

DESCRIPTION

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

SPECIFICATIONS

- FREQUENCY:----- 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 & 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
- RF CONNECTORS: ----- 2.4 mm FEMALE
- SIZE: ----- 4.0" X 1.5" X 0.4"
- FINISH: ----- GOLD PLATED

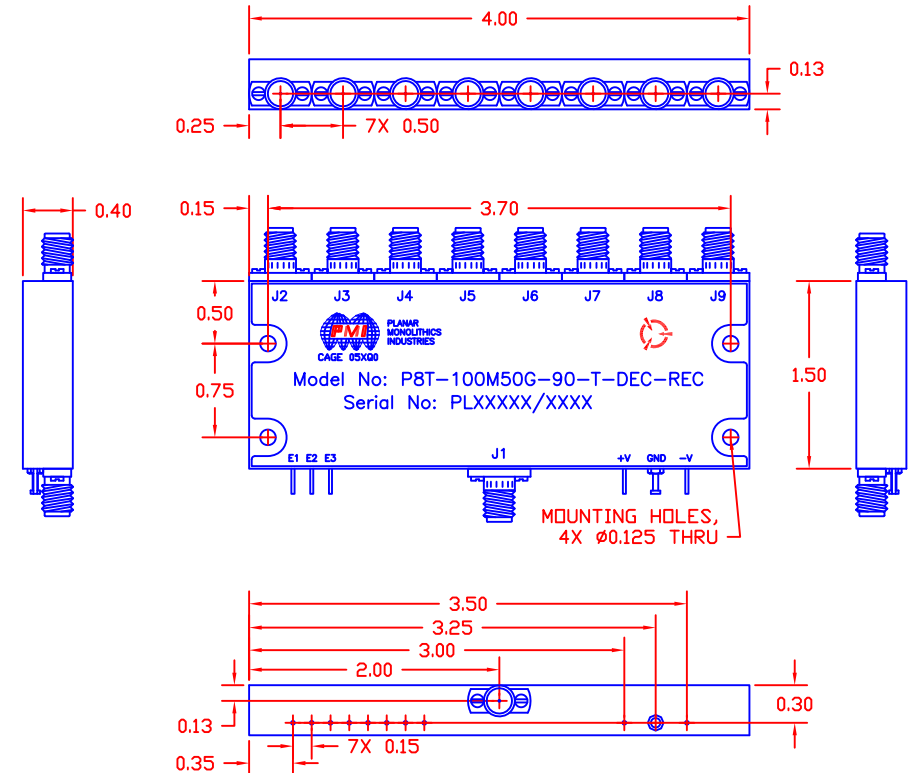
ENVIRONMENTAL RATINGS

- 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

PMI CONFIDENTIAL AND PROPRIETARY

| REVISIONS | | | | |
|-----------|------|-------------|---------|----------|
| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
| | - | PRELIMINARY | 7/21/23 | |
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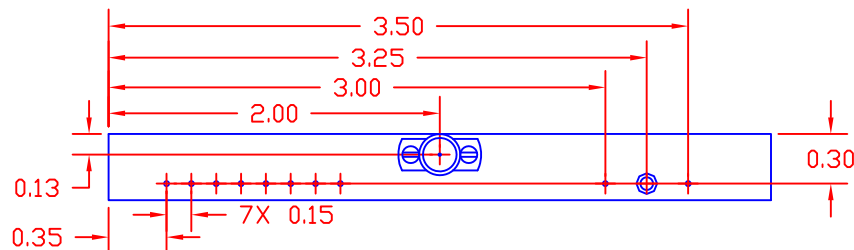
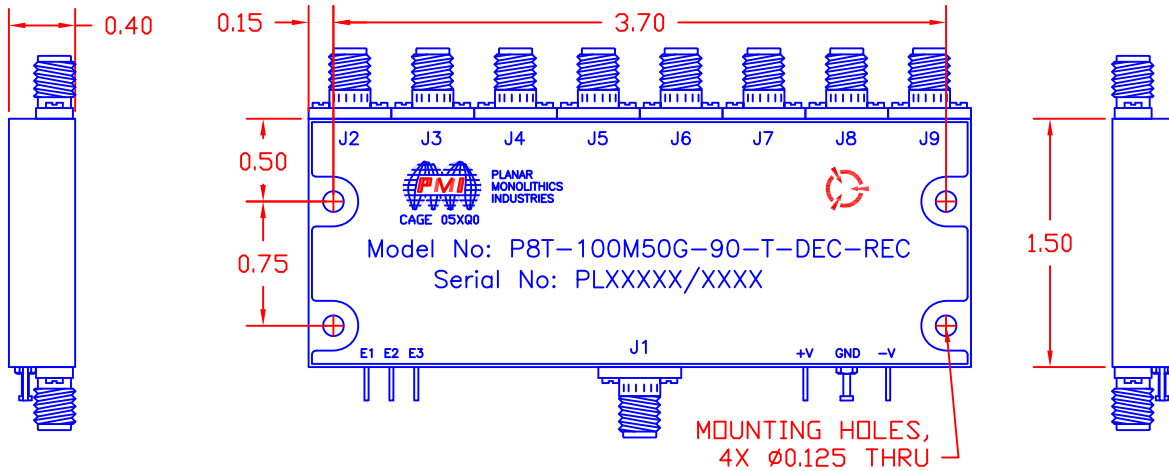
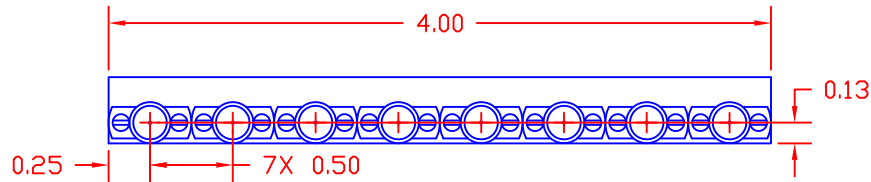


| APPROVALS | | DATE | TITLE | | |
|-----------------|--|---------|---|-------------------|------------------------|
| DRAWN <i>AG</i> | | 7/21/23 | PRODUCT FEATURE P8T-100M50G-90-T-DEC-REC | | |
| CHECKED | | | SIZE A | FSCM NO. 05XQ0 | DWG NO. PRELIMINARY |
| ISSUED | | | SCALE N:S | | REV. - |
| | | | | SHEET | 1 OF 2 |

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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 |

ALL DIMENSIONS
ARE IN INCHES
TOLERANCES:
X.XX ±0.020
X.XXX ±0.010

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| CHECKED | | | SIZE | FSCM NO. | DWG NO. | REV. |
| ISSUED | | | A | 05XQ0 | | - |
| SCALE | | | N:S | | SHEET 2 OF 2 | |