

**DESCRIPTION**

PMI MODEL NUMBER P2T-1G1R1G-25-R-SFF-100W-SM IS A SINGLE POLE, TWO THROW HERMETICALLY SEALED REFLECTIVE SWITCH DESIGNED TO OPERATE OVER THE 1.0 GHz TO 1.1 GHz FREQUENCY RANGE. THIS MODEL IS DESIGNED TO HANDLE 100 WATTS AVERAGE INPUT POWER AND 5 kW PEAK HAVING A 17  $\mu$ s PULSE WIDTH AND 2% DUTY CYCLE.

**SPECIFICATIONS**

- FREQUENCY: 1.0 GHz TO 1.1 GHz
- POWER: 5 kW PEAK
- AVERAGE POWER: 100 WATTS
- INSERTION LOSS: 0.8 dB MAX
- ISOLATION: 25 dB MIN
- VSWR: 1.5:1
- RISE TIME: 275 ns TYP (FROM 10% TO 90% RF)
- DUTY CYCLE: 1%
- PULSE WIDTH: 32  $\mu$ s
- PRF: 600 Hz
- SWITCHING SPEED: 250 ns TYP (50% TTL TO 10%/90% RF)
- SWITCHING RATE: 2 kHz
- COLD SWITCHING: YES
- POWER SUPPLY: +50V @ 50 mA, +5V @ 200 mA
- CONTROL: TTL (SEE LOGIC TABLE)
- FINISH: NO PAINT ON MOUNTING SURFACE  
BLUE EPOXY POLIMIDE COATING IAW MIL-C-22750, TYPE I OVER EPOXY POLIMIDE PRIMER IAW MIL-P-23377, TYPE I, CLASS 1 OR 3.
- CONNECTORS: TNC FEMALE (J1, J2, J3) 9-PIN MICRO D (DC/CONTROL)
- J4 CONNECTIONS:

TTL	STATE
"0"	J1 - J3
"1"	J1 - J2

J4 PIN	CONNECT TO
1	U1 +50V
2	NO CONNECTION
3	NO CONNECTION
4	U1 +5V
5	U1 IN1, (CTL)
6	U1 GROUND
7	U1 GROUND
8	U1 GROUND
9	U1 GROUND

**ENVIRONMENTAL RATINGS**

- TEMPERATURE: -45°C TO +85°C (OPERATING - BASE PLATE)  
-54°C TO +125°C (NON-OPERATING)
- ENVIRONMENTAL: MIL-STD-810E
- EMI/EMC: MIL-STD-461

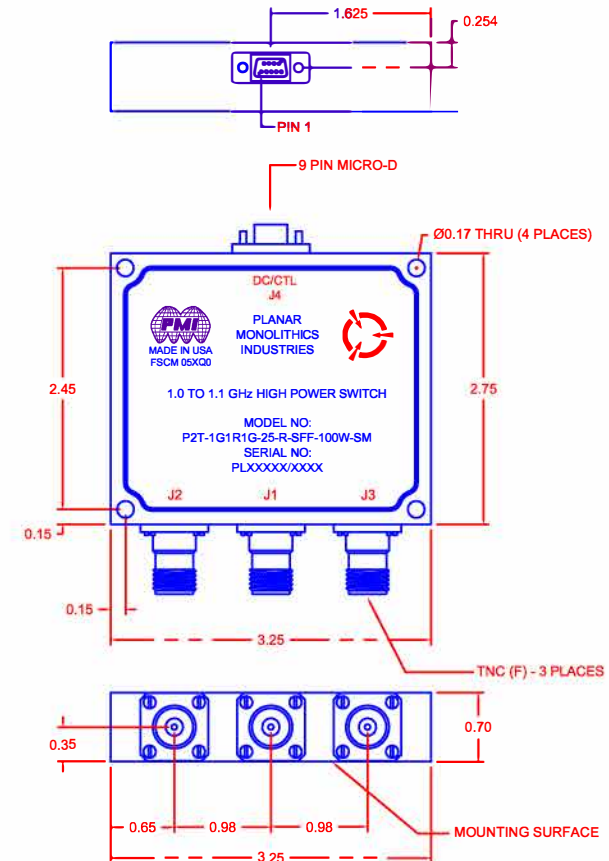
NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE  
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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

**PMI CONFIDENTIAL AND PROPRIETARY**

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	ORIGINAL RELEASE	12/28/15	
	A1	ECN # 16-0179	11/30/16	

**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](http://www.pmi-rf.com)  
E-MAIL: [sales@pmi-rf.com](mailto:sales@pmi-rf.com)  
ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		REV.
DRAWN <i>M. Berry</i>		11/30/16	PRODUCT FEATURE P2T-1G1R1G-25-R-SFF-100W-SM 1.0 to 1.1 GHz High Power Switch		A1
CHECKED			SIZE A	FSCM NO. 05XQ0	DWG NO. 27030201
ISSUED			SCALE N:S		SHEET 1 OF 1