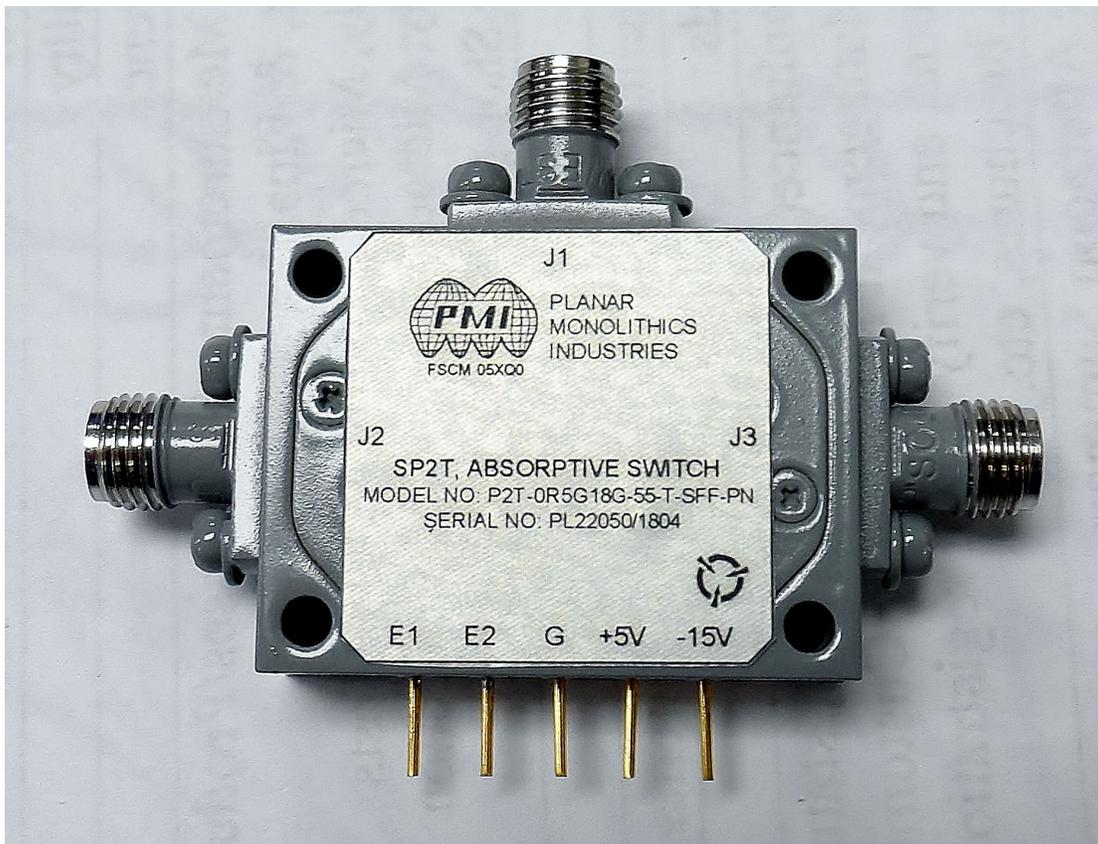




TYPICAL CHARACTERISTICS ON P2T-0R5G18G-55-T-SFF-PN

PMI MODEL P2T-0R5G18G-55-T-SFF-PN IS A SINGLE POLE, DOUBLE THROW
REFLECTIVE
SWITCH DESIGNED TO OPERATE OVER THE 0.5 GHz TO 18.0 GHz
FREQUENCY RANGE.
THIS MODEL IS DESIGNED TO MAINTAIN LOW INSERTION LOSS, HIGH
ISOLATION,
AND FAST SWITCHING SPEED.



TESTED & REPORTED BY:
K. Mansfield

August 15, 2017

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



TYPICAL CHARACTERISTICS ON P2T-0R5G18G-55-T-SFF-PN

DESCRIPTION

PMI MODEL NUMBER: P2T-0R5G18G-55-T-SFF-PN IS A SINGLE POLE, DOUBLE THROW NON-REFLECTIVE SWITCH DESIGNED TO OPERATE OVER THE 0.5GHZ TO 18.0GHZ FREQUENCY RANGE. THIS MODEL IS DESIGNED TO MAINTAIN LOW INSERTION LOSS, HIGH ISOLATION, AND FAST SWITCHING SPEED.

SPECIFICATIONS

- FREQUENCY RANGE: 0.5 GHz TO 18.0 GHz
- INSERTION LOSS: 3.75dB MAX
- ISOLATION: 60dB MIN. (0.5 to 10.0 GHz)
55dB MIN. (10.0 to 18.0 GHz)
- VSWR: 2.0:1 MAX
- SPEED: 100ns MAX
- POWER INPUT (OPERATING): +20dBm CW MAX.
- CONTROL: TTL LOGIC - SEE LOGIC TABLE
- POWER SUPPLY: +5VDC @ 80 mA NOMINAL
-12 to -15VDC @ 50 mA NOMINAL
- RF CONNECTORS: SMA FEMALE CONNECTORS
- DC CONNECTORS: SOLDER PINS
- SIZE: (L) 1.2" X (W) .9" (H) 0.35"
- FINISH: PAINTED BLUE

LOGIC TABLE		
2 BIT TTL		
E1	E2	FUNCTION
0	1	J1-J2 "Low Loss"
1	0	J1-J3 "Low Loss"

ENVIRONMENTAL RATINGS

- TEMPERATURE: -40°C TO + 85°C (OPERATING)
-65°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 107D COND. A

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

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	9/15/18	
	B1	ECN # 18-0050	3/15/18	
	B2	ECN # 18-0099	3/1/18	
	B3	ECN # 18-0194	10/11/18	

MECHANICAL OUTLINE

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

PMI CONFIDENTIAL AND PROPRIETARY

APPROVALS		DATE	TITLE
DESIGN	DATE	9/15/18	PRODUCT FEATURE
DRAWN			P2T-0R5G18G-55-T-SFF-PN
ISSUED	SCALE	N: S	SHEET 1 OF 1

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

TEST DATA SHEET

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA/QC
1	Frequency Range:	0.5 – 18 GHz	0.5 – 18 GHz See Plot	

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TYPICAL CHARACTERISTICS ON P2T-0R5G18G-55-T-SFF-PN

2	Insertion Loss:	3.75dB Max.	3.07dB See Plot		
3	Isolation:	55dB Min.	90dB See Plot		
4	VSWR : In/Out	2.0:1 Max.	1.85:1 See Plot		
5	Switching Speed:	100ns Max.	>40ns		
6	Operating Input Power:	+20dBm CW Max	Pass by Design		
7	DC Supply:	+5VDC @ 80mA Nominal -15VDC @ 50mA Nominal	33mA 67mA		
8	Control Signal:	LOGIC TABLE			Pass
		2 BIT TTL			
		E1	E2	FUNCTION	
		0	1	J1-J2 "LOW LOSS"	
		1	0	J1-J3 "LOW LOSS"	

(J1-J2) Insertion Loss and Return Loss



TYPICAL CHARACTERISTICS ON P2T-0R5G18G-55-T-SFF-PN



(J1-J3) Insertion Loss and Return Loss



(J1 - J2) Isolation and Termination Return Loss

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TYPICAL CHARACTERISTICS ON P2T-0R5G18G-55-T-SFF-PN



(J1 – J3) Isolation and Termination Return Loss

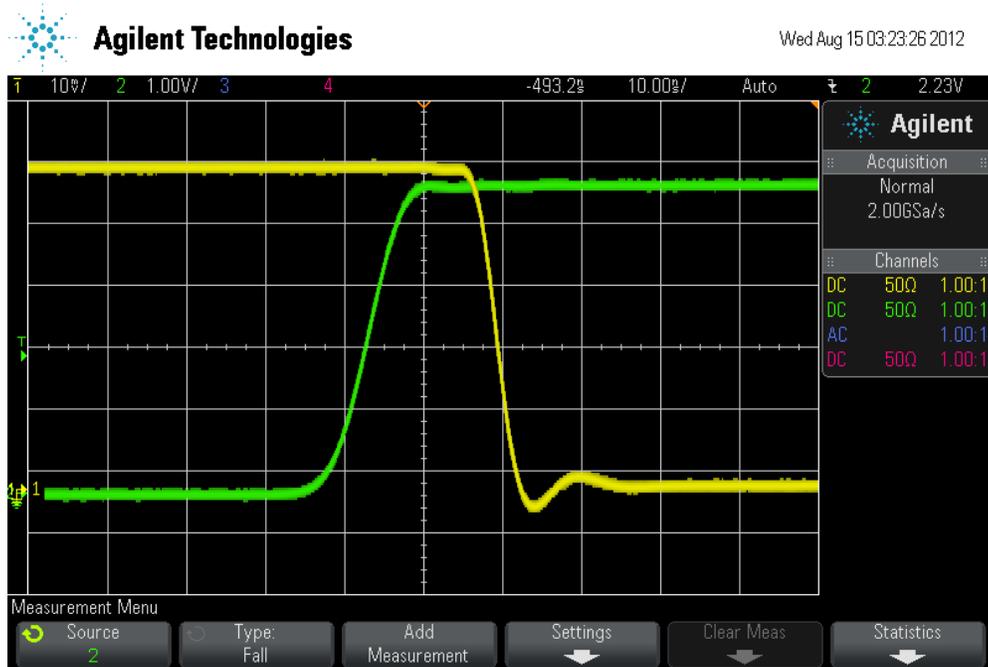


Switching Speed

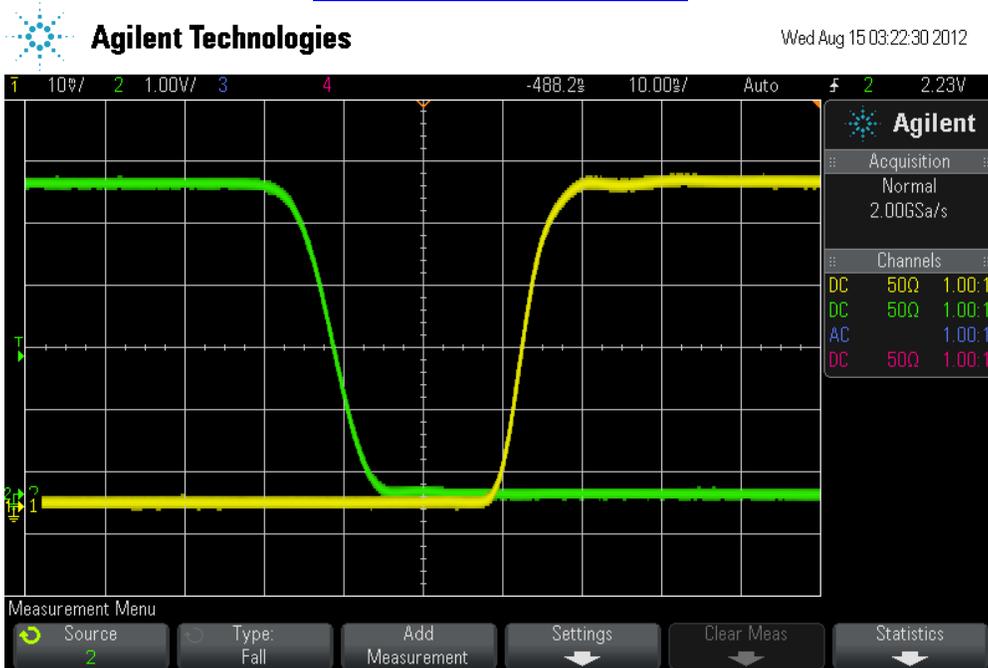
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TYPICAL CHARACTERISTICS ON P2T-0R5G18G-55-T-SFF-PN



ON Delay – 10ns per Div.



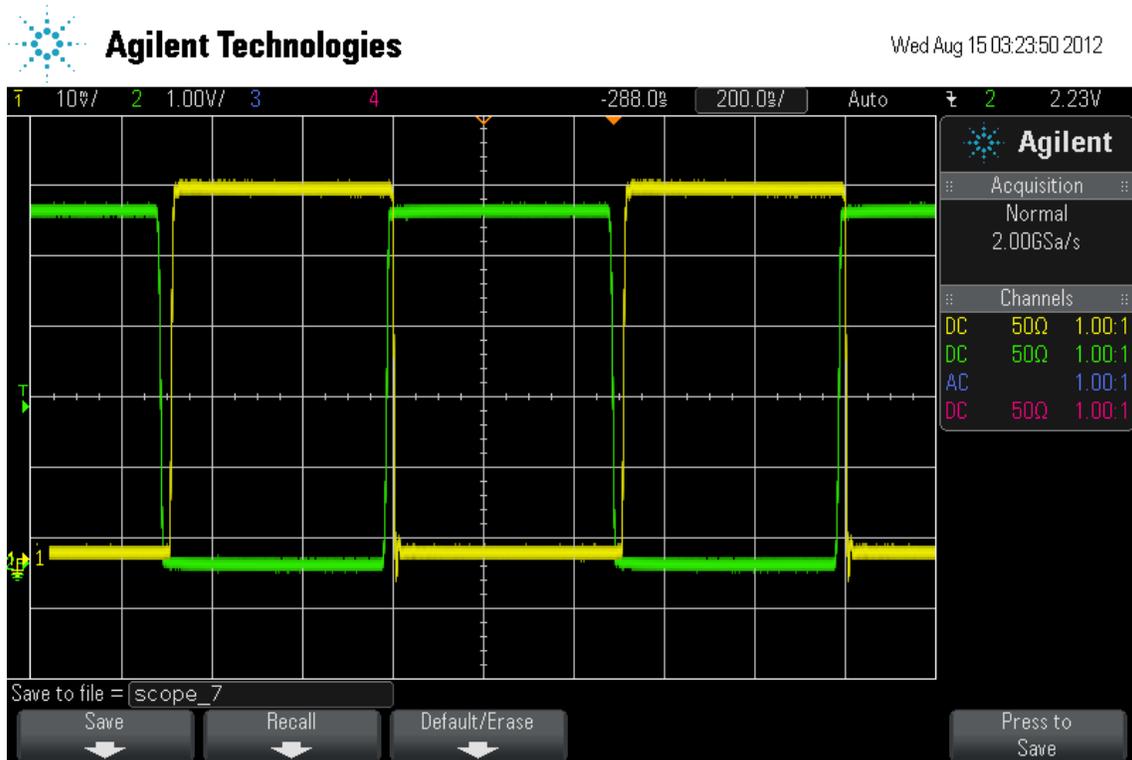
Green = TTL Signal
Yellow = RF Signal



TYPICAL CHARACTERISTICS ON P2T-0R5G18G-55-T-SFF-PN

Switching Speed

Full Pulse – 200ns per Div.



Green = TTL Signal
Yellow = RF Signal