



**TYPICAL CHARACTERISTICS
ON
P2T-0R75G18G-80-R-512-SFF**

PMI MODEL P2T-0R75G18G-80-R-512-SFF IS A REFLECTIVE, SINGLE POLE, TWO THROW SWITCH THAT OPERATES OVER THE 0.75 GHz TO 18 GHz FREQUENCY RANGE. THIS MODEL INCORPORATES A TTL COMPATIBLE DRIVER FOR EASY SYSTEM INTEGRATION.



December 3, 2013

Designed By: PMI Engineering

Tested and Reported By: Sebastian Palacio

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DESCRIPTION

PMI MODEL P2T-0R75G18G-80-R-512-SFF IS A REFLECTIVE, SINGLE POLE, TWO THROW SWITCH THAT OPERATES OVER THE 0.75 GHz TO 18 GHz FREQUENCY RANGE. THIS MODEL INCORPORATES A TTL COMPATIBLE DRIVER FOR EASY SYSTEM INTEGRATION.

SPECIFICATIONS

- FREQUENCY RANGE:.....0.75 GHz TO 18 GHz
- ISOLATION:.....80 DB MIN
- INSERTION LOSS:.....3.0 DB TYP
- VSWR IN / OUT:.....2.0 : 1
- INPUT POWER:.....+30 dBm CW MAX
- RF SWITCHING SPEED:25 ns MAX
- DC VOLTAGE:.....+5 V
-12 V
- CONTROL SIGNAL:.....TTL LOGIC
SEE LOGIC TABLE

- CONNECTORS IN/OUT:.....SMA FEMALE CONNECTORS
- CONTROL CONNECTORS:.....SMA FEMALE CONNECTOR
- FINISH:.....GOLD PLATED

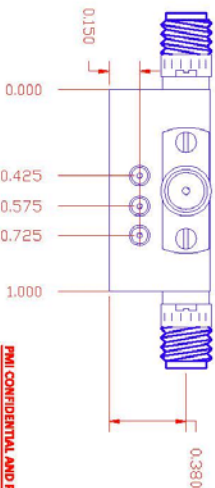
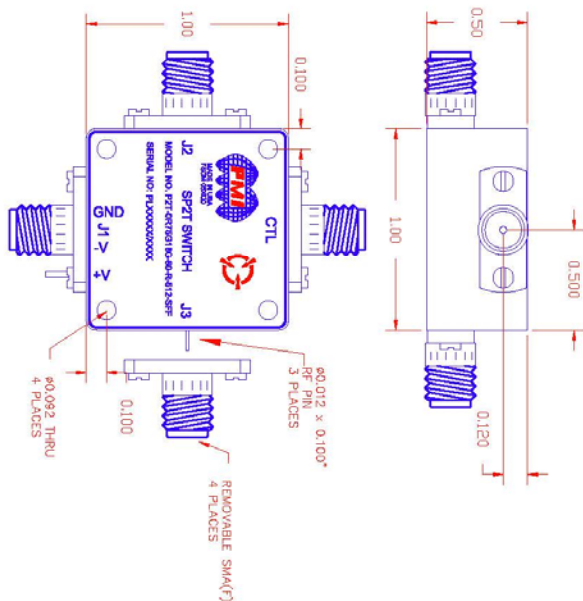
ENVIRONMENTAL RATINGS

- TEMPERATURES:.....-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
- SALT FOG:.....MIL-STD-202F, METHOD 107D COND. A
- FUNGUS:.....MIL-STD-810C, METHOD 508.2
- TEMPERATURE CYCLES:.....MIL-STD-202F, METHOD 107

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

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

REV	DATE	DESCRIPTION	BY	APP'D
AE		ORIGINAL RELEASE		
AE		ECN # 13-0196	2/2/13	



ALL DIMENSIONS ARE IN INCHES
TOLERANCES
X.XX ± 0.005
X.XXX ± 0.001

REV	DATE	DESCRIPTION	BY	APP'D
AE		ORIGINAL		
B	03X00			
1	07/1			

PMI CONFIDENTIAL AND PROPRIETARY

OUTLINE DRAWING

P2T-0R75G18G-80-R-512-SFF

PLASMA MONOLITHICS INDUSTRIES, INC.
10000 WOODBURN ROAD
FREDERICK, MD 21704
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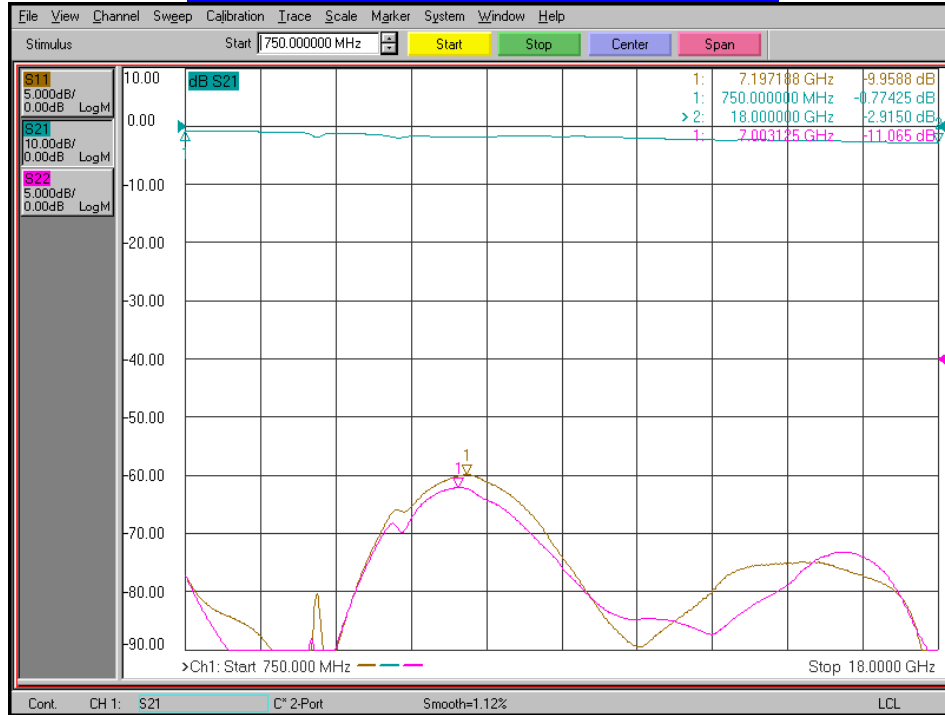
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TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	0.75 – 18 GHz	0.75 – 18 GHz See Plots	
2	Insertion Loss:	3.0 dB Typ.	2.91dB See Plots	
3	Isolation:	80 dB Min.	83.05dB See Plots	
4	VSWR : In/Out	2.0:1 Typ.	1.93:1 See Plots	
5	Input Power:	+30 dBm CW Max.	+30 dBm CW Max.	
6	Switching Speed:	25 ns Max.	25ns Typ. See Plots	
7	DC Supply:	+5VDC -12VDC	35mA 25mA	
8	Video Transients:	Not Specified	2.76V Peak to Peak Typ. Se Plot	
9	Control Signal:	TTL "0" → (J1-J2) TTL "1" → (J1-J3)	Pass	

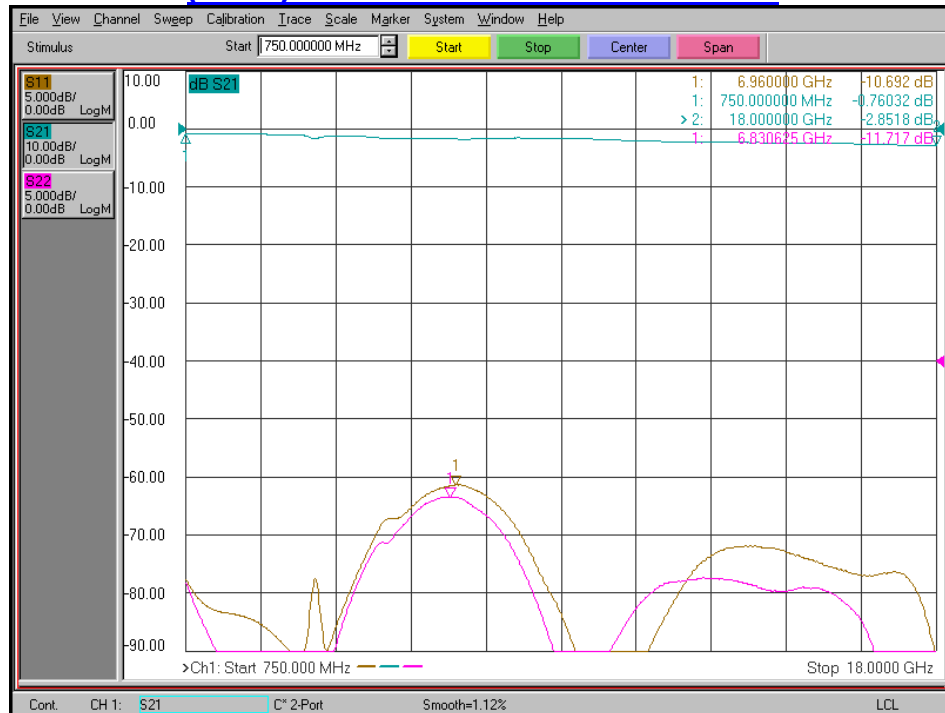


TYPICAL CHARACTERISTICS ON P2T-0R75G18G-80-R-512-SFF

(J1-J2) Insertion Loss and Return Loss



(J1-J3) Insertion Loss and Return Loss

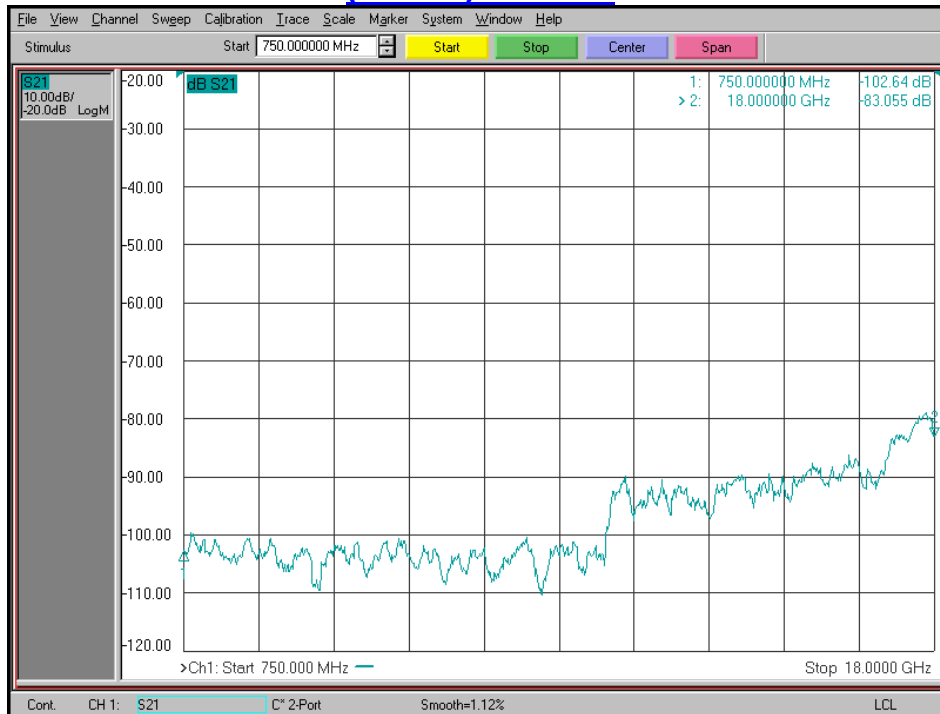


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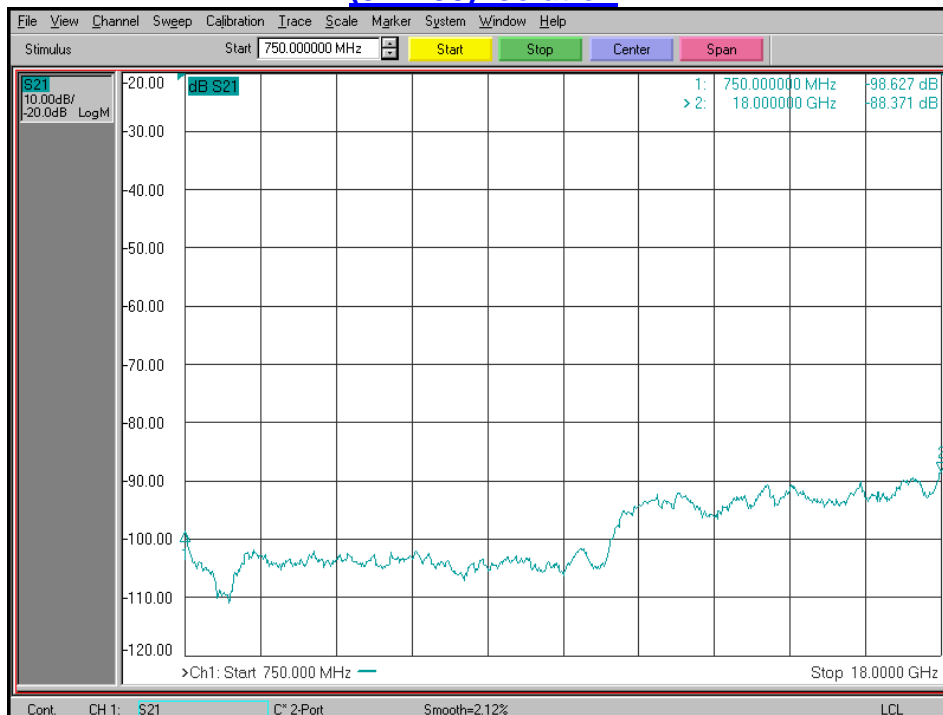


TYPICAL CHARACTERISTICS ON P2T-0R75G18G-80-R-512-SFF

(J1 – J2) Isolation



(J1 – J3) Isolation



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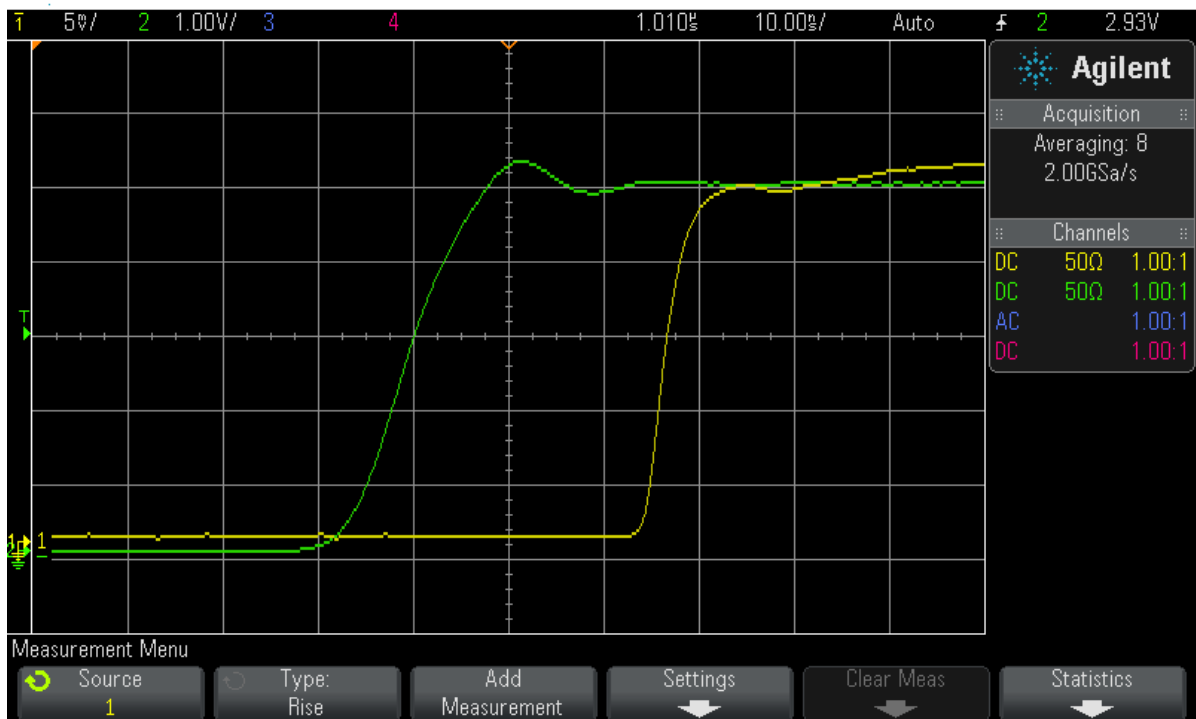
Switching Speed

ON Delay – 10ns per Div.



Agilent Technologies

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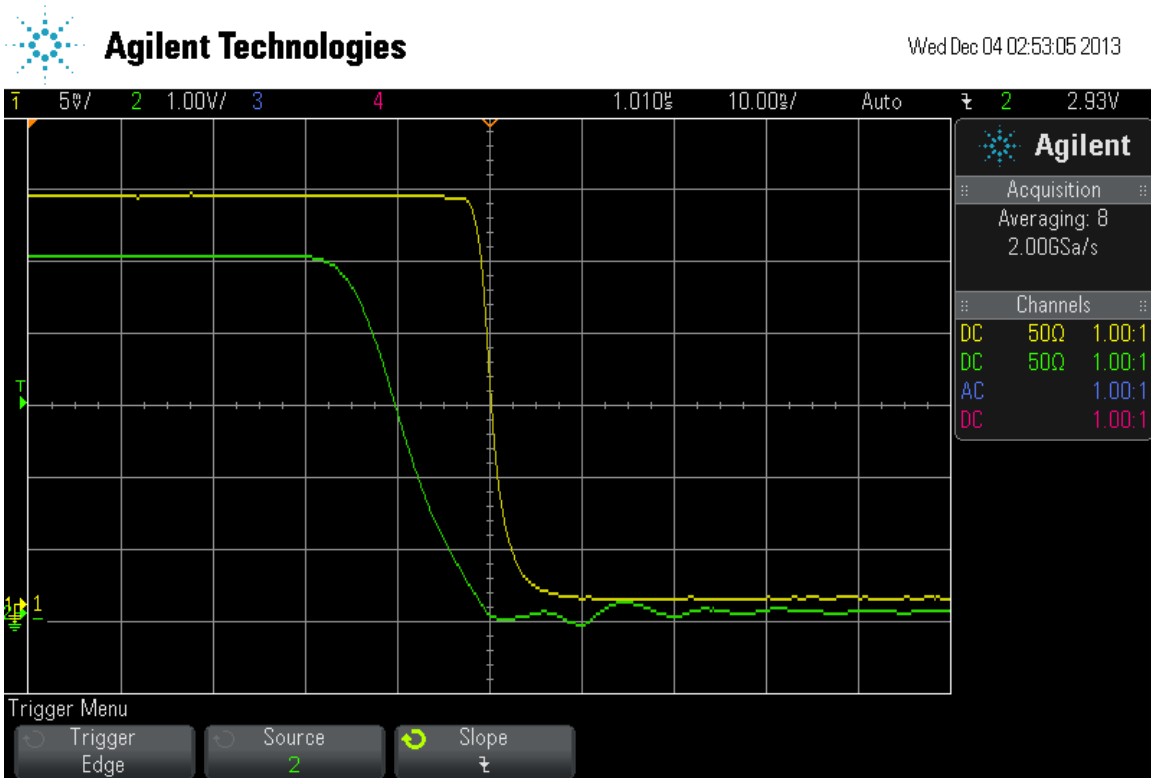


Green Trace: TTL Signal
Yellow Trace: RF Signal



**TYPICAL CHARACTERISTICS
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OFF Delay – 10ns per Div.

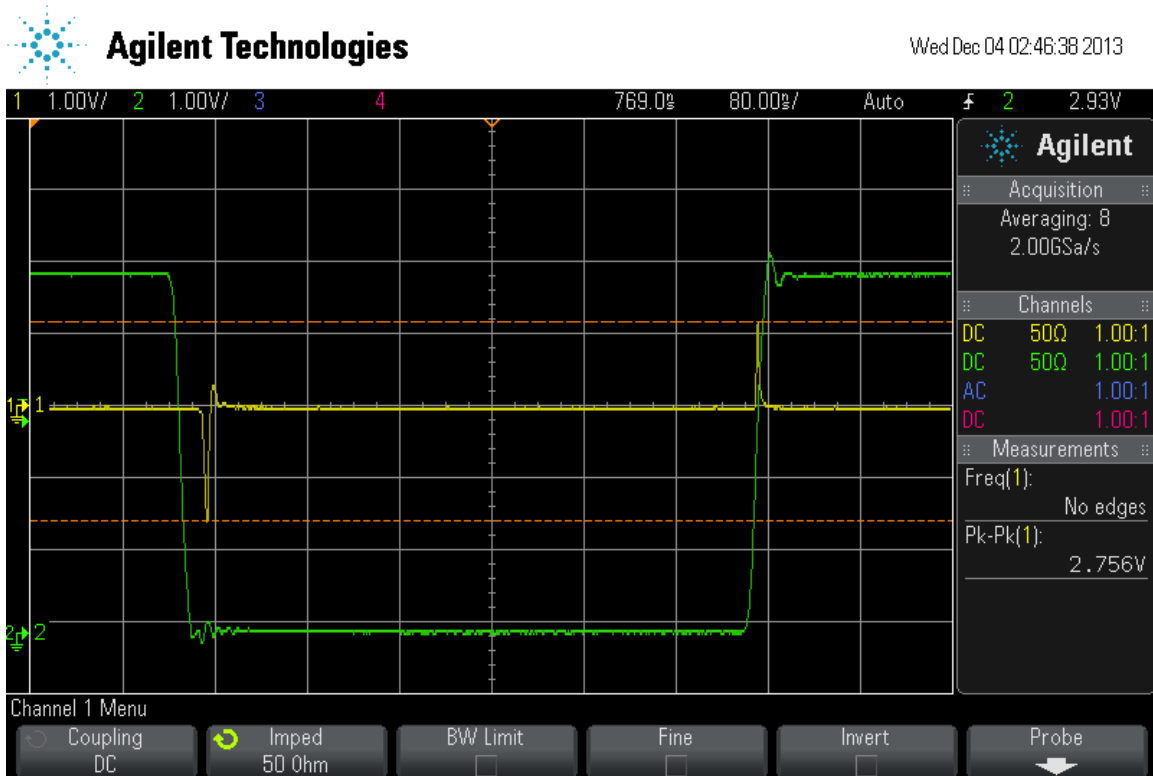


Green Trace: TTL Signal
Yellow Trace: RF Signal



TYPICAL CHARACTERISTICS ON P2T-0R75G18G-80-R-512-SFF

Video Transients



Green Trace: TTL Signal
Yellow Trace: Video Transients