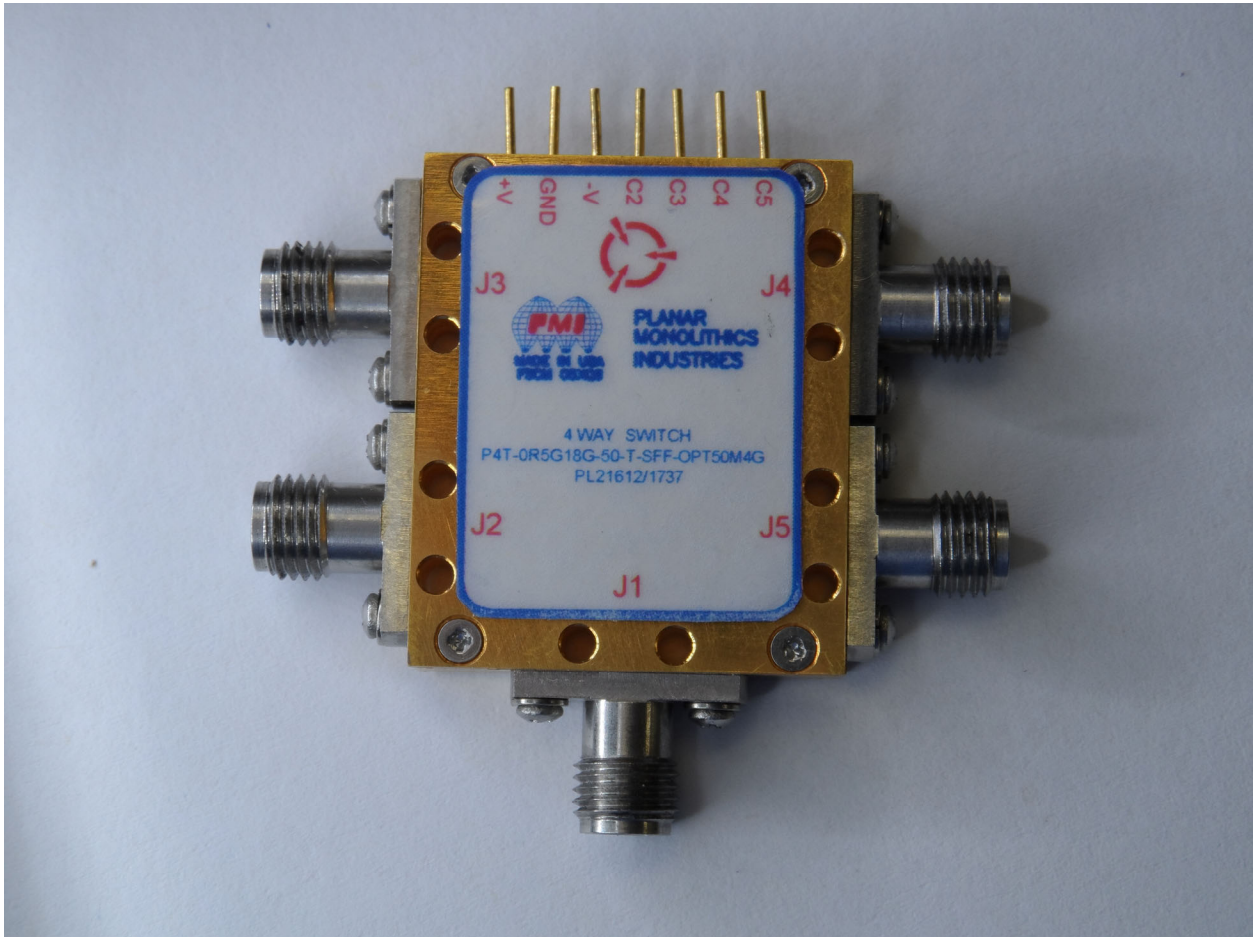




**TYPICAL CHARACTERISTICS
ON
P4T-0R5G18G-50-T-SFF-OPT50M4G**

**PMI MODEL: P4T-0R5G18G-50-T-SFF-OPT50M4G IS A SINGLE POLE FOUR
THROW REFLECTIVE SWITCH. THIS MODEL HAS THE FOLLOWING
SPECIFICATIONS.**



SEPTEMBER 18, 2017

DESIGNED BY: PMI ENGINEERING

TESTED & REPORTED BY: Jerry N



**TYPICAL CHARACTERISTICS
ON
P4T-0R5G18G-50-T-SFF-OPT50M4G**

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**TYPICAL CHARACTERISTICS
ON
P4T-0R5G18G-50-T-SFF-OPT50M4G**

OUTLINE DRAWING

DESCRIPTION

PMI MODEL: P4T-0R5G18G-50-T-SFF-OPT50M4G IS A SINGLE POLE FOUR THROW REFLECTIVE SWITCH. THIS MODEL HAS THE FOLLOWING SPECIFICATIONS.

SPECIFICATIONS

- FREQUENCY RANGE: 0.05 TO 4 GHz
- INSERTION LOSS: 1.25dB 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 ±5% @ 135 mA Max
-5VDC ±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: GOLD PLATED

ENVIRONMENTAL RATINGS

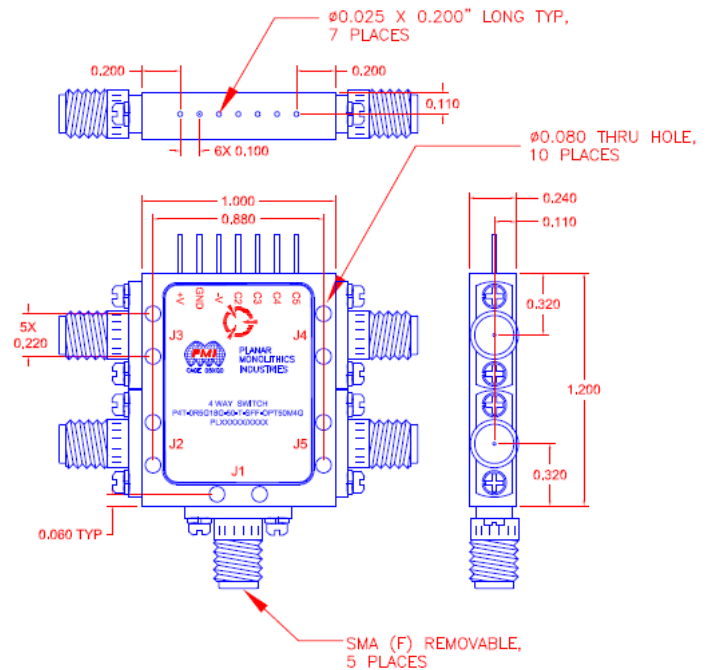
- TEMPERATURE: -45°C TO +70°C (OPERATING)
-65°C TO +125°C (STORAGE)
- HUMIDITY: MIL-STD-202G, METHOD 103B COND. B
- SHOCK: MIL-STD-202G, METHOD 213B COND. B
- VIBRATION: MIL-STD-202G, METHOD 204D COND. B
- ALTITUDE: MIL-STD-202G, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202G, METHOD 107G COND.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

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
A1		ORIGINAL RELEASE	02/10/14	

MECHANICAL OUTLINE



PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.

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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>sf</i>	02/10/14	PRODUCT FEATURE			
REDRAWN	<i>SPU</i>	07/12/17	P4T-0R5G18G-50-T-SFF-OPT50M4G			
ISSUED			SIZE	FSCM NO.	DWG NO.	
			A	05XQ0	27032960	A1
			SCALE	N:S	SHEET	1 OF 1



**TYPICAL CHARACTERISTICS
ON
P4T-0R5G18G-50-T-SFF-OPT50M4G**

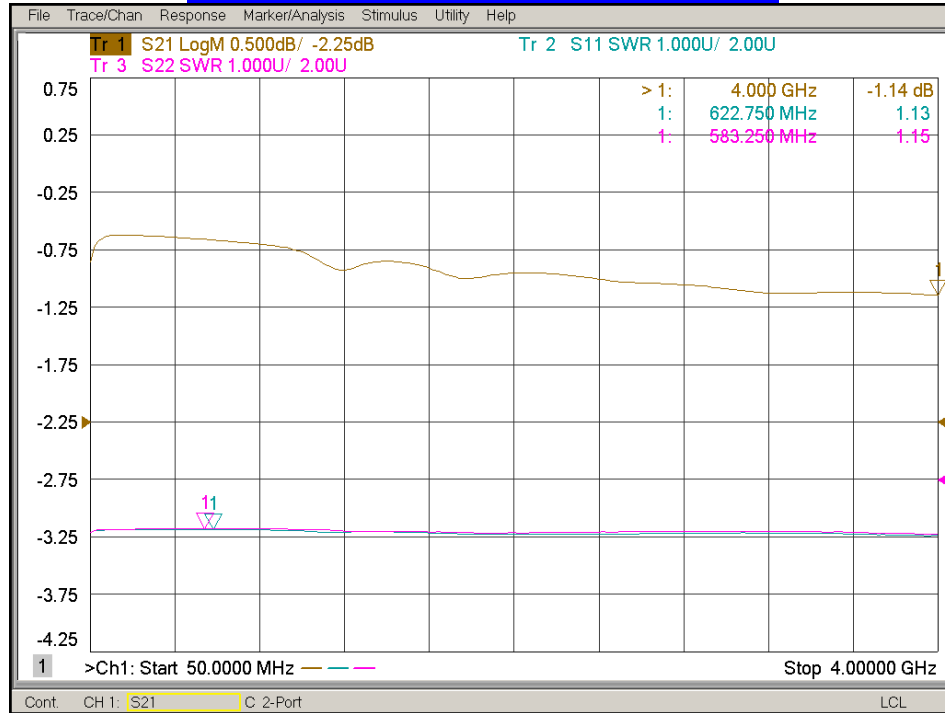
TEST DATA SUMMARY

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA/QC
1	Frequency Range:	0.05 – 4 GHz	0.05 – 4 GHz	
2	Insertion Loss:	1.25dB Max.	1.15 dB See Plot	
3	Isolation:	50dB Min.	53.85 dB See Plot	
4	VSWR (On/Off):	2.0:1 Max	1.15 :1 See Plot	
5	Survival Power (On/Off):	1W CW	Pass	
6	Switching Speed: (On/Off):	25ns	84 ns See plots	
7	Rise/Fall Time:	10ns	12 ns See Plots	
8	DC Supply:	+5VDC ±5% @ 135 mA Max. -5VDC ±5% @ 65 mA Max.	132 mA 30 mA	
9	Control Logic:	TTL "0" = Switch ON TTL "1" = Switch OFF	Pass	

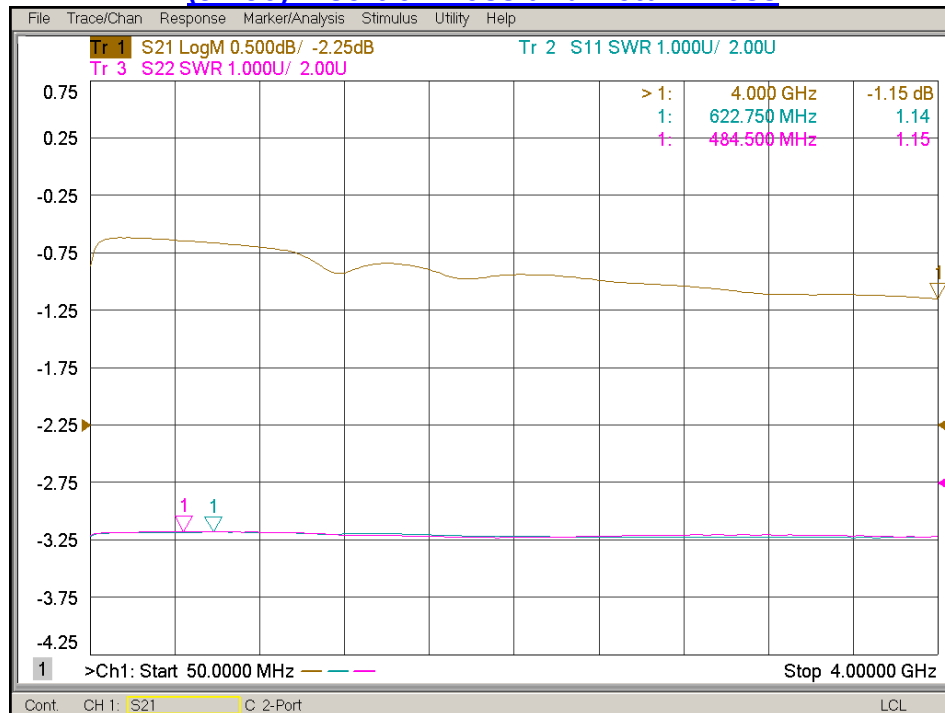


**TYPICAL CHARACTERISTICS
ON
P4T-0R5G18G-50-T-SFF-OPT50M4G**

(J1-J2) Insertion Loss and Return Loss



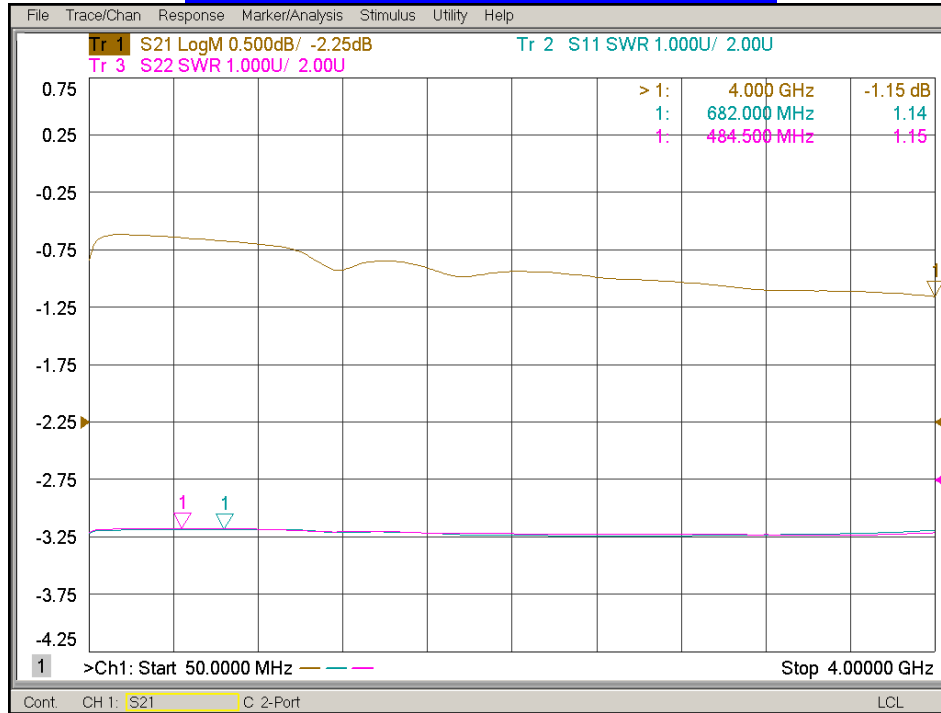
(J1-J3) Insertion Loss and Return Loss



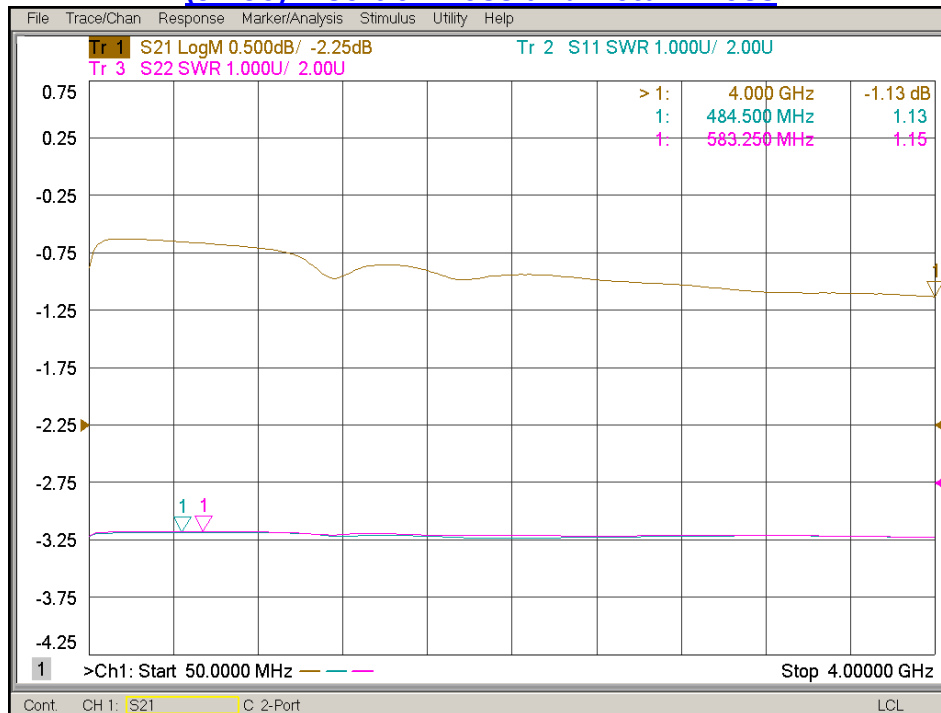


**TYPICAL CHARACTERISTICS
ON
P4T-0R5G18G-50-T-SFF-OPT50M4G**

(J1-J4) Insertion Loss and Return Loss



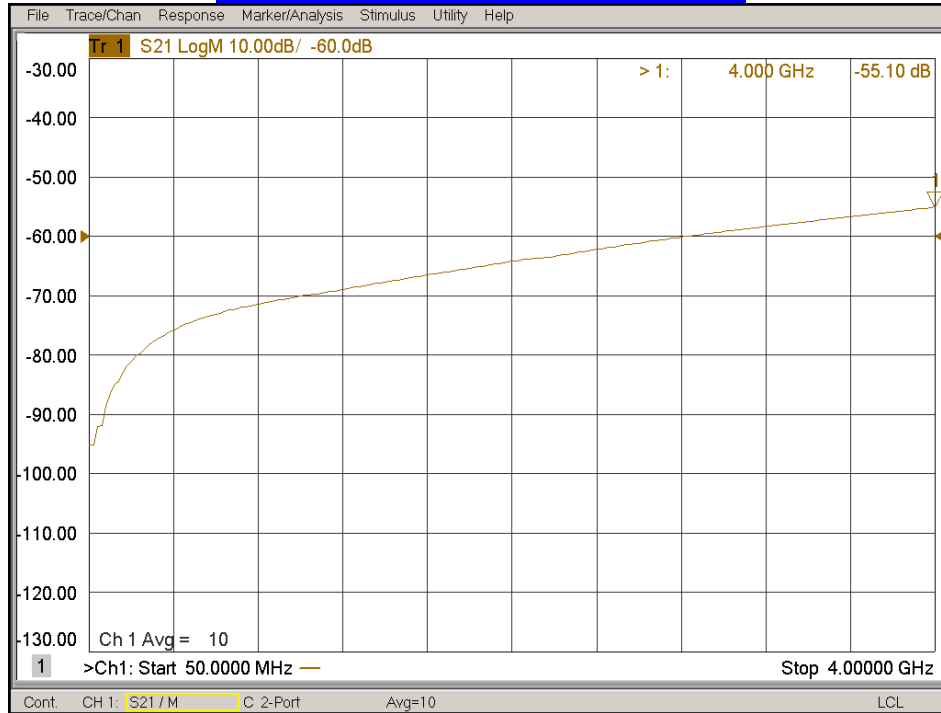
(J1-J5) Insertion Loss and Return Loss



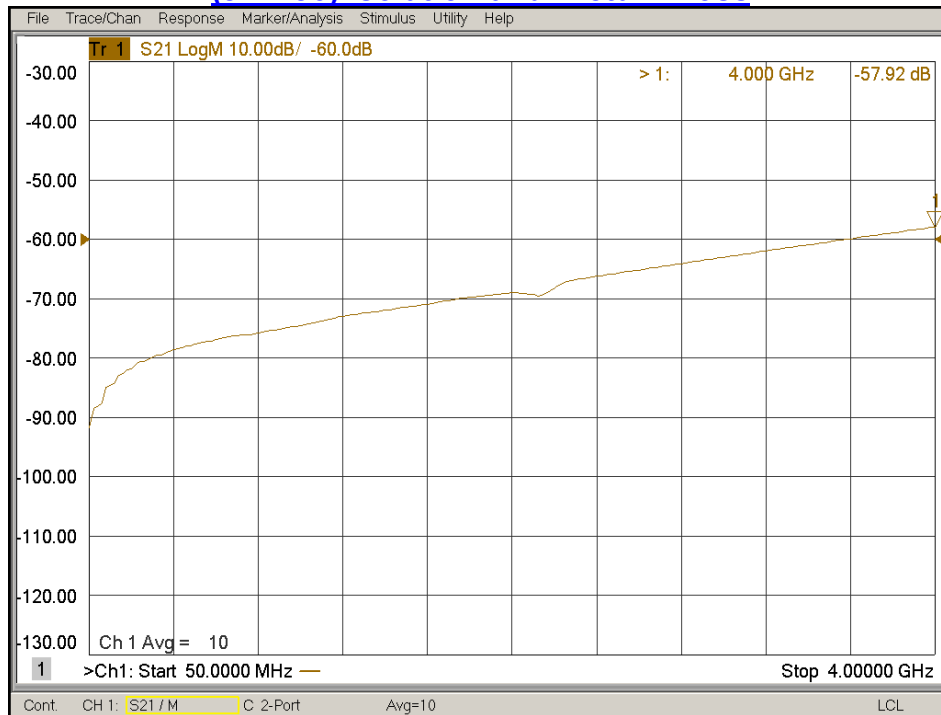


**TYPICAL CHARACTERISTICS
ON
P4T-0R5G18G-50-T-SFF-OPT50M4G**

(J1 – J2) Isolation and Return Loss



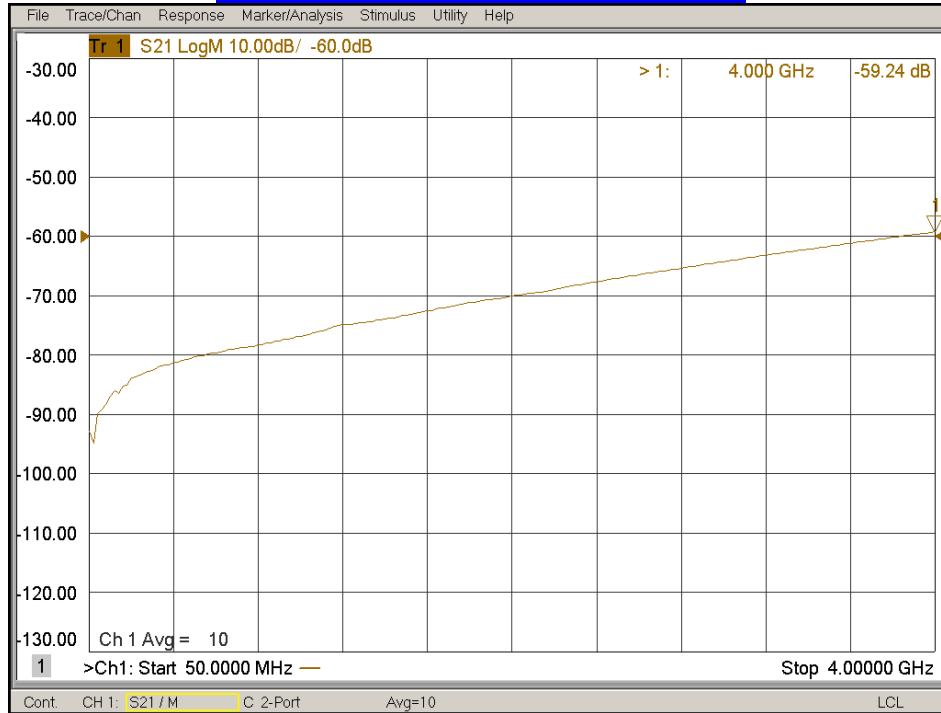
(J1 – J3) Isolation and Return Loss



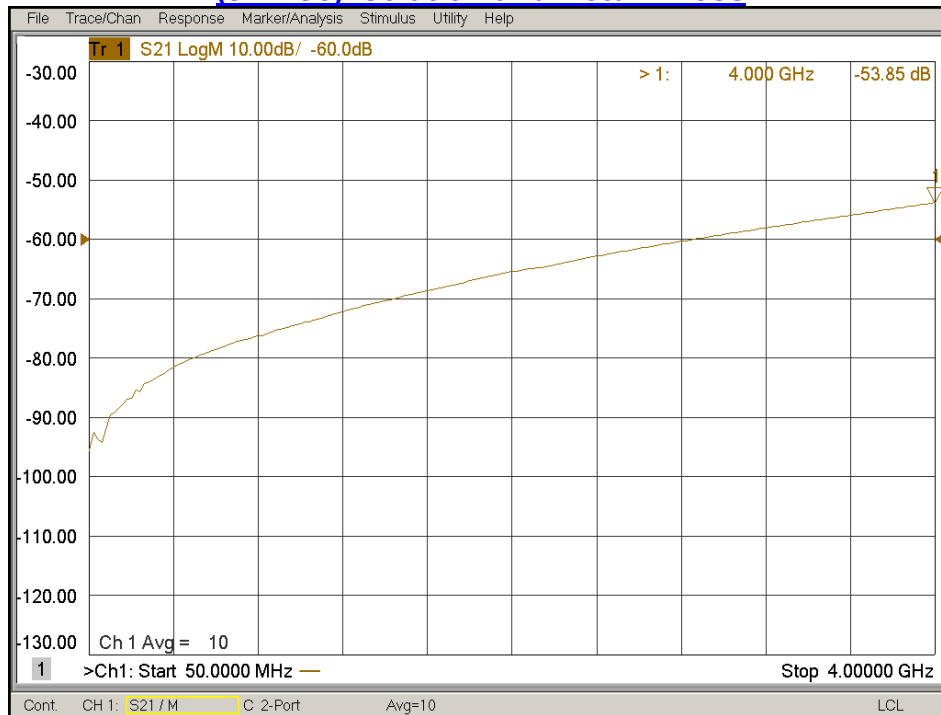


**TYPICAL CHARACTERISTICS
ON
P4T-0R5G18G-50-T-SFF-OPT50M4G**

(J1 – J4) Isolation and Return Loss



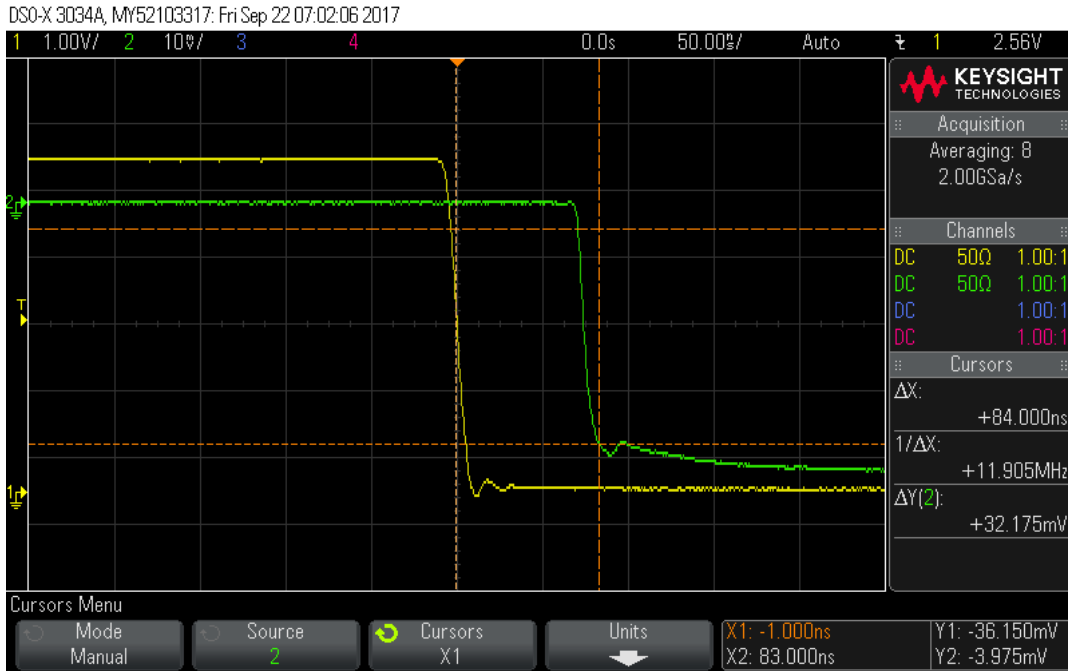
(J1 – J5) Isolation and Return Loss



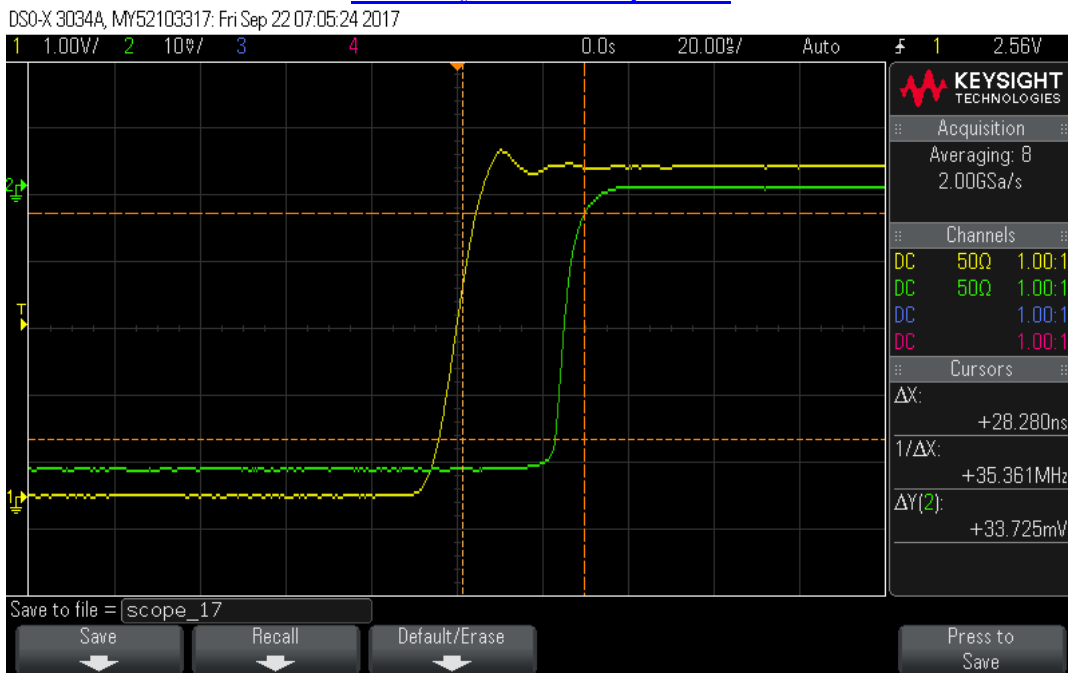


TYPICAL CHARACTERISTICS ON P4T-0R5G18G-50-T-SFF-OPT50M4G

Switching Speed TYP. OFF Delay – 50 ns per Div.



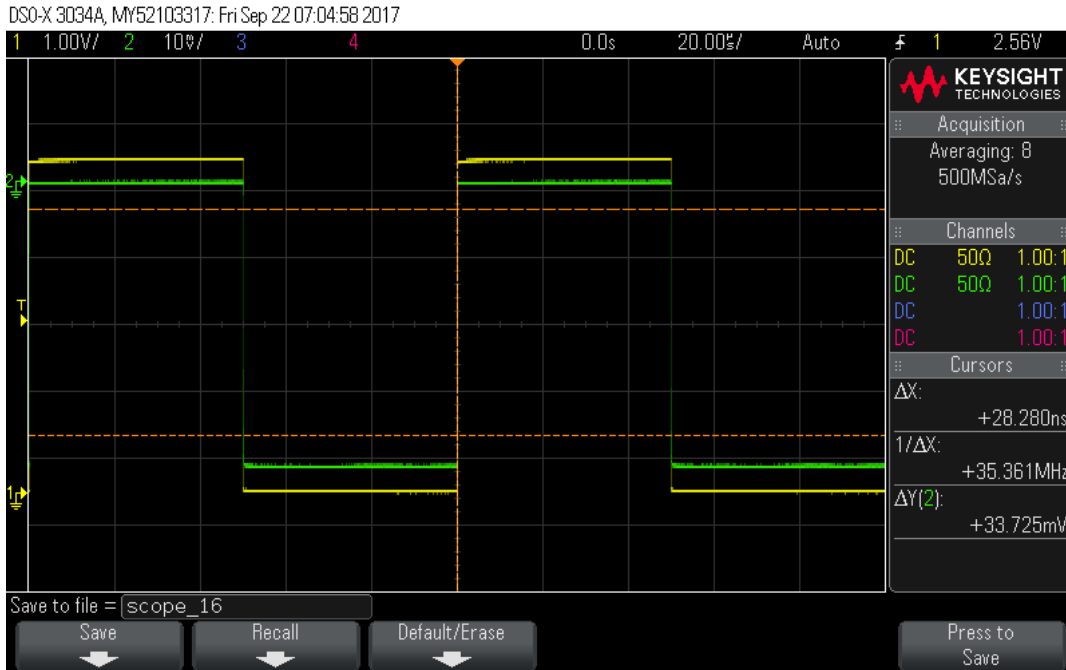
ON Delay and – 20 ns per Div.



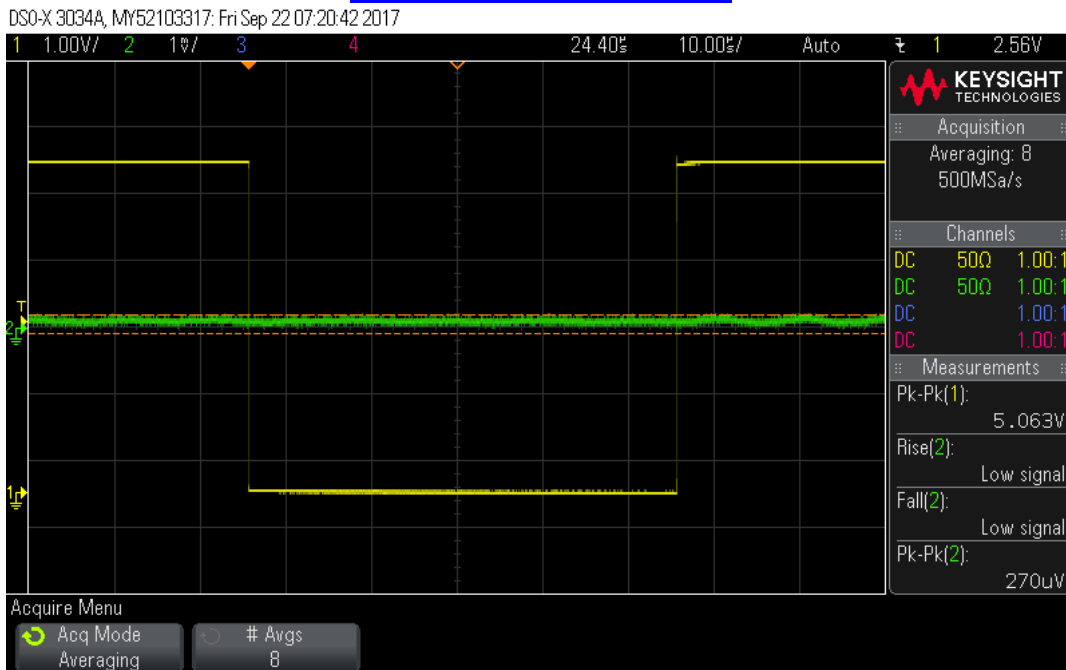


TYPICAL CHARACTERISTICS ON P4T-0R5G18G-50-T-SFF-OPT50M4G

FULL PULSE– 20 μ s per Div.



TRANSIENT– 100 μ s per Div.



GREEN TRACE: RF
YELLOW TRACE: TTL