

## DESCRIPTION

PMI MODEL P4T-100M50G-100-R-RD IS A REFLECTIVE, SINGLE POLE FOUR THROW PIN DIODE SWITCH THAT OPERATES OVER THE 0.1 GHz TO 50 GHz FREQUENCY RANGE. IT FEATURES LOW INSERTION LOSS AND HIGH ISOLATION IN A SLIMLINE PACKAGE. THIS MODEL ALSO INCORPORATES A TTL COMPATIBLE DRIVER FOR EASE OF SYSTEM INTEGRATION.

## SPECIFICATIONS

- FREQUENCY: 0.1 TO 50 GHz
- INSERTION LOSS: 5.0 dB (0.1 TO 18 GHz) TYP  
8.0 dB (18 TO 40 GHz) TYP  
14.0 dB (40 TO 50 GHz) TYP
- INPUT & OUTPUT VSWR: 2.2:1 (0.1 TO 18 GHz) TYP  
2.5:1 (18 TO 40 GHz) TYP  
3.0:1 (40 TO 50 GHz) TYP
- ISOLATION: 70 dB (0.1 TO 1 GHz) TYP  
100 dB (1 TO 18 GHz) TYP  
100 dB (18 TO 40 GHz) TYP  
80 dB (40 TO 50 GHz) TYP
- INPUT POWER: 20 dBm CW MAX
- SWITCHING SPEED: 50 ns MAX
- CONTROL SIGNAL: SEE TTL LOGIC TABLE
- DC VOLTAGE: +5 V @ 200 mA MAX  
-5 V @ 200 mA MAX
- RF CONNECTORS: 2.4 mm FEMALE
- SIZE: 1.25" X 1.25" X 0.40"
- FINISH: GOLD PLATED

## ENVIRONMENTAL RATINGS

- TEMPERATURE: -40 °C TO +85 °C (OPERATING)  
-65 °C TO +125 °C (STORAGE)
- HUMIDITY: MIL-STD-202, METHOD 103B COND. B
- SHOCK: MIL-STD-202, METHOD 213B COND. B
- VIBRATION: MIL-STD-202, METHOD 204D COND. B
- ALTITUDE: MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202, METHOD 107D COND. A

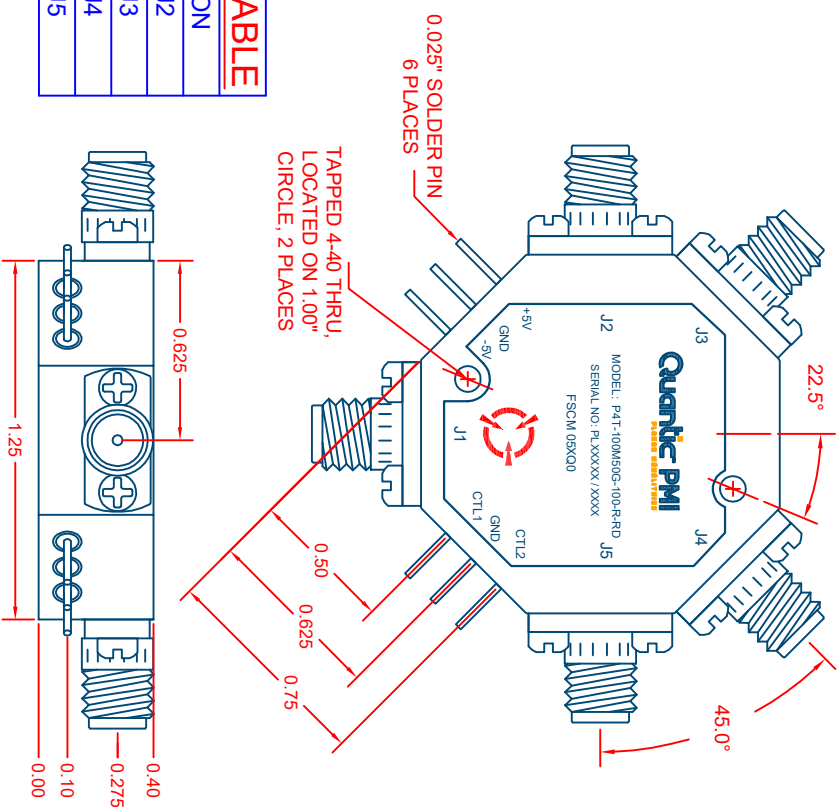
NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE  
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

## TTL LOGIC CONTROL TABLE

CTL 2	CTL 1	FUNCTION
0	0	J1 TO J2
0	1	J1 TO J3
1	0	J1 TO J4
1	1	J1 TO J5

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	ORIGINAL RELEASE	09/26/16	
	A1	ECN # 17-0299	12/19/17	
	B1	ECN # 22-0168	03/24/23	

## MECHANICAL OUTLINE



ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
XXX ±0.020  
XXX ±0.010

PMI CONFIDENTIAL AND PROPRIETARY

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APPROVALS	DATE	TITLE
DRAWN <i>MES</i>	09/26/16	PRODUCT FEATURE P4T-100M50G-100-R-RD
CHECKED		
ISSUED		
SCALE N:S		