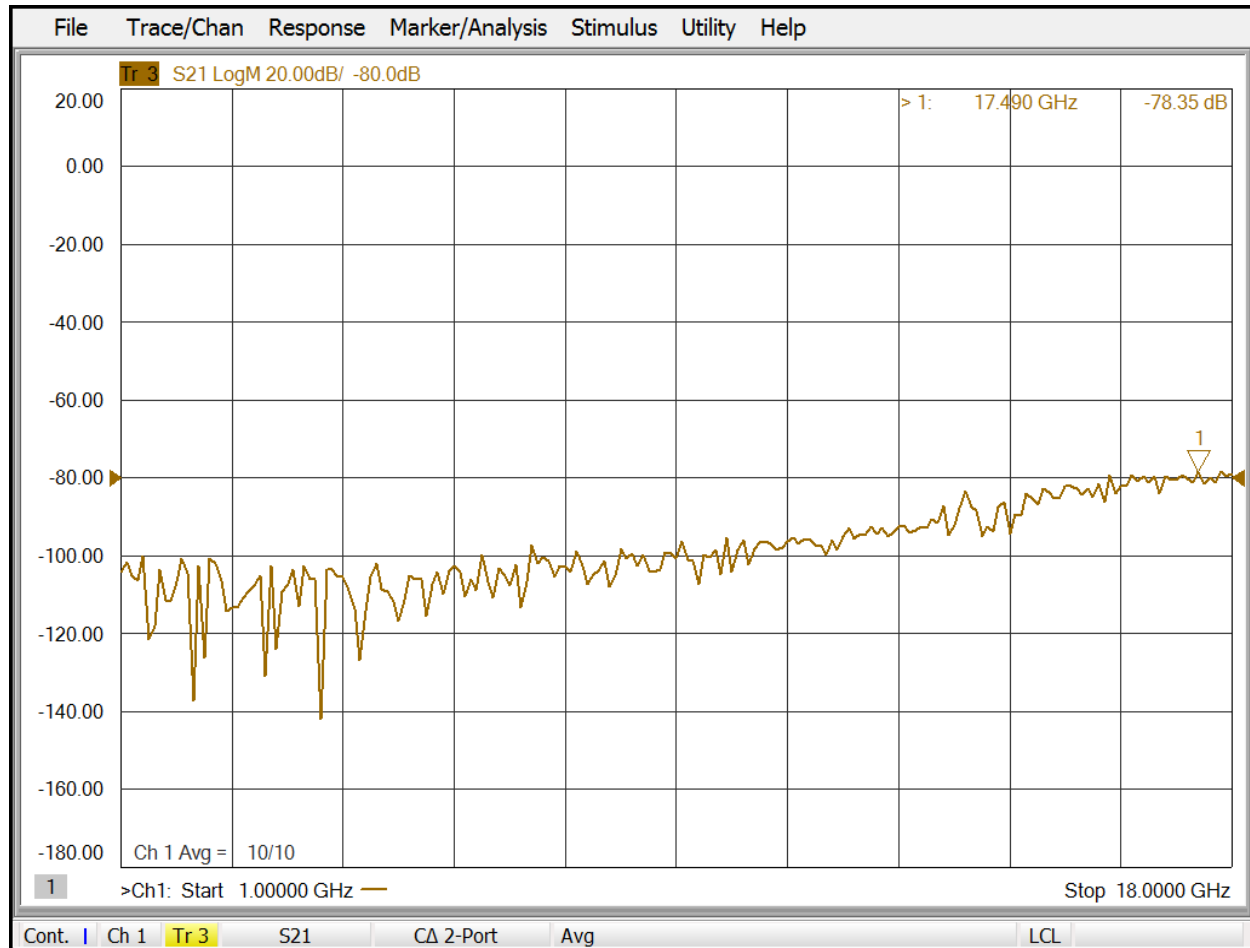
J1 – J2 Insertion Loss and Return Loss:





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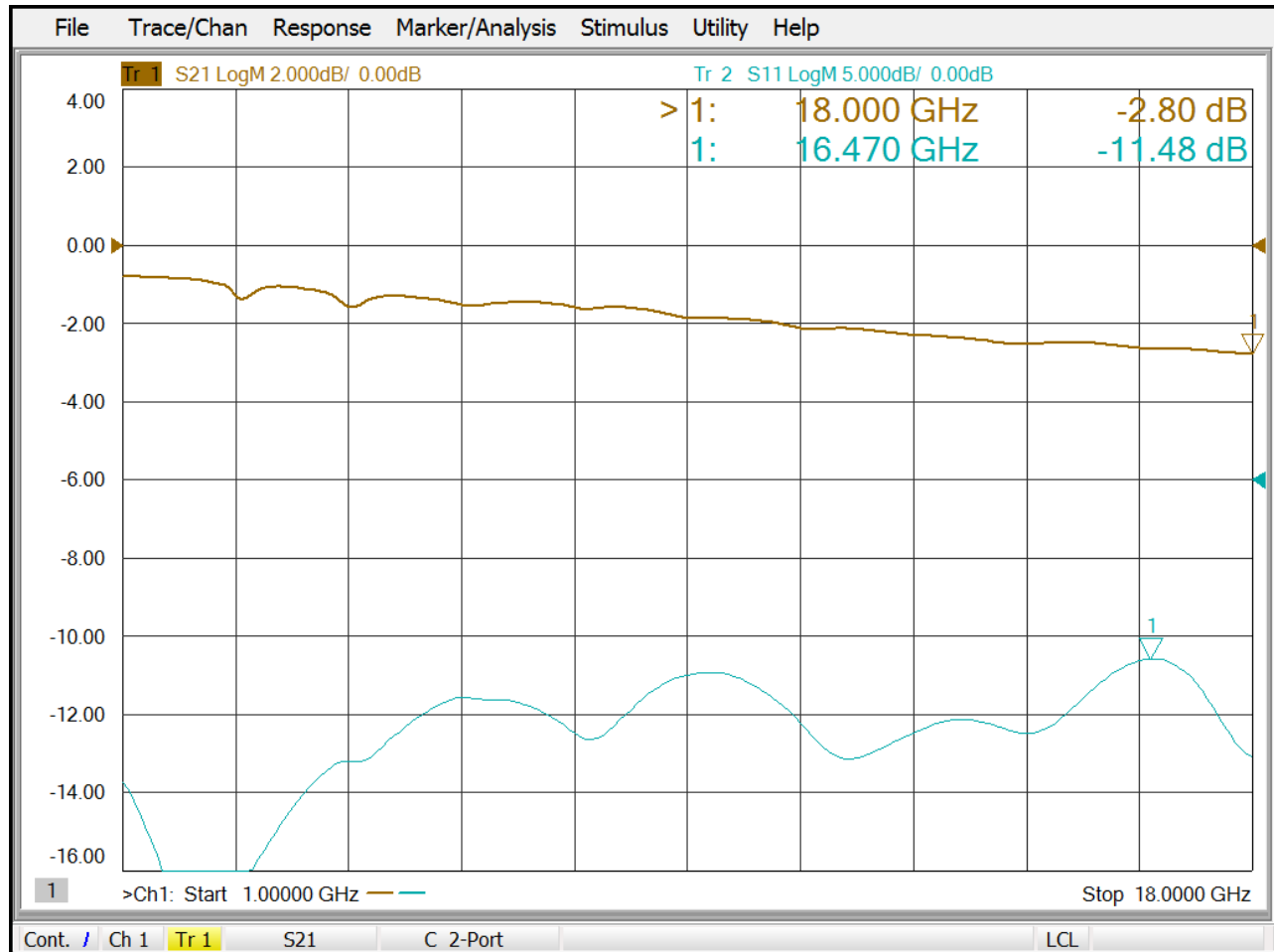
J1 – J2 Isolation and Terminated Return Loss:





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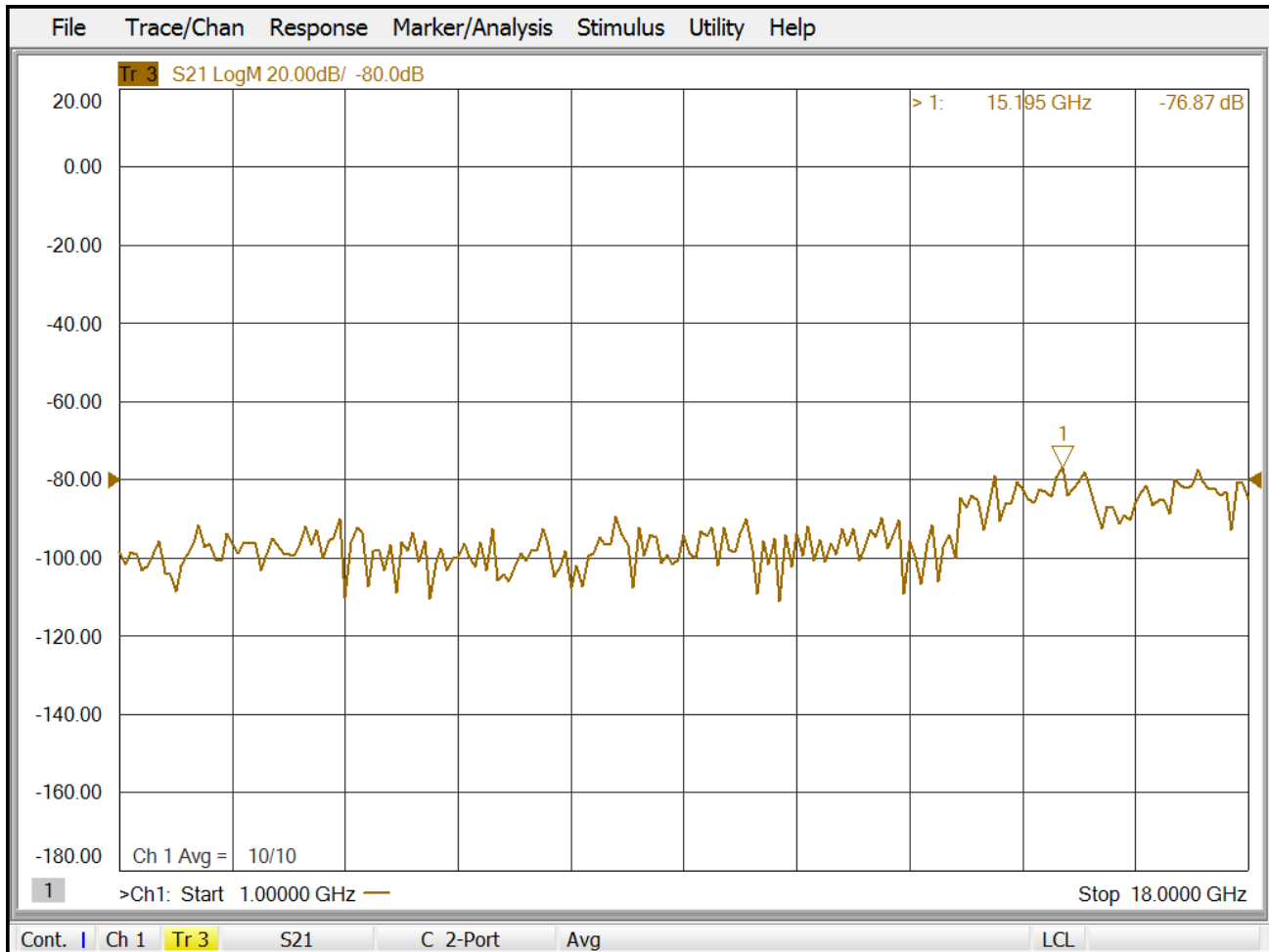
J1 – J3 Insertion Loss and Return Loss:





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J1 – J3 Isolation and Terminated Return Loss:

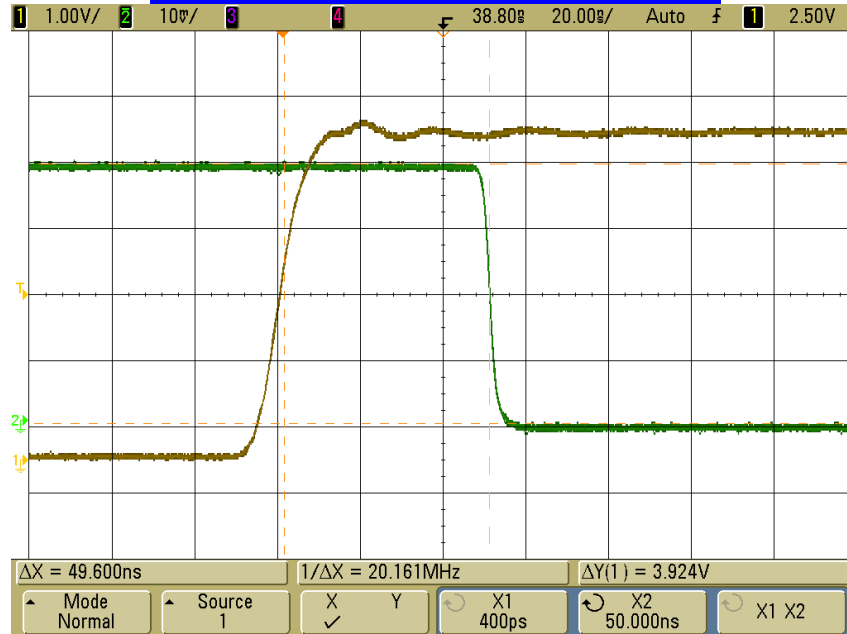




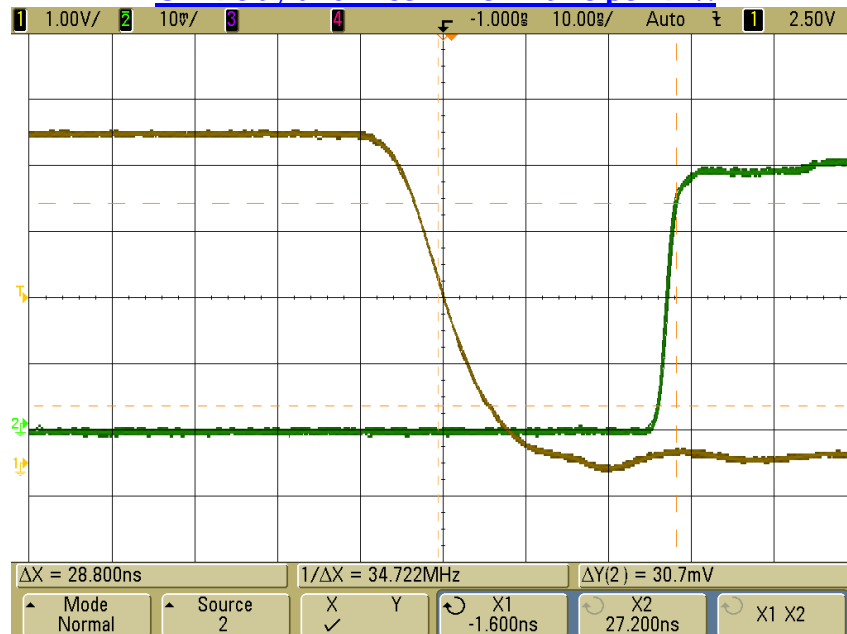
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Switching Speed:

OFF Delay and Fall Time – 20 ns per Div.



ON Delay and Rise Time – 10 ns per Div.



GREEN TRACE : RF

YELLOW TRACE: TTL