

**DESCRIPTION:**

PMI MODEL P4T-100M50G-100-T-RD IS AN ABSORPTIVE, SINGLE POLE FOUR THROW PIN DIODE SWITCH THAT OPERATES OVER THE 100 MHz 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:**

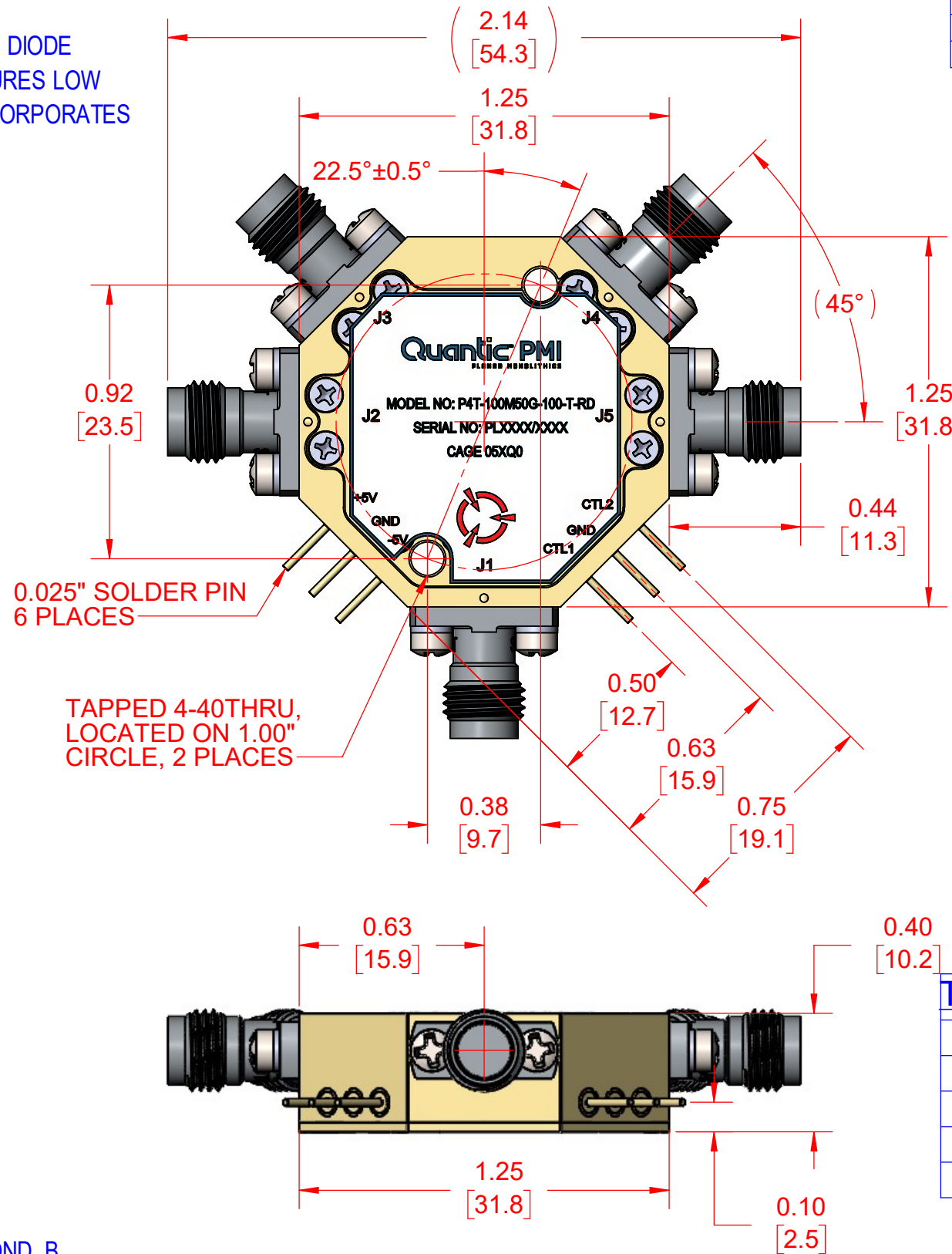
- FREQUENCY RANGE:.....0.1 TO 50 GHz
- INSERTION LOSS:.....5.0 dB (0.1 TO 18 GHz) MAX  
8.0 dB (18 TO 40 GHz) MAX  
14.0 dB (40 TO 50 GHz) MAX
- VSWR & INPUT / OUTPUT AND TERMINATION:.....2.2:1 (0.1 TO 18 GHz) MAX  
2.7:1 (18 TO 40 GHz) MAX  
3.2:1 (40 TO 50 GHz) MAX
- INPUT POWER:.....20 dBm CW MAX
- ISOLATION:.....80 dB (0.1 TO 1 GHz) MIN  
90 dB (1 TO 18 GHz) MIN  
75 dB (18 TO 40 GHz) MIN  
70 dB (40 TO 50 GHz) MIN
- SWITCHING SPEED:.....50 ns MAX
- CONTROL SIGNAL:.....SEE TTL LOGIC TABLE
- RF CONNECTORS:.....2.4 mm FEMALE
- DC VOLTAGE :.....+5 V @ 200 mA MAX  
-5 V @ 200 mA MAX
- SIZE:.....1.25" X 1.25" X 0.40"  
SEE LOGIC TABLE
- FINISH:.....GOLD PLATED

**ENVIRONMENTAL RATINGS:**

- TEMPERATURE:.....-40°C TO +85°C (OPERATING)  
-65°C TO +125°C (STORAGE)  
MIL-STD-202F, METHOD 103B COND. B
- HUMIDITY:.....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-202, METHOD 107D COND. A.

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

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	6/23/2022	
	B1	ECN # 22-0168	5/24/2023	
	B2	ECN # 24-0296	10/16/2024	



**MECHANICAL OUTLINE**

**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

PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.



APPROVALS		DATE	TITLE			
DRAWN	S AZHAR	6/23/2022	OUTLINE			
REDRAWN			P4T-100M50G-100-T-RD			
ISSUED			SIZE	FSCM NO.	DWG NO.	REV.
			B	05XQ0	27027780	B2
			SCALE 2:1			SHEET 1 OF 1

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES  
TOLERANCES ARE:  
FRACTIONS DECIMALS ANGLES  
± .XX ± 0.02 ±  
.XXX ± 0.01