

**DESCRIPTION:**

PMI MODEL P8T-100M50G-90-T-DEC-REC-MICROD IS AN ABSORPTIVE, SINGLE POLE EIGHT THROW PIN DIODE SWITCH THAT OPERATES OVER THE 0.1 TO 50 GHz FREQUENCY RANGE.

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE	3/31/2026	

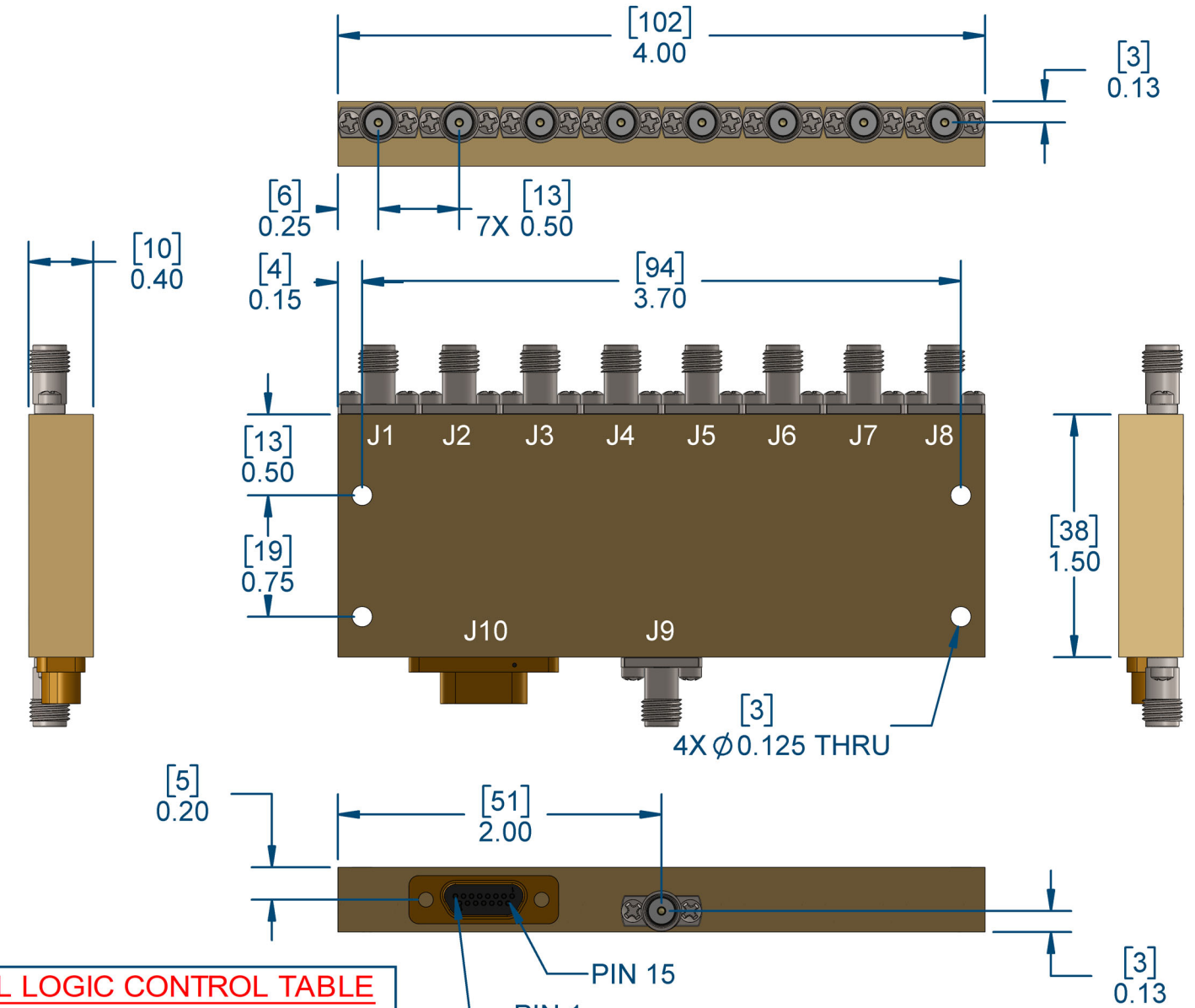
**SPECIFICATIONS:**

- FREQUENCY RANGE:..... 0.1 TO 50 GHz
- INSERTION LOSS:..... 6.0 dB TYP, 7.0 dB MAX (0.1 TO 18 GHz)  
9.0 dB TYP, 10.5 dB MAX (18 TO 40 GHz)  
16.0 dB TYP, 17.0 dB MAX (40 TO 50 GHz)
- INPUT AND OUTPUT VSWR:..... 2.2:1 TYP, 2.5:1 MAX (0.1 TO 18 GHz)  
2.5:1 TYP, 3.2:1 MAX (18 TO 40 GHz)  
3.5:1 TYP, 3.7:1 MAX (40 TO 50 GHz)
- ISOLATION:..... 90 dB TYP, 70 dB MIN (0.1 TO 1 GHz)  
90 dB TYP, 60 dB MIN (1 TO 40 GHz)  
80 dB TYP, 50 dB MIN (40 TO 50 GHz)
- INPUT POWER:..... 20 dBm CW MAX
- SWITCHING SPEED:..... 50 ns MAX
- CONTROL SIGNAL:..... SEE TTL LOGIC TABLE
- DC VOLTAGE :..... +5 V @ 400 mA MAX, -5 V @ 300 mA MAX
- CONNECTORS:..... RF: 2.4 mm FEMALE  
CONTROL: 15 PIN MICROD
- FINISH:..... GOLD PLATED

MICRO D CONNECTOR							
1	2	3	4	5	6	7	8
CTL 1	CTL 2	CTL 3	N/C	N/C	N/C	N/C	N/C
9	10	11	12	13	14	15	
N/C	N/C	N/C	GND	+V	-V	GND	

**ENVIRONMENTAL RATINGS:**


- TEMPERATURE:..... -55°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



TTL LOGIC CONTROL TABLE			
CTL 3	CTL 2	CTL 1	FUNCTION
0	0	0	J9 TO J1
0	0	1	J9 TO J2
0	1	0	J9 TO J3
0	1	1	J9 TO J4
1	0	0	J9 TO J5
1	0	1	J9 TO J6
1	1	0	J9 TO J7
1	1	1	J9 TO J8

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

**PMI CONFIDENTIAL AND PROPRIETARY**

APPROVALS		DATE	 7309-A GROVE ROAD FREDERICK, MARYLAND 21704 USA TEL: (301) 682-5019, FAX: (301) 682-1731 WEB: WWW.QUANTICPMI.COM, EMAIL: SALES@QUANTICPMI.COM ISO 9001 CERTIFIED	
DRAWN		3/31/26		
REDRAWN				
ISSUED				
TITLE			P8T-100M50G-90-T-DEC-REC-MICROD	
SIZE	FSCM NO.	DWG NO.	REV.	
B	05XQ0	PRELIMINARY	-	
SCALE 1:1			SHEET 1 OF 1	

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