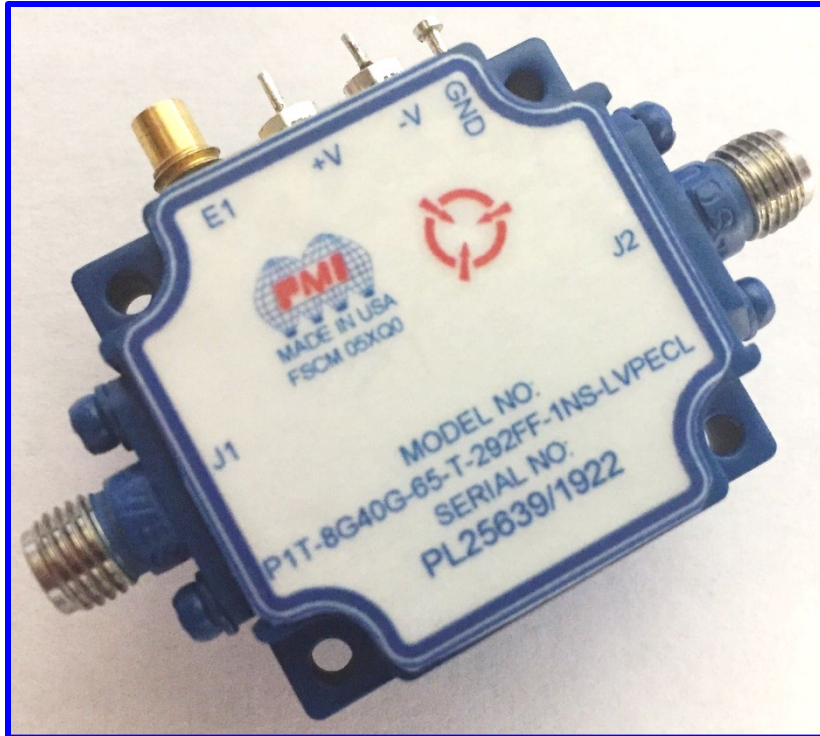




**TYPICAL CHARACTERISTICS
ON
P1T-8G40G-65-T-292FF-1NS-LVPECL**

PMI MODEL P1T-8G40G-65-T-292FF-1NS-LVPECL IS AN ABSORPTIVE, SINGLE POLE, SINGLE THROW, PIN DIODE SWITCH THAT OPERATES FROM 8.0 TO 40.0 GHZ. THIS MODEL INCORPORATES A SINGLE ENDED LVPECL COMPATIBLE DRIVER FOR EASY SYSTEM INTEGRATION.



June 06, 2019

Designed By: PMI Engineering

**Tested & Reported By:
Alfredo Lopez
Santiago Urrego**



TYPICAL CHARACTERISTICS ON P1T-8G40G-65-T-292FF-1NS-LVPECL

DESCRIPTION

PMI MODEL P1T-8G40G-65-T-292FF-1NS-LVPECL IS AN ABSORPTIVE, SINGLE POLE, SINGLE THROW PIN DIODE SWITCH THAT OPERATES FROM 8 TO 40 GHZ. THIS MODEL INCORPORATES A SINGLE ENDED LVPECL COMPATIBLE DRIVER FOR EASY SYSTEM INTEGRATION.

SPECIFICATIONS

- FREQUENCY RANGE: 8 to 40GHz
- ISOLATION: 65dB Typical, 55dB Min.
- INSERTION LOSS: 5.5dB Typical, 6.8dB Max.
- VSWR IN / OUT: 2.0:1 Typical, 2.2:1 Max.
- INPUT POWER: +17 dBm CW Max.
- P1dB: +13 dBm Min.
- SWITCHING SPEED: 5ns Typical, 10ns Max.
- RISE/FALL TIME: 0.9ns Typical, 1ns Max.
- CONTROL SIGNAL: SINGLE ENDED LVPECL "1" = ON
- DC VOLTAGE: +8 to +15V @ 40mA Max.
-8 to -15V @ 40mA Max.
- CONNECTORS IN/OUT: 2.92mm FEMALE CONNECTORS
- CONTROL CONNECTORS: SMC
- 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.
- SIZE: 1.2" X 1.3" X 0.5"

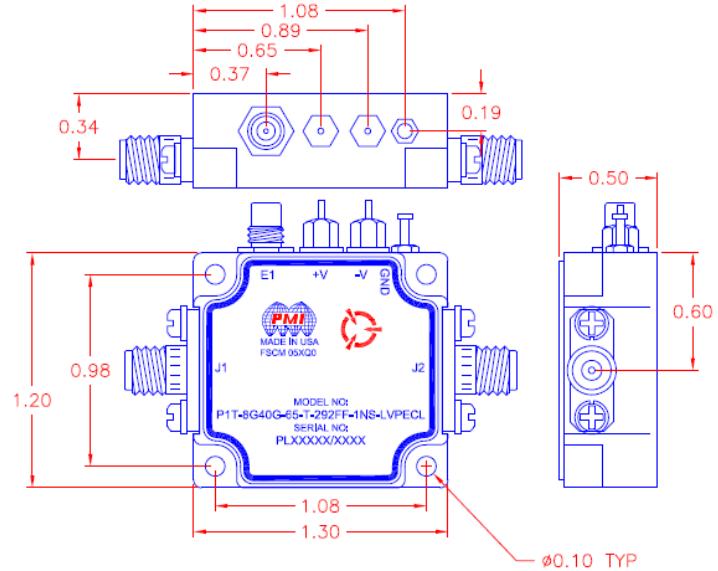
ENVIRONMENTAL RATINGS

- TEMPERATURE: -40°C TO +85°C (OPERATING)
-55°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 107

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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	INITIAL RELEASE	08/01/19	
	A2	ECN # 22-0101	08/18/22	

MECHANICAL OUTLINE



PMI CONFIDENTIAL AND PROPRIETARY

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



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

APPROVALS		DATE	TITLE		
DRAWN: <i>KM</i>		12/11/18	PRODUCT FEATURE		
REDRAWN: <i>SJR</i>		08/01/19	P1T-8G40G-65-T-292FF-1NS-LVPECL		
ISSUED:			SIZE: A	FSCM NO.: 05XQ0	DWG NO.: 27036120
			SCALE: N:S		REV: A2
				SHEET	1 OF 1



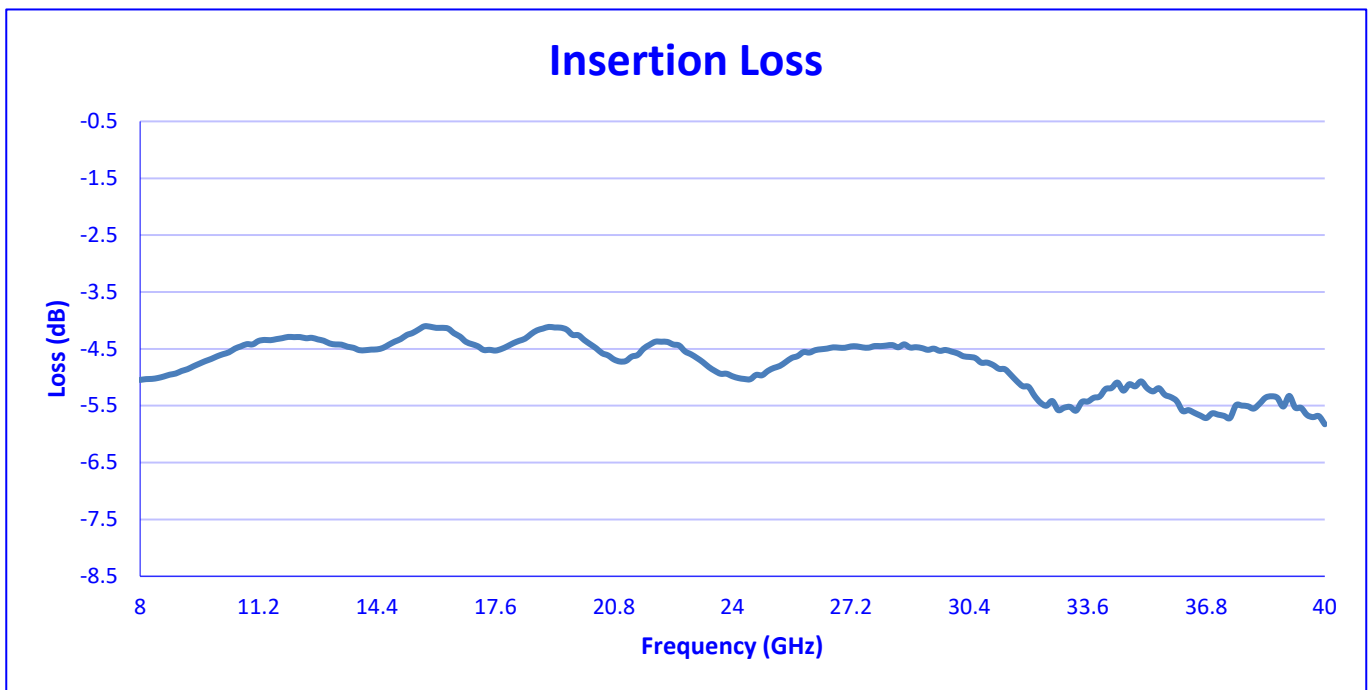
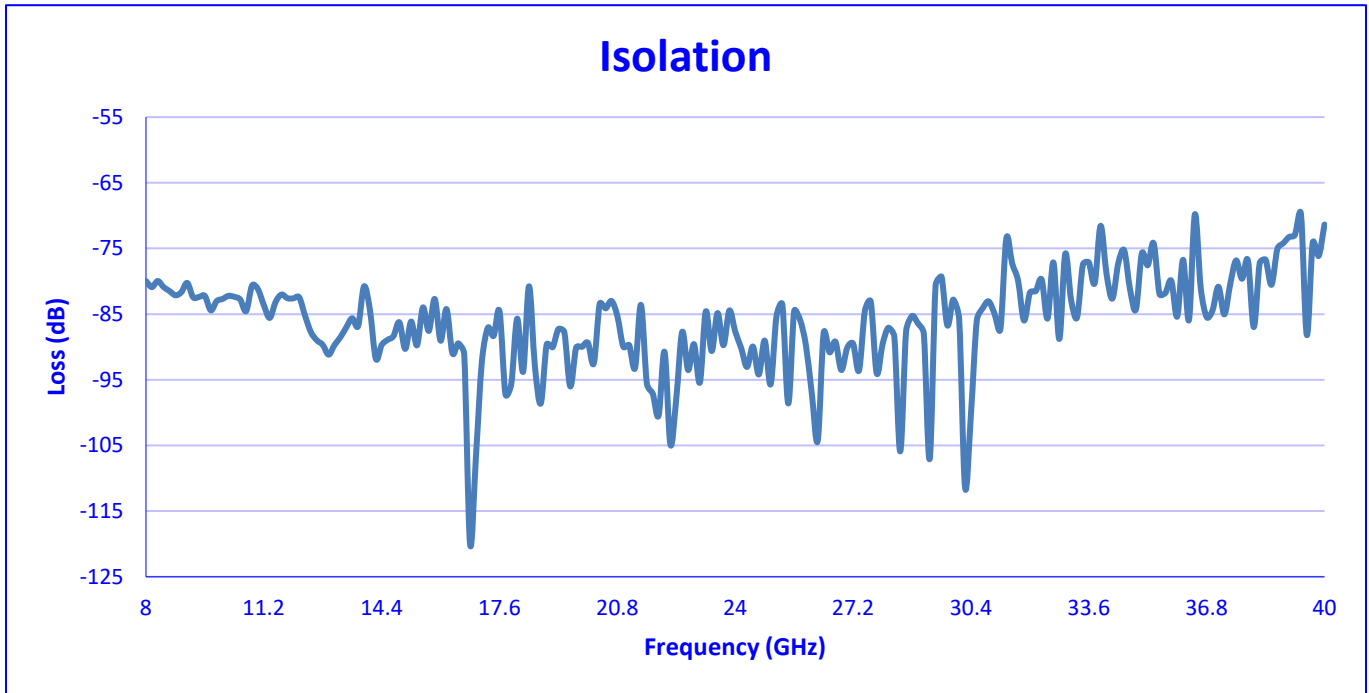
**TYPICAL CHARACTERISTICS
ON
P1T-8G40G-65-T-292FF-1NS-LVPECL**

Technical specifications

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	8 GHz to 40 GHz	8 GHz to 40 GHz	
2	Isolation:	65 dB Typ, 55 dB Min.	70dB See Plot	
3	Insertion Loss:	5.5 dB Typ, 6.8 dB Max.	5.83 dB See Plot	
4	VSWR: In/Out	2.0:1 Typ, 2.2:1 Max.	2.1:1 In 2.1:1 Out See Plot	
5	Input Power:	+17 dBm CW Max.	+17 dBm See Plot	
6	P1dB:	+13 dBm Min.	> +17 dBm See Plot	
7	Switching Speed:	5 ns Typ, 10 ns Max.	10 ns See Plot	
8	Rise/Fall Time:	0.9 ns Typ, 1.0 ns Max.	< 1.0 ns See Plot	
9	Control Signal:	Single Ended LVPECL "1" = On	Pass	
10	DC Voltage:	+8 to +15 V @ 15 mA Max. -8 to -15 V @ 40 mA Max.	26 mA +V 27 mA -V	

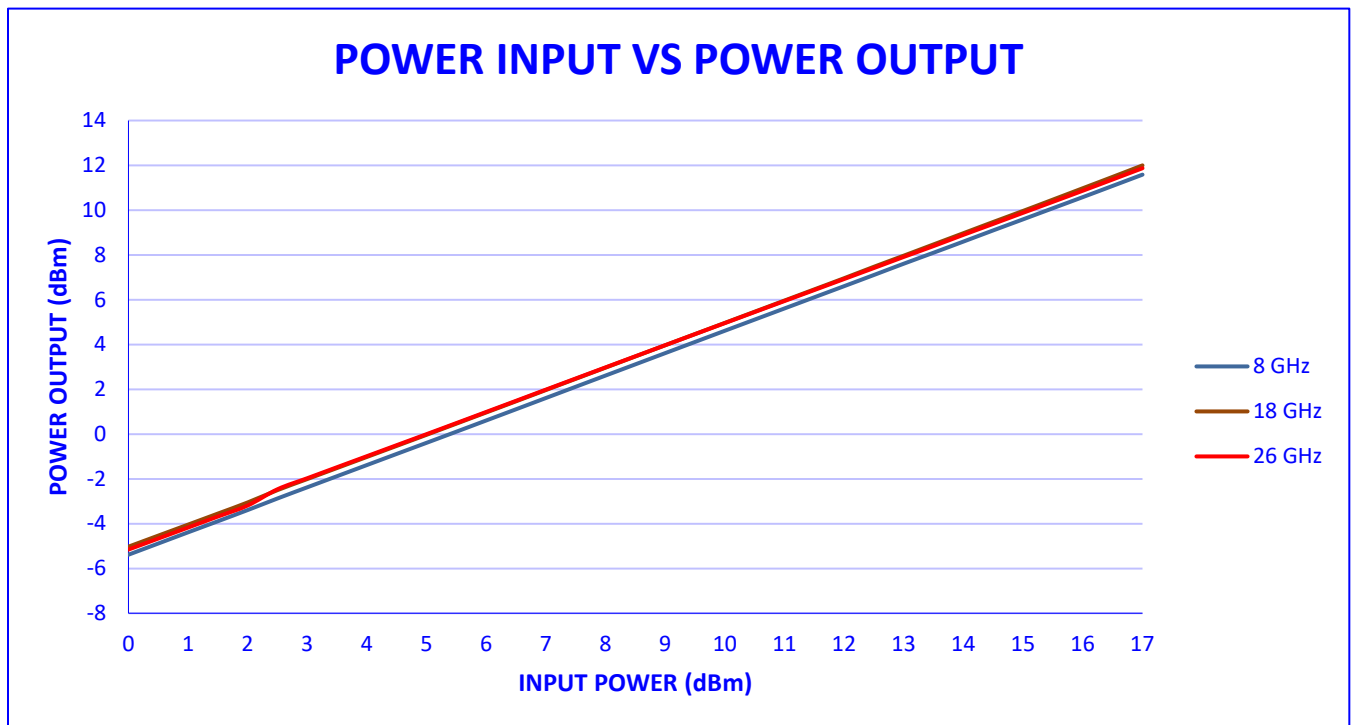
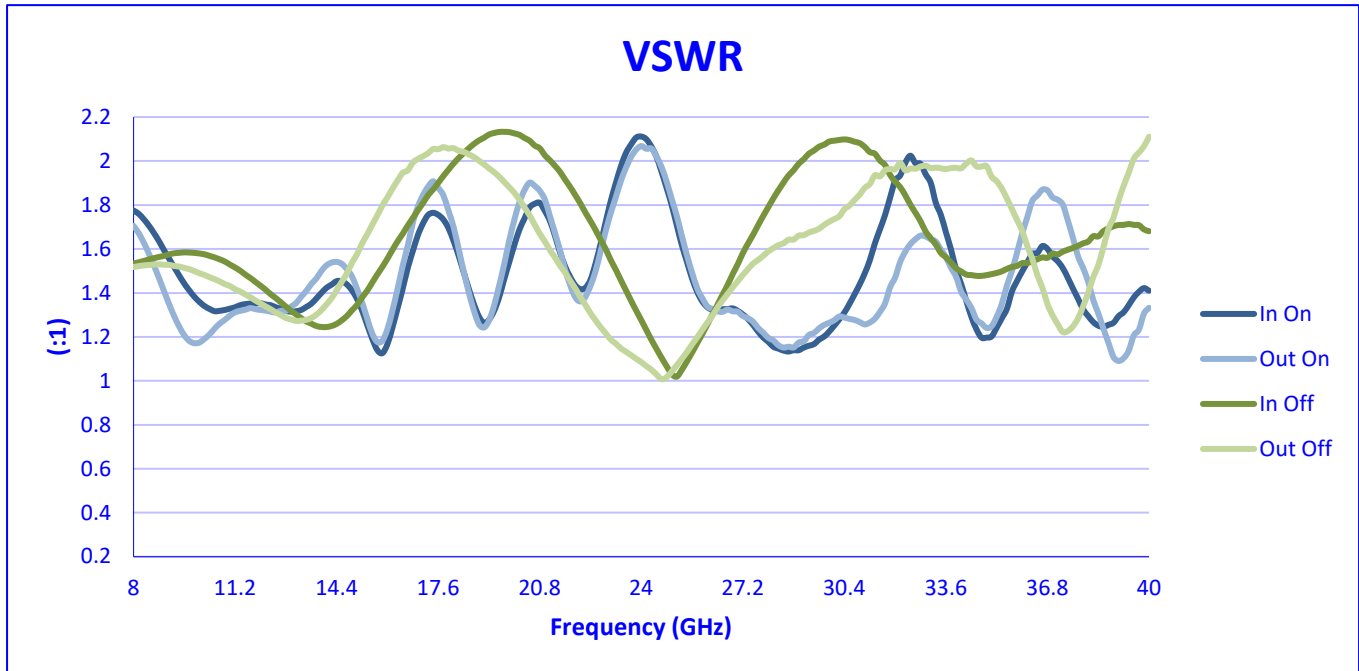


**TYPICAL CHARACTERISTICS
ON
P1T-8G40G-65-T-292FF-1NS-LVPECL**





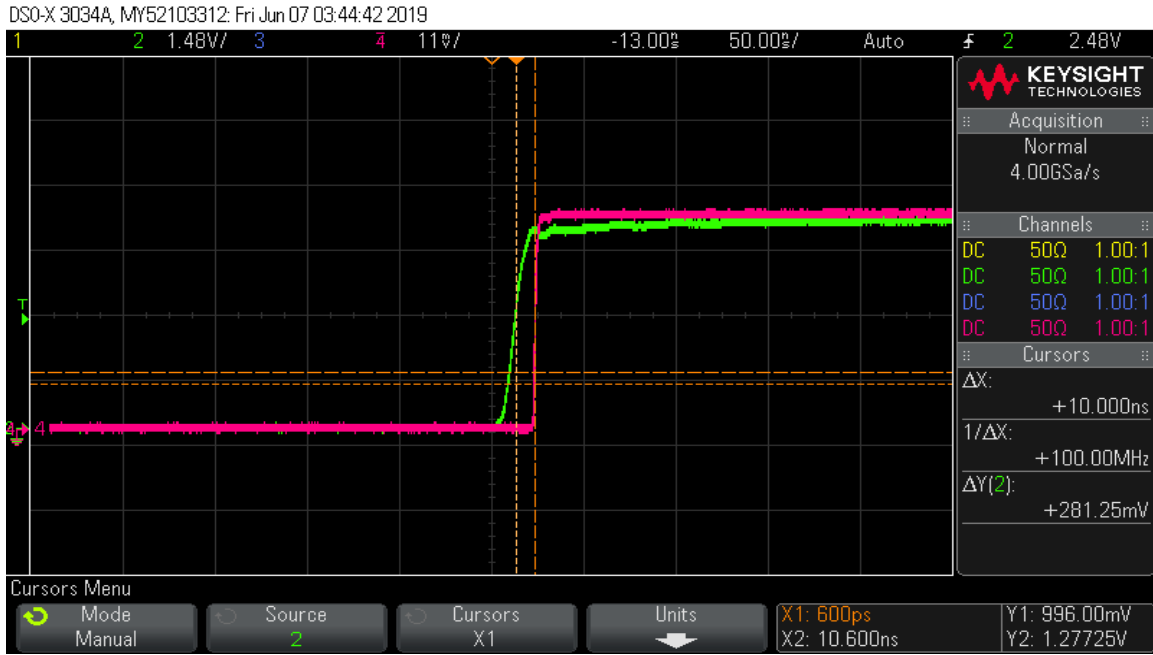
**TYPICAL CHARACTERISTICS
ON
P1T-8G40G-65-T-292FF-1NS-LVPECL**



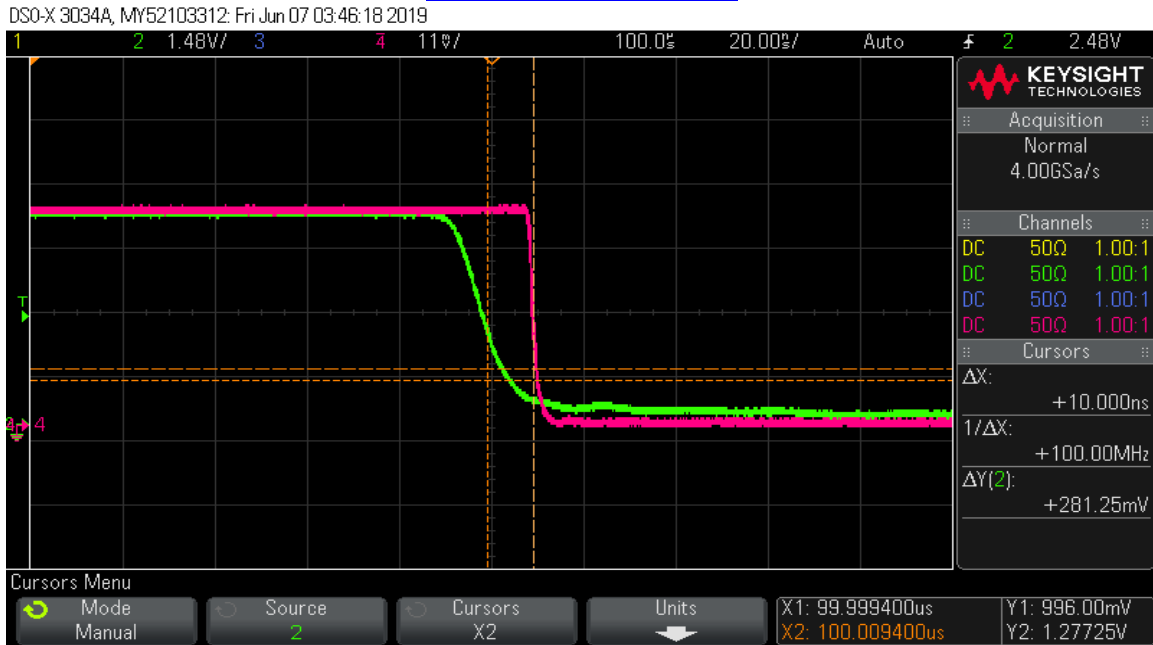


TYPICAL CHARACTERISTICS ON P1T-8G40G-65-T-292FF-1NS-LVPECL

Switching Speed On



Switching Speed Off

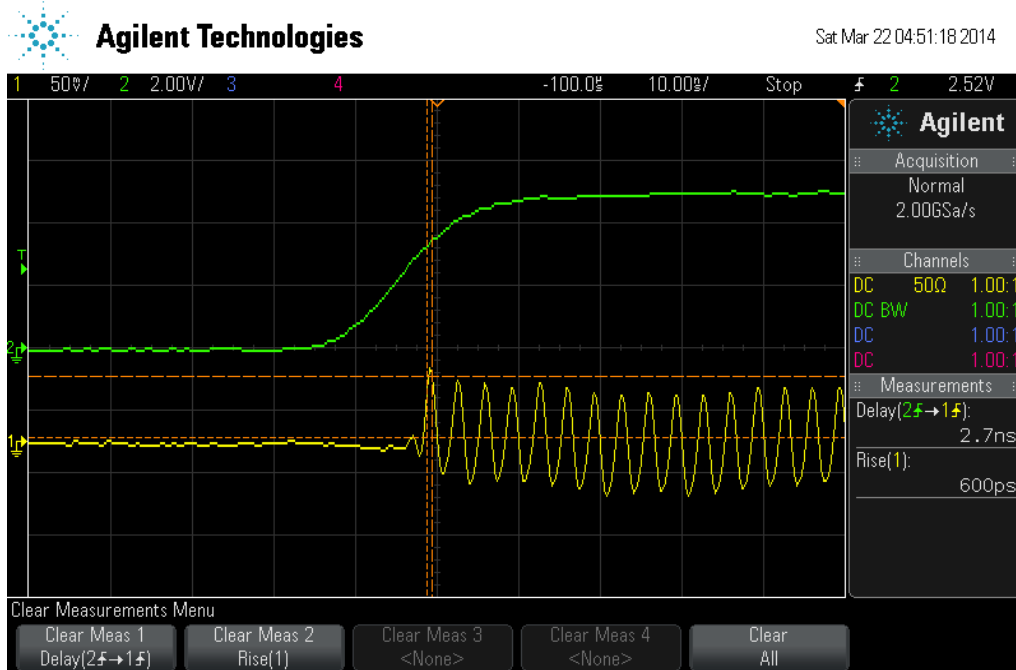


Green: TTL switch input
Red: RF Signal

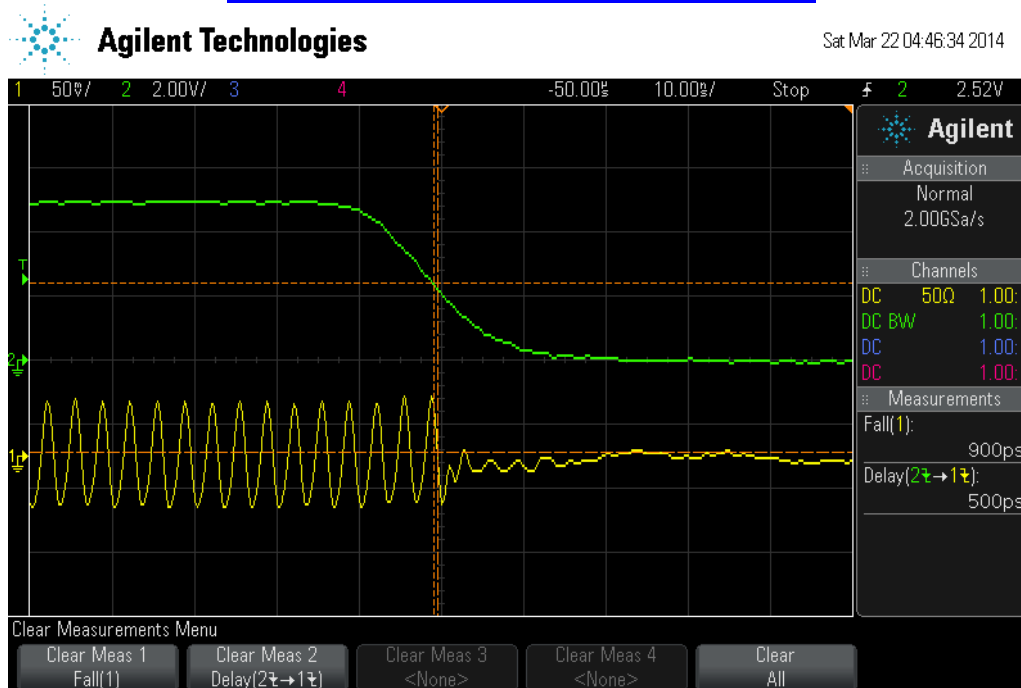


TYPICAL CHARACTERISTICS ON P1T-8G40G-65-T-292FF-1NS-LVPECL

Delay On and Rise Time -10ns per Div.



Delay Off and Fall Time – 10ns per Div.





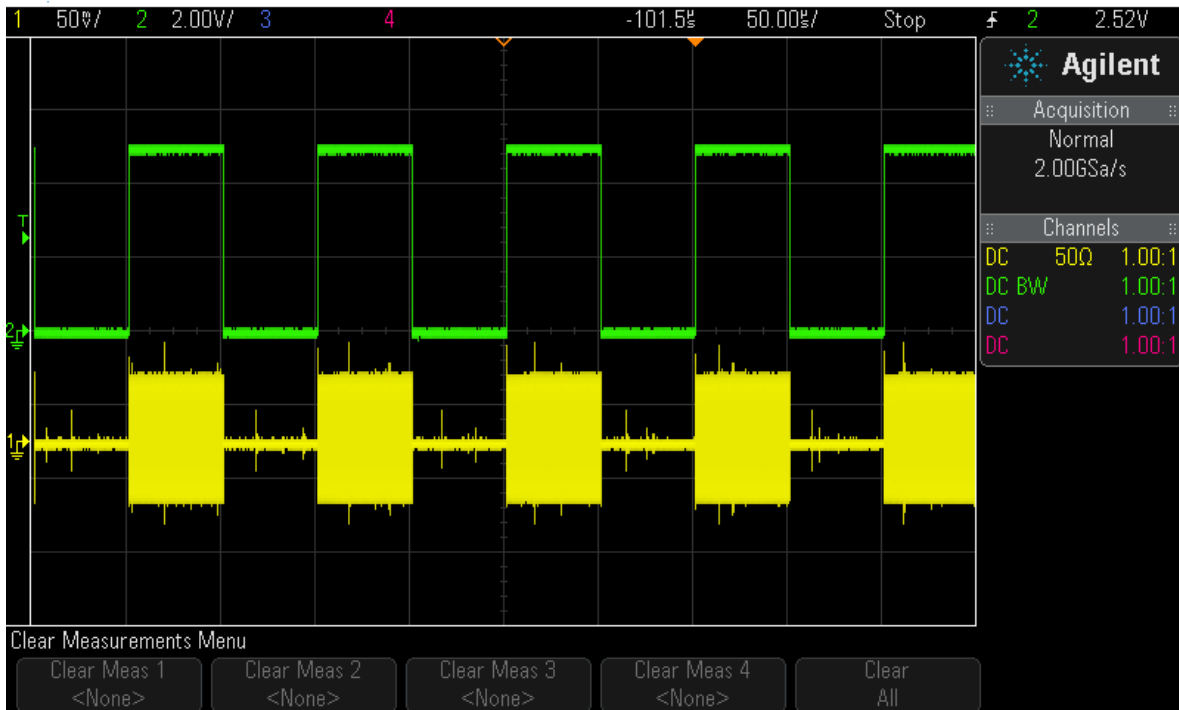
**TYPICAL CHARACTERISTICS
ON
P1T-8G40G-65-T-292FF-1NS-LVPECL**

Full Pulse – 50ns per Div.



Agilent Technologies

Sat Mar 22 04:54:02 2014



Green: TTL switch input E1
Yellow: RF Signal