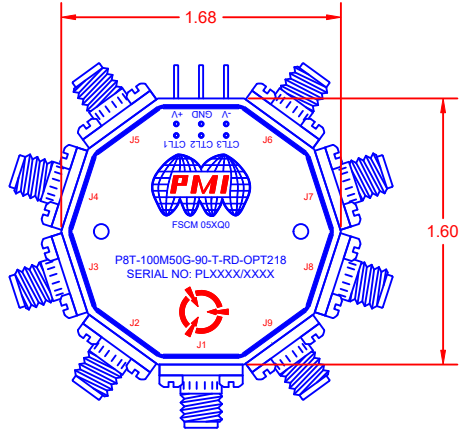
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	7/1/24	

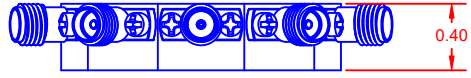
DESCRIPTION

PMI MODEL P8T-100M50G-90-T-RD-OPT218 IS AN ABSORPTIVE, SINGLE POLE EIGHT THROW PIN DIODE SWITCH THAT OPERATES OVER THE 0.1 GHz TO 18 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 18 GHz
- INSERTION LOSS: ---------- 6.0 dB TYP, 7.0 dB MAX (0.1 TO 18 GHz)
- INPUT & OUTPUT VSWR: ------ 2.0:1 TYP, 2.5:1 MAX (0.1 TO 18 GHz)
- ISOLATION: ---------- 90 dB TYP, 70 dB MIN (0.1 TO 1 GHz)
  90 dB TYP, 65 dB MIN (1 TO 18 GHz)
- INPUT POWER: ---------- 23 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
- RF CONNECTORS: ---------- SMA FEMALE
- SIZE: ---------- 1.60" X 1.68" X 0.40"
- FINISH: ---------- GOLD PLATED





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

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

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ISO 9001 CERTIFIED

APPROVALS	DATE
DRAWN SPH	7/1/24
CHECKED	
ISSUED	

TITLE: PRODUCT FEATURE
P8T-100M50G-90-T-RD-OPT218

SIZE	FSCM NO.	DWG NO.	REV.
A	05XQ0	PRELIMINARY	

SCALE N:S | SHEET 1 OF 2

DESCRIPTION

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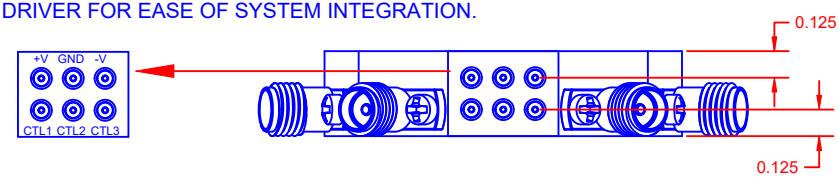
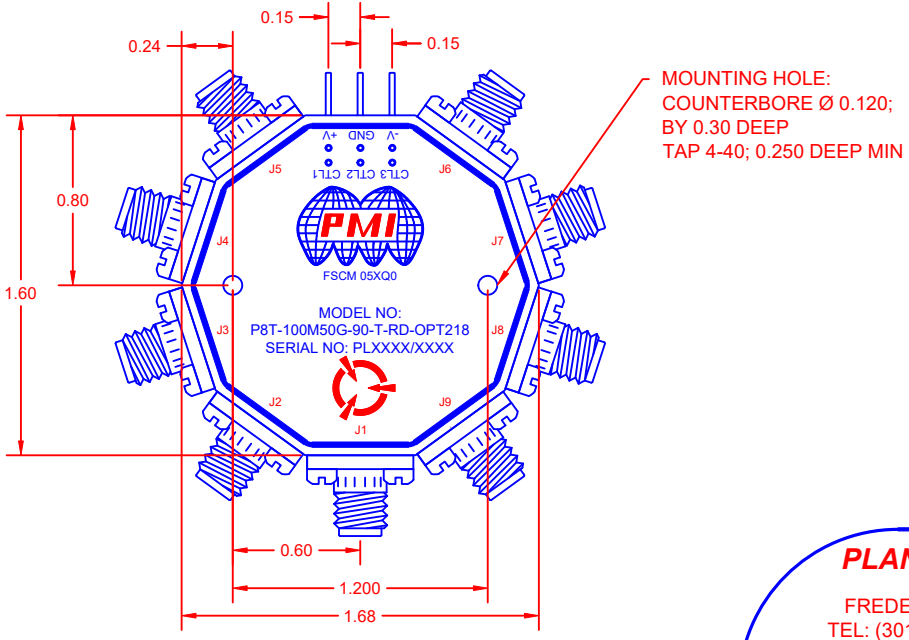
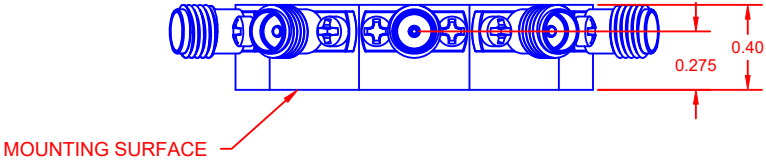


MECHANICAL OUTLINE





TTL LOGIC CONTROL TABLE

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

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X.XXX ±0.010

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TITLE: PRODUCT FEATURE P8T-100M50G-90-T-RD-OPT218

SIZE	FSCM NO.	DWG NO.	REV.
A	05XQ0	PRELIMINARY	-

SCALE N:S | SHEET 2 OF 2