

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	4/17/2026	
	A2	ECN # 26-0093	5/4/2026	

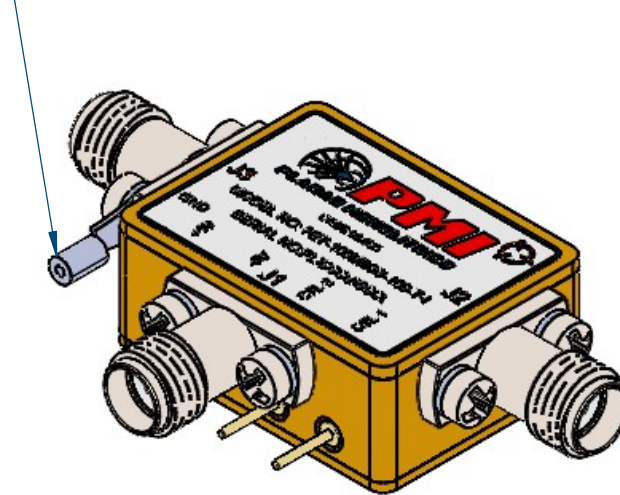
**DESCRIPTION:**

PMI MODEL P2T-100M50G-100-T-I IS A SINGLE POLE, DOUBLE 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:..... 4.5 dB (0.1 TO 18 GHz) MAX  
6.0 dB (18 TO 40 GHz) MAX  
8.5 dB (40 TO 50 GHz) MAX
- VSWR:..... 2.2:1 (0.1 TO 18 GHz) MAX  
2.5:1 (18 TO 40 GHz) MAX  
3.0:1 (40 TO 50 GHz) MAX
- ISOLATION:..... 85 dB (0.1 TO 40 GHz) MIN  
70 dB (40 TO 50 GHz) MIN
- INPUT POWER:..... 20 dBm CW MAX
- SWITCHING SPEED:..... 50 ns MAX
- CONTROL SIGNAL:..... TTL LOGIC (SEE TRUTH TABLE)
- DC VOLTAGE:..... +5 V @ 100 mA MAX  
-5 V @ 100 mA MAX
- CONNECTORS:..... 2.4 mm FEMALE
- FINISH:..... GOLD PLATED

22 AWG MAX SOLDER GROUND TERMINAL



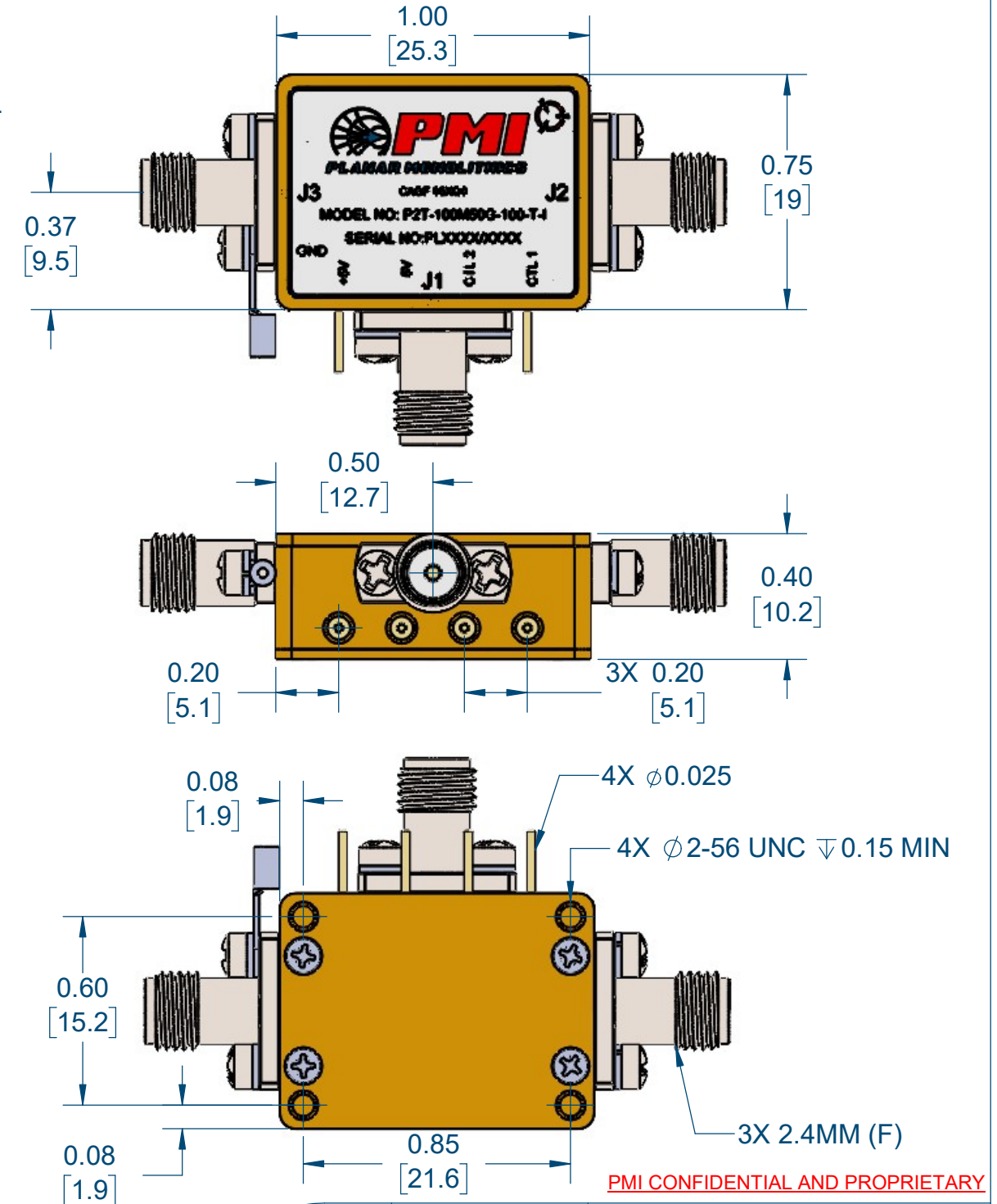
TRUTH TABLE		
CTL2	CTL1	STATE
0	0	ALL OFF**
0	1	J1-J2 ON/ J3 OFF
1	0	J1-J3 ON/ J2 OFF
1	1	ALL ON*

\*IF MULTIPLE ARMS ARE ON, INSERTION LOSS, CURRENT AND VSWR SPECIFICATION VARY RELATIVE TO SINGLE PATH PERFORMANCE  
\*\*VSWR NOT SPECIFIED IN THIS CONDITION

**ENVIRONMENTAL RATINGS:**

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

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



PMI CONFIDENTIAL AND PROPRIETARY

APPROVALS		DATE	TITLE			
DRAWN E CASTILLO		4/17/2026	OUTLINE			
REISSUED			P2T-100M50G-100-T-I			
SIZE	FSCM NO.	DWG NO.	REV.			
B	05XQ0	27054720	A2			
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



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