

## DESCRIPTION

PMI MODEL NUMBER: P4T-50M40G-55-T-292FF IS A 50MHz TO 40GHz, SINGLE POLE, FOUR THROW, ABSORPTIVE SWITCH. THIS SWITCH OFFERS 55dB OF PORT TO PORT ISOLATION, AND A MAXIMUM INSERTION LOSS OF 8dB. IT HAS A SWITCHING SPEED OF 100ns AND IS INDEPENDENTLY TTL CONTROLLED. THE OPERATING POWER IS +20dBm CW AND THE TYPICAL VSWR IS 2.5:1 MAXIMUM.

## SPECIFICATIONS

- FREQUENCY RANGE: . . . . . 50MHz TO 40GHz
  - INSERTION LOSS: . . . . . 8dB MAX
  - ISOLATION: . . . . . 55dB MIN
  - VSWR: . . . . . 2.5:1 MAX
  - SPEED: . . . . . 50% TTL TO 10%/90% RF  
85ns TYP, 100ns MAX
  - INPUT POWER: . . . . . +20dBm CW
  - SURVIVAL POWER: . . . . . 0.5W CW, 5W PEAK, 1us
  - CONTROL TTL: . . . . . 4 LINE INDEPENDENT  
LOGIC "0" = INSERTION LOSS  
LOGIC "1" = ISOLATION
  - POWER SUPPLY: . . . . . +12 TO +15VDC @ 150mA \*  
-12 TO -15VDC @ 100mA \*
  - RF CONNECTORS: . . . . . 2.92mm FEMALE FOR LOW LEAKAGE
  - CONTROL, POWER, AND GROUND: . . . . FEEDTHRU - Ø0.030 TYP
  - RF LEAKAGE: . . . . . SMA & PINS = <-100dB PER MIL-C-39012
  - SEALING: . . . . . EPOXY SEALED
  - SIZE: . . . . . (L) 2.0" X (W) 1.0" X (H) 0.4"
  - FINISH: . . . . . GOLD PLATED
- \* VOLTAGE REGULATION & REVERSE BIAS PROTECTION INCLUDED

## ENVIRONMENTAL RATINGS

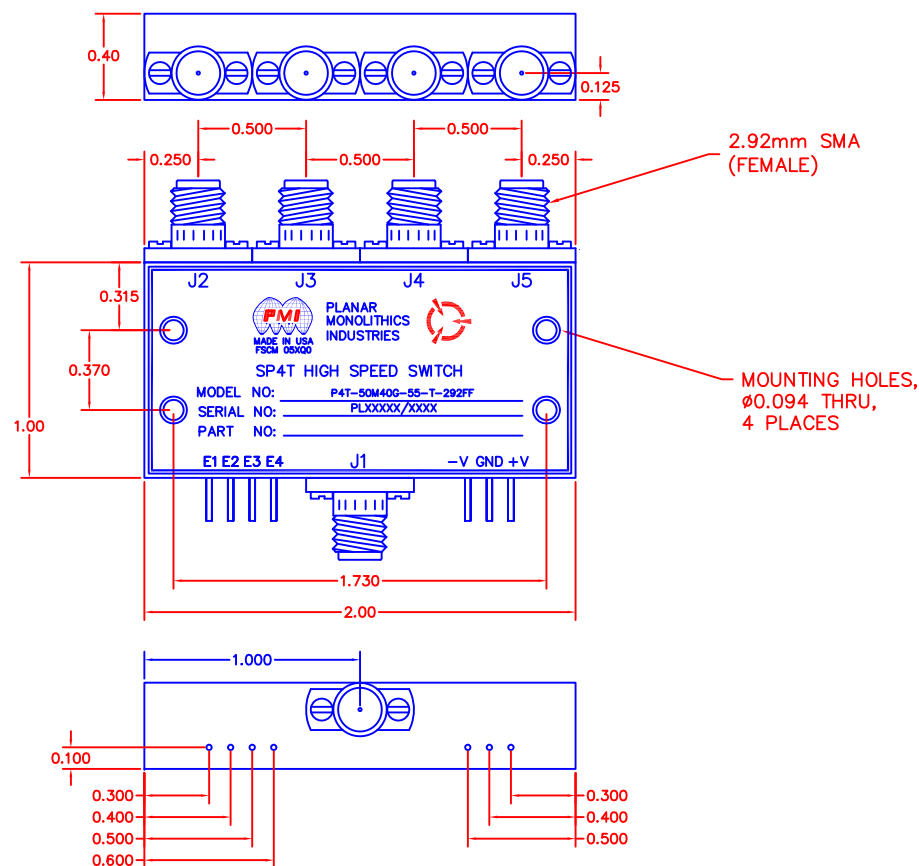
- TEMPERATURE: . . . . . -40°C TO + 85°C (OPERATING)  
-55°C TO +125°C (STORAGE)
- HUMIDITY: . . . . . MIL-STD-202F, METHOD 103B COND. B
- SHOCK: . . . . . MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: . . . . . MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: . . . . . MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE: . . . . . MIL-STD-202F, METHOD 107D COND. A

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

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

| REVISIONS |      |                  |          |
|-----------|------|------------------|----------|
| ZONE      | REV. | DESCRIPTION      | DATE     |
|           | A1   | ORIGINAL RELEASE | 04/22/18 |

## MECHANICAL OUTLINE



PMI CONFIDENTIAL AND PROPRIETARY

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ISO 9001:2000 CERTIFIED



| APPROVALS |  | DATE     |  | TITLE                 |          |          |        |
|-----------|--|----------|--|-----------------------|----------|----------|--------|
| DRAWN     |  | 04/22/18 |  | PRODUCT FEATURE       |          |          |        |
| CHECKED   |  |          |  | P4T-50M40G-55-T-292FF |          |          |        |
| ISSUED    |  |          |  | SIZE                  | FSCM NO. | DWG NO.  | REV.   |
|           |  |          |  | A                     | 05XQ0    | 27018971 | A1     |
|           |  |          |  | SCALE                 | N: S     | SHEET    | 1 OF 1 |