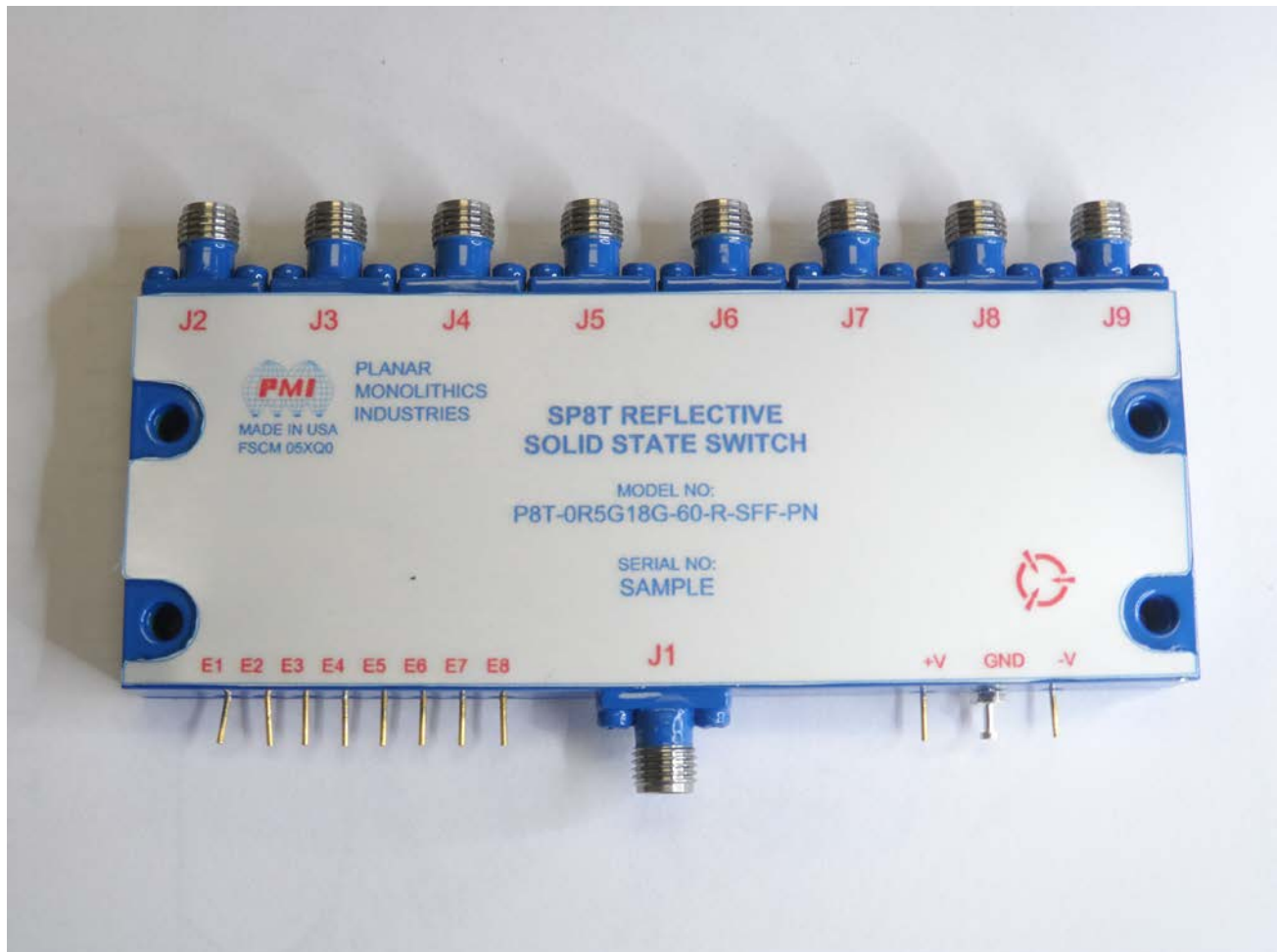




**TYPICAL CHARACTERISTICS
ON
P8T-0R5G18G-60-R-SFF-PN**

PMI MODEL P8T-0R5G18G-60-R-SFF-PN IS A HIGH SPEED, SINGLE POLE EIGHT THROW, REFLECTIVE SWITCH CAPABLE OF SWITCHING WITHIN 100 ns. THE FREQUENCY RANGE IS 0.5 TO 18.0 GHz AND THIS SWITCH HAS OVER 55dB OF ISOLATION.



June 30 , 2016

DESIGNED BY: PMI ENGINEERING

TESTED & REPORTED BY: Jerry N

Page 1 of 13

7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi-rf.com



**TYPICAL CHARACTERISTICS
ON
P8T-0R5G18G-60-R-SFF-PN**

TABLE OF CONTENTS

Outline Drawing.....	Page 3
Summary Test Data.....	Page 4
S-Parameter Data Insertion Loss and Return Loss.....	Page 5-8
S-Parameter Data Isolation .	Page 9-12
Switching Speed.....	Page 13



TYPICAL CHARACTERISTICS ON P8T-0R5G18G-60-R-SFF-PN

OUTLINE DRAWING

DESCRIPTION

THE MODEL P8T-0R5G18G-60-R-SFF-PN IS A HIGH SPEED, SINGLE POLE, EIGHT THROW, REFLECTIVE SWITCH CAPABLE OF SWITCHING WITHIN 100ns. THE FREQUENCY RANGE IS 0.5 TO 18.0 GHz AND THIS SWITCH HAS OVER 55dB OF ISOLATION.

SPECIFICATIONS

- FREQUENCY RANGE: 0.5 TO 18.0 GHz
- ISOLATION: 55dB MIN
- INSERTION LOSS: 4dB TYP
- VSWR IN/OUT: 2.0:1 MAX
- OPERATING INPUT POWER: . . . +20dBm CW
- SWITCHING SPEED: 100 ns MAX
- DC VOLTAGE AND CURRENT: . . +5VDC @ 400mA
-5VDC @ 100mA
- CONTROL SIGNAL: EIGHT LINE TTL
 - E1 CONTROLS J1-J2
 - E2 CONTROLS J1-J3
 - E3 CONTROLS J1-J4
 - E4 CONTROLS J1-J5
 - E5 CONTROLS J1-J6
 - E6 CONTROLS J1-J7
 - E7 CONTROLS J1-J8
 - E8 CONTROLS J1-J9
 - "0" ISOLATION
 - "1" INSERTION LOSS
- CONNECTORS: SMA (F)
- SIZE: 4.0" X 1.5" X 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.

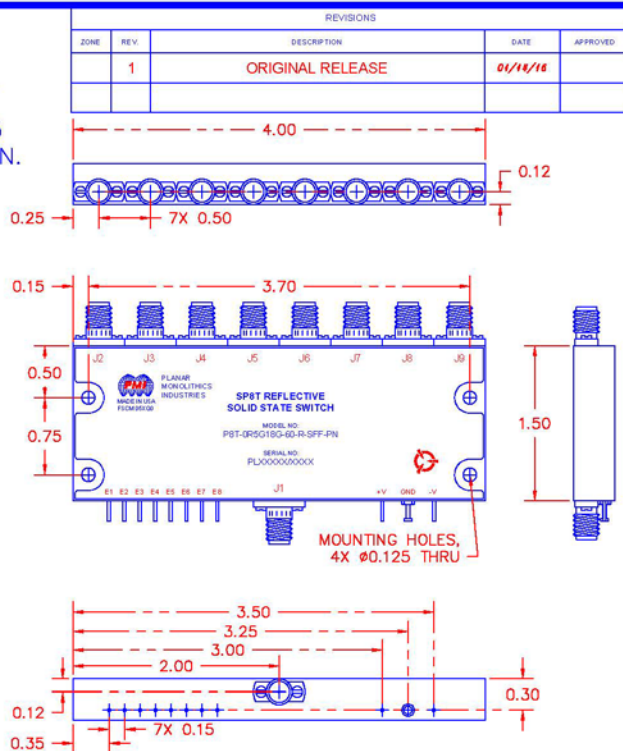
ENVIRONMENTAL RATINGS

- TEMPERATURE: -40°C TO +85°C (OPERATING)
-55°C TO +125°C (STORAGE)

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

PMI CONFIDENTIAL AND PROPRIETARY



PLANAR MONOLITHICS INDUSTRIES, INC.

7311-F GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: (301)-662-5019, FAX: (301)-662-1731
WEB: www.pmi-rf.com, EMAIL: sales@pmi-rf.com
ISO 9001 CERTIFIED



APPROVALS		DATE		TITLE	
DRAWN		B. Thomas		04/14/16	
CHECKED					
ISSUED					
SIZE		FSCM NO.		DWG NO.	
A		05XQ0		27027601	
SCALE		N:S		SHEET	
				1 OF 1	



**TYPICAL CHARACTERISTICS
ON
P8T-0R5G18G-60-R-SFF-PN**

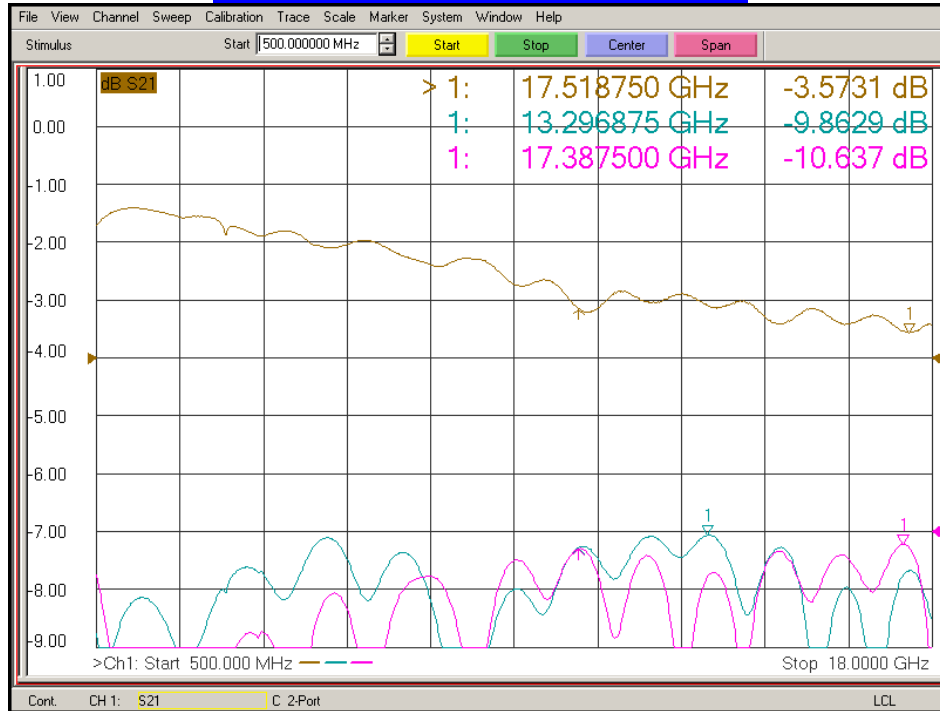
TEST DATA SUMMARY

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	0.5 – 18 GHz	0.5 – 18 GHz See Plot	
2	Insertion Loss:	4 dB Typ.	3.57 dB See Plot	
3	Isolation:	55 dB Min.	56.84 dB See Plot	
4	VSWR : In/Out	2.0:1 Max.	1.96 :1 See Plot	
5	Switching Speed:	100 ns Max.	42 ns See Typical Characteristic	
6	Operating Input Power:	+20dBm CW	Pass	
7	DC Supply:	+5VDC @ 400 mA Typ -5VDC @ 100 mA Typ	+5VDC @ 68 mA -5VDC @ 11 mA	
8	Control Signal:	EIGHT LINE TTL: "0" ISOLATION "1" INSERTION LOSS E1: J1-J2 E2: J1-J3 E3: J1-J4 E4: J1-J5 E5: J1-J6 E6: J1-J7 E7: J1-J8 E8: J1-J9	Pass	

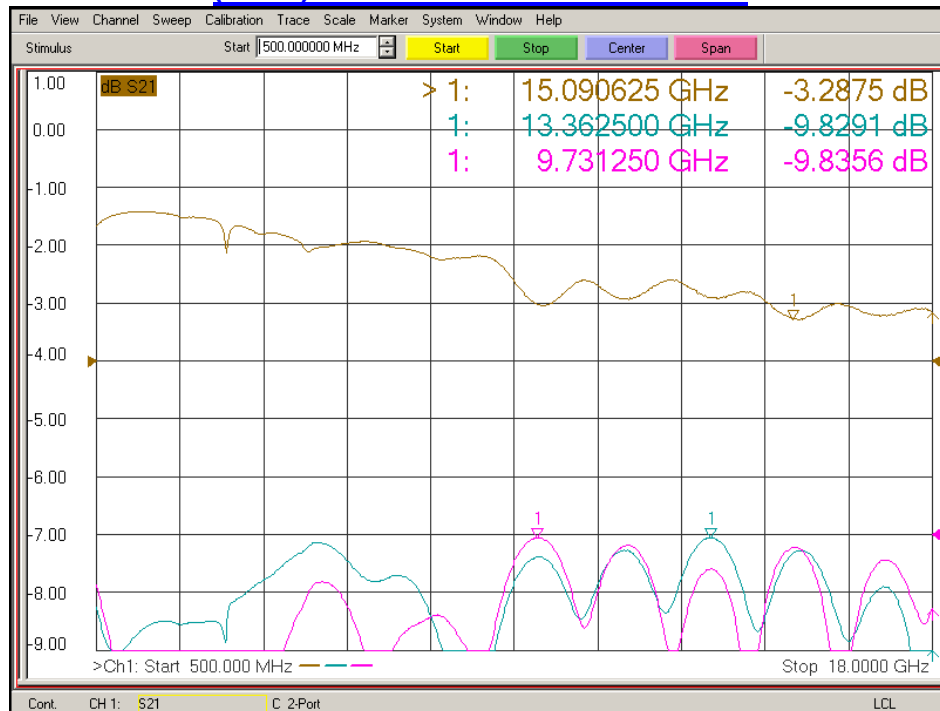


TYPICAL CHARACTERISTICS ON P8T-0R5G18G-60-R-SFF-PN

(J1-J2) Insertion Loss and Return Loss



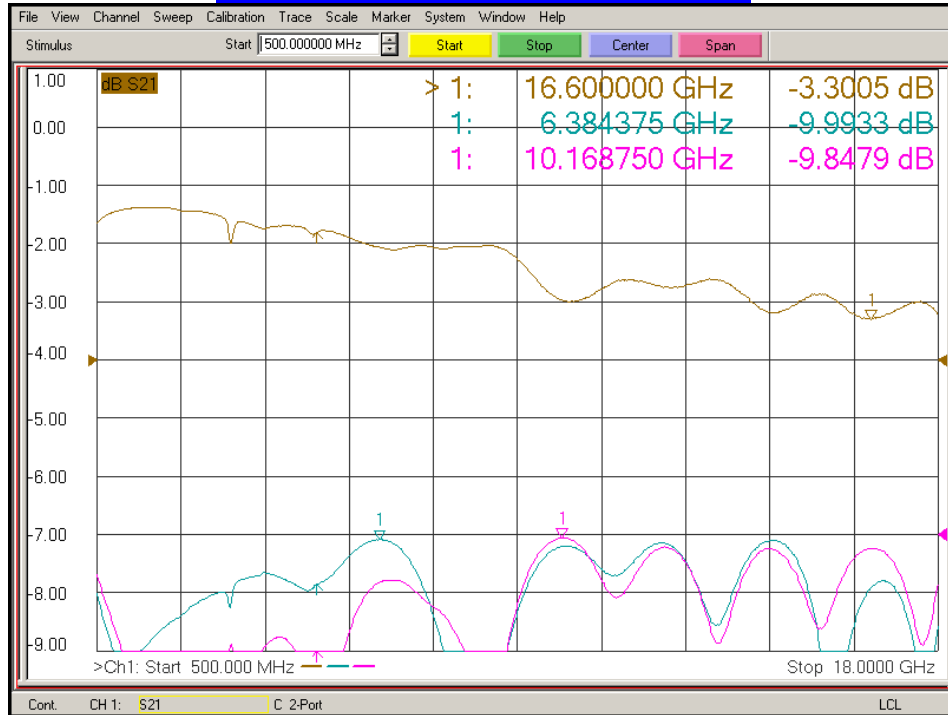
(J1-J3) Insertion Loss and Return Loss



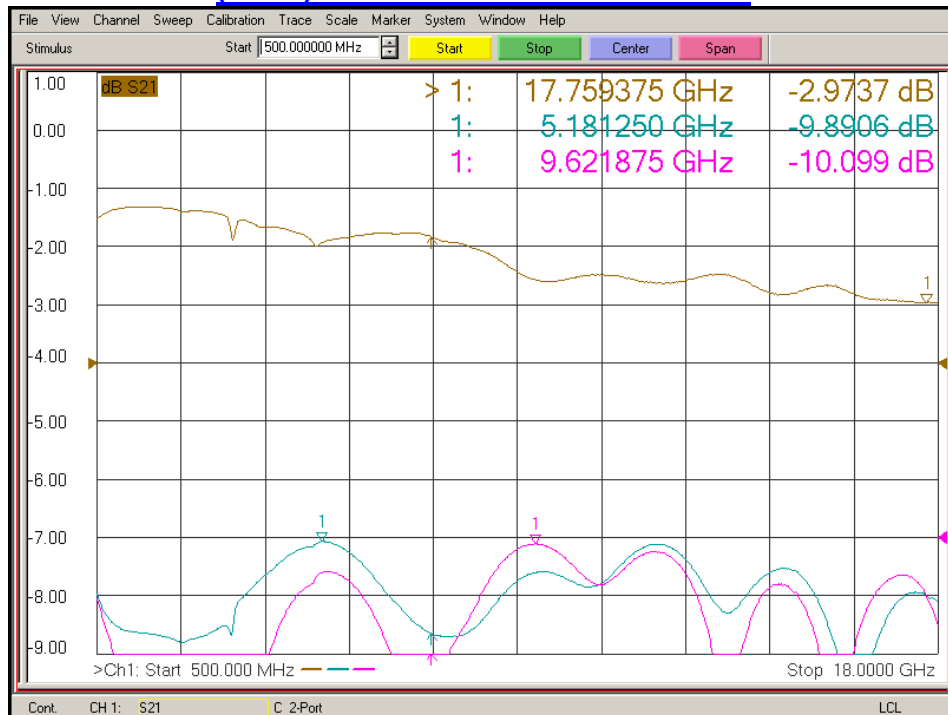


TYPICAL CHARACTERISTICS ON P8T-0R5G18G-60-R-SFF-PN

(J1-J4) Insertion Loss and Return Loss



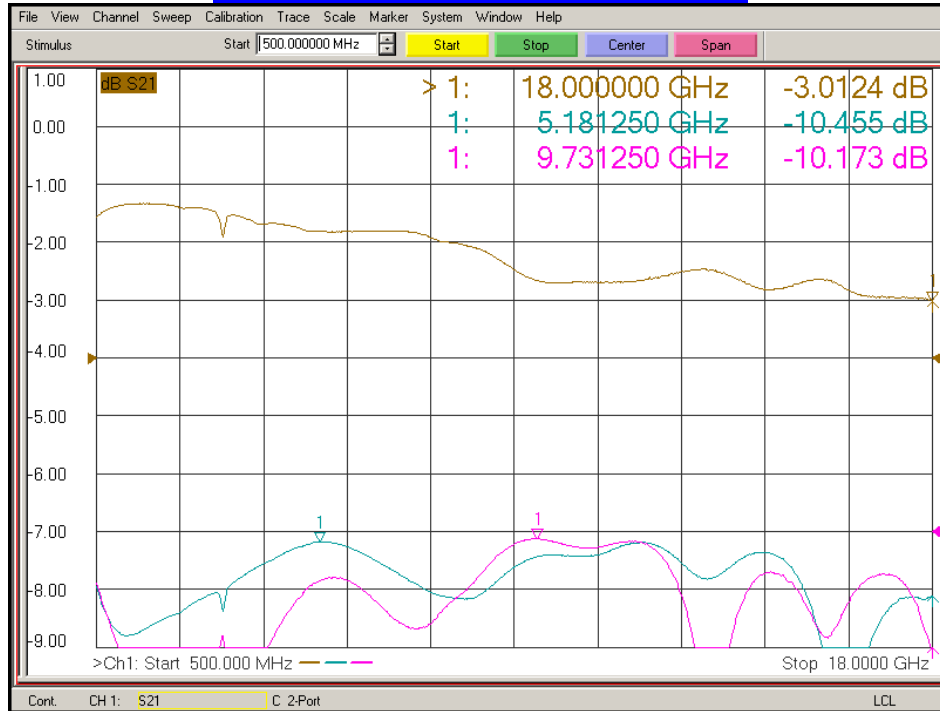
(J1-J5) Insertion Loss and Return Loss



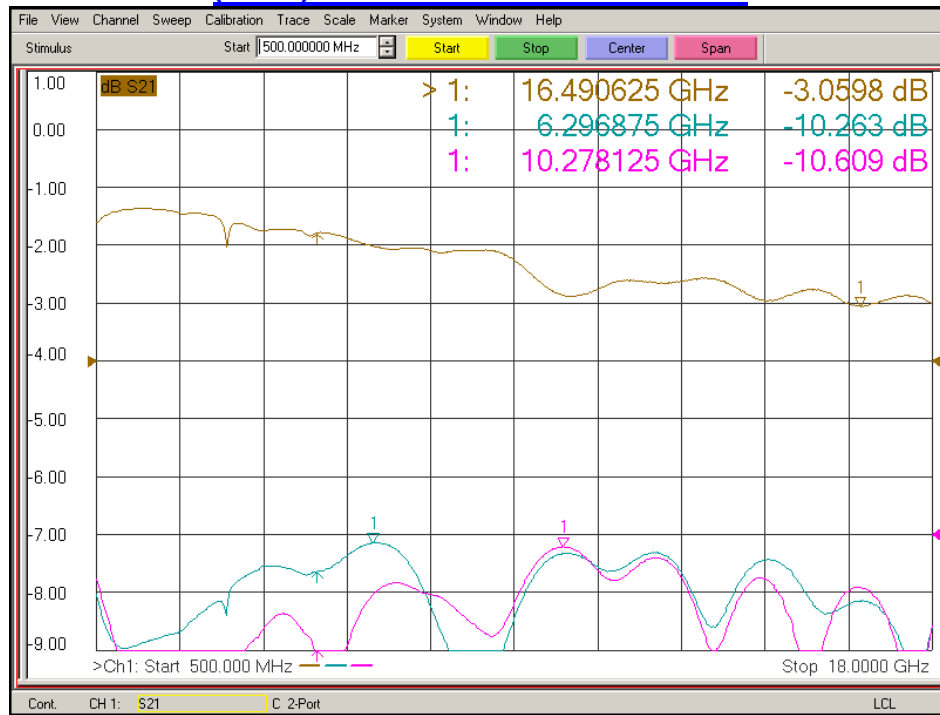


TYPICAL CHARACTERISTICS ON P8T-0R5G18G-60-R-SFF-PN

(J1-J6) Insertion Loss and Return Loss



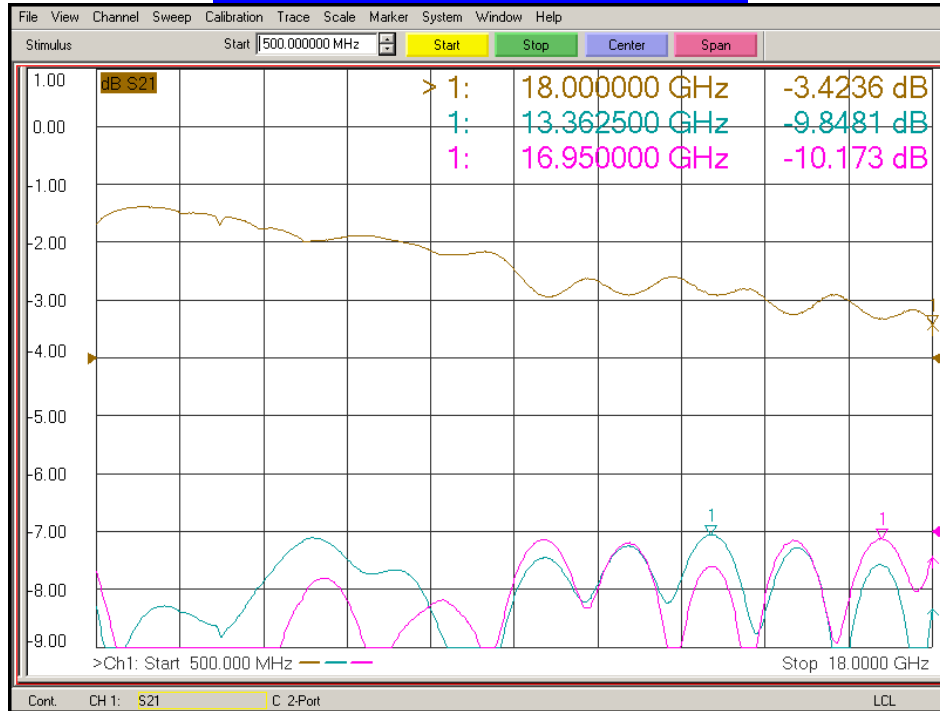
(J1-J7) Insertion Loss and Return Loss



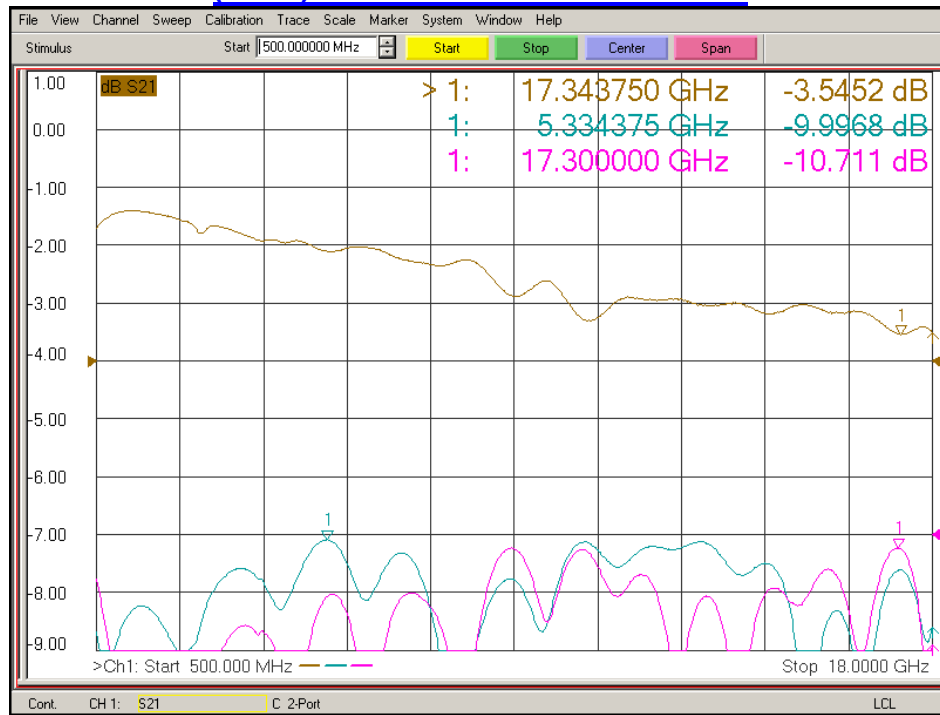


**TYPICAL CHARACTERISTICS
ON
P8T-0R5G18G-60-R-SFF-PN**

(J1-J8) Insertion Loss and Return Loss



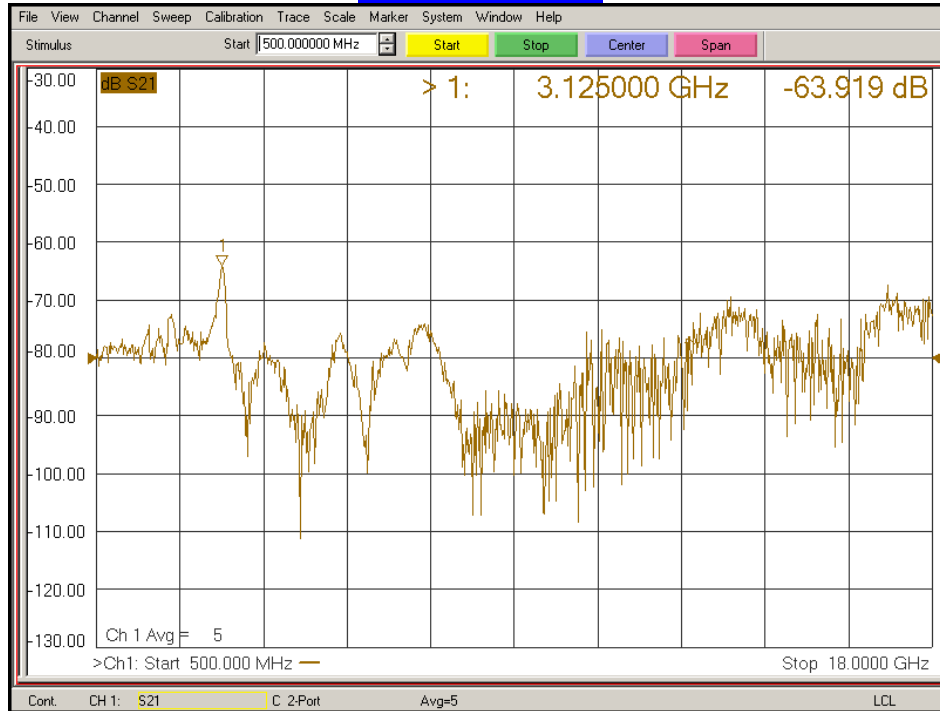
(J1-J9) Insertion Loss and Return Loss



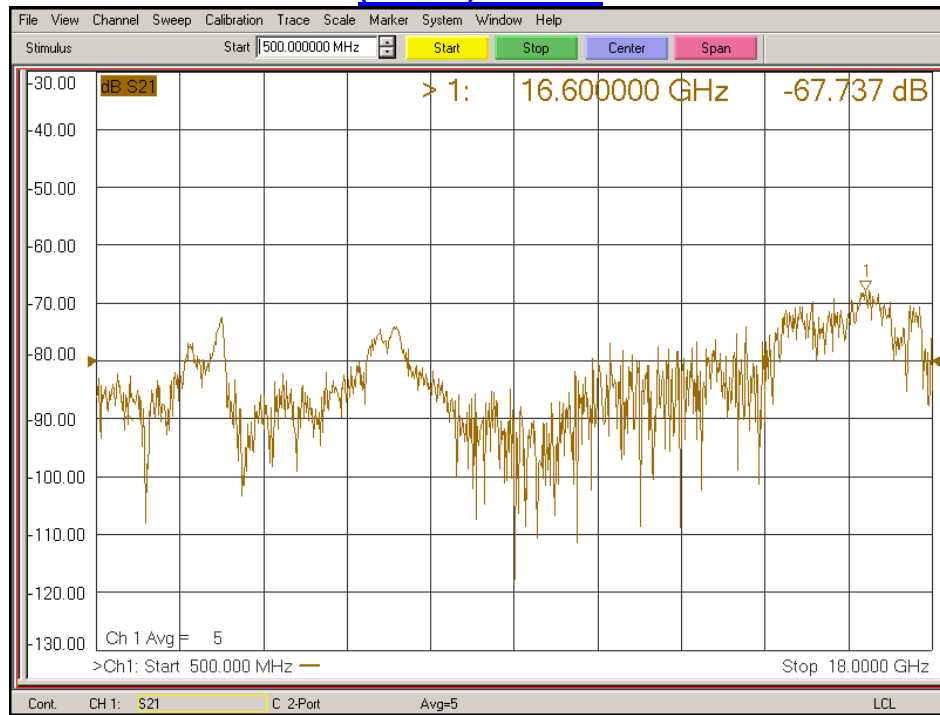


**TYPICAL CHARACTERISTICS
ON
P8T-0R5G18G-60-R-SFF-PN**

(J1 – J2) Isolation



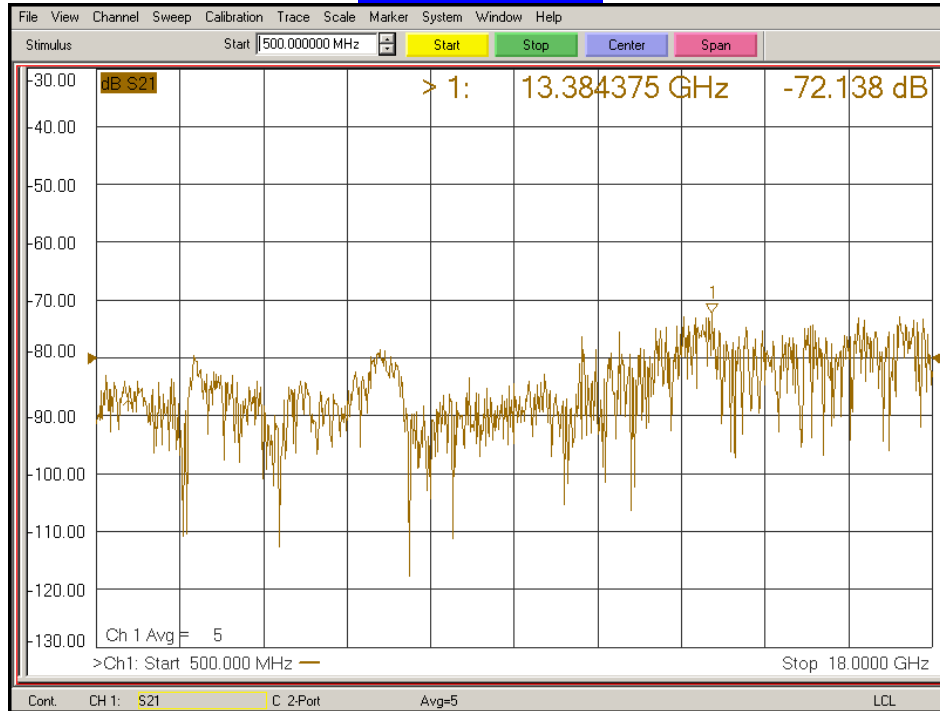
(J1 – J3) Isolation



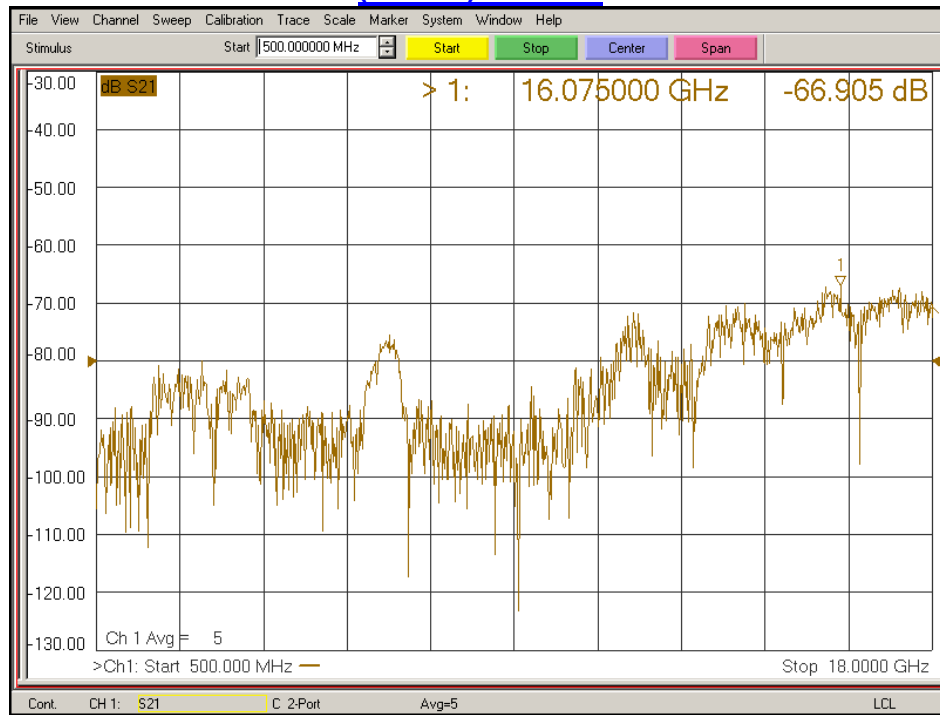


**TYPICAL CHARACTERISTICS
ON
P8T-0R5G18G-60-R-SFF-PN**

(J1 – J4) Isolation



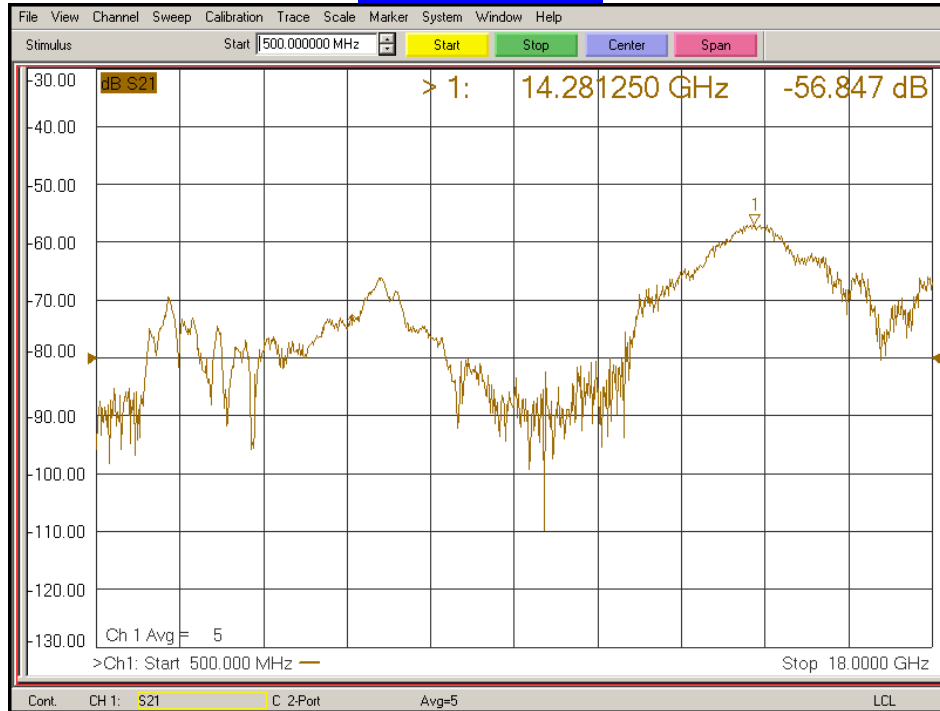
(J1 – J5) Isolation



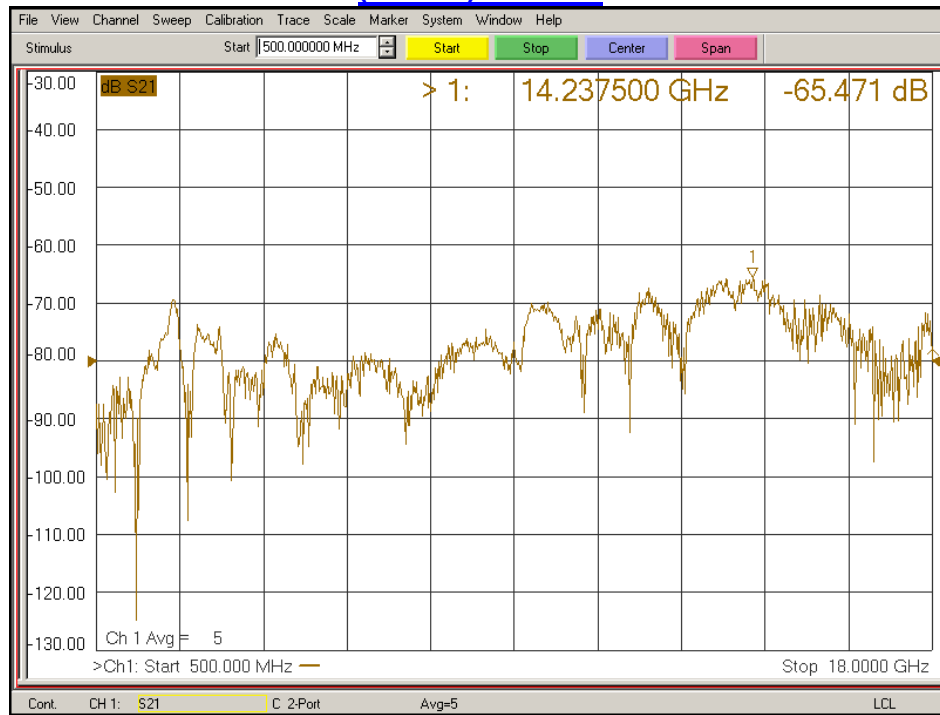


**TYPICAL CHARACTERISTICS
ON
P8T-0R5G18G-60-R-SFF-PN**

(J1 – J6) Isolation



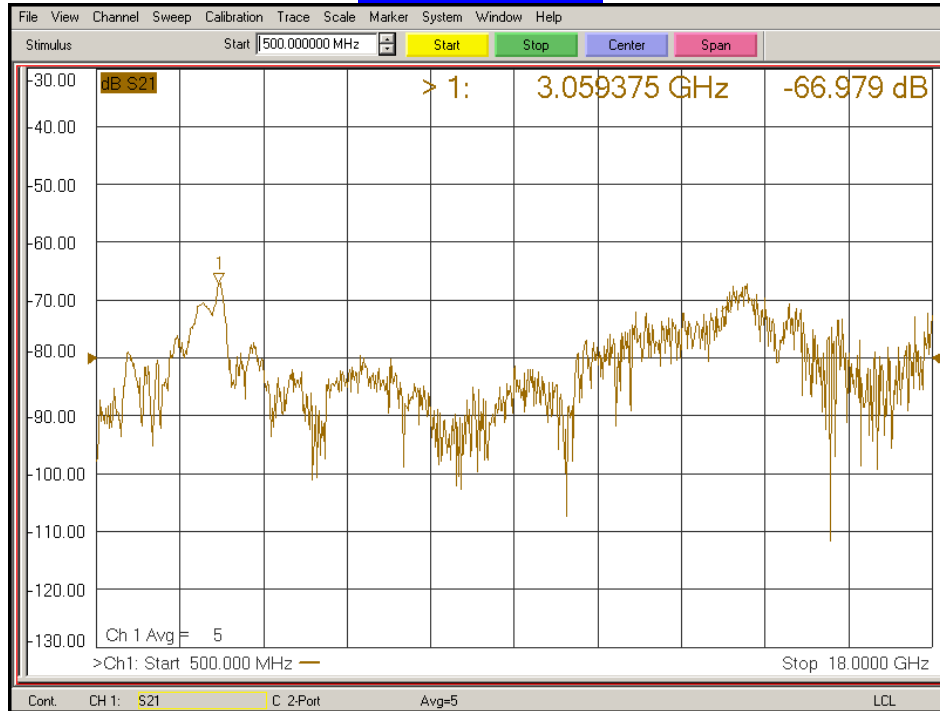
(J1 – J7) Isolation



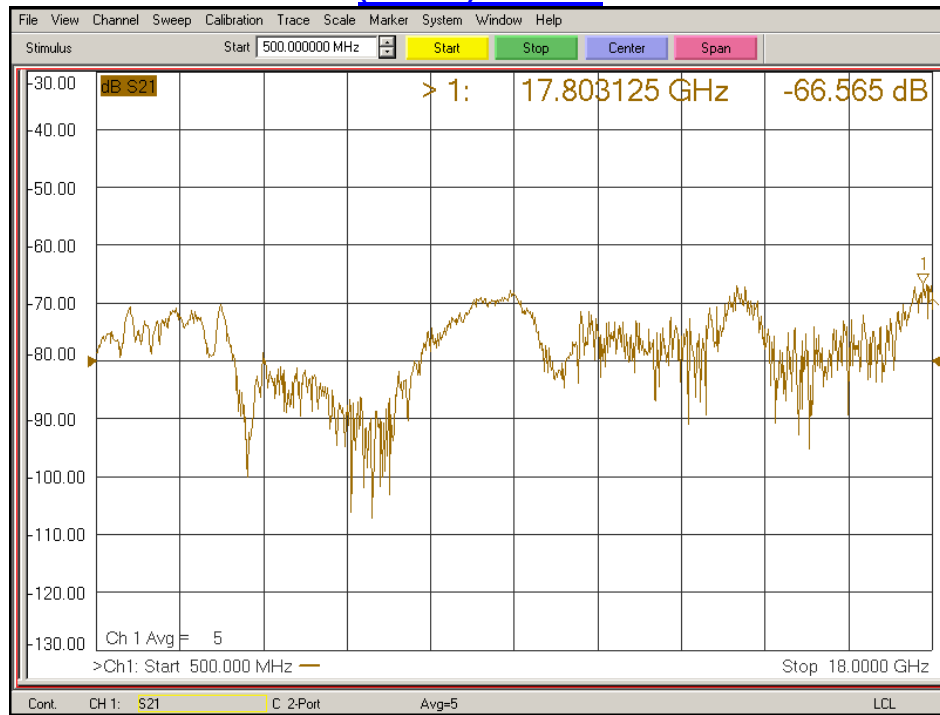


**TYPICAL CHARACTERISTICS
ON
P8T-0R5G18G-60-R-SFF-PN**

(J1 – J8) Isolation



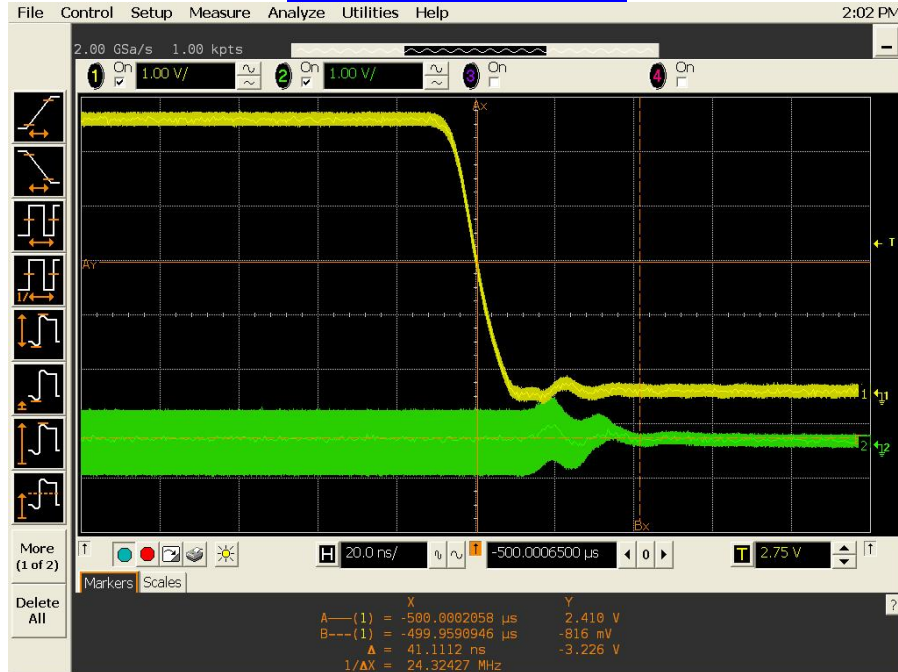
(J1 – J9) Isolation



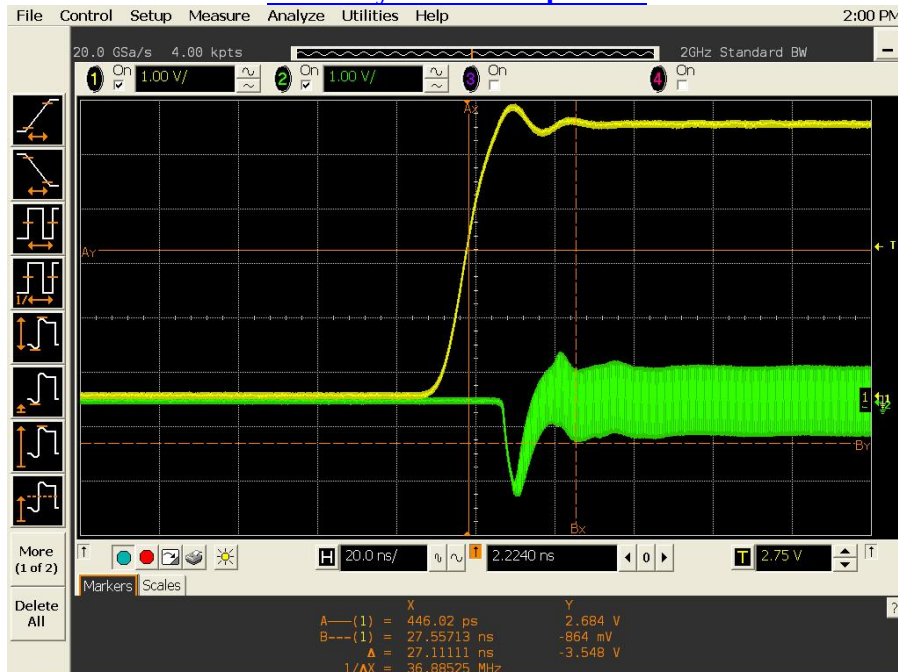


TYPICAL CHARACTERISTICS ON P8T-0R5G18G-60-R-SFF-PN

Switching Speed TYP. OFF Delay – 20 ns per Div.



ON Delay and – 20 ns per Div.



GREEN TRACE: RF
YELLOW TRACE: TTL