

## DESCRIPTION

PMI MODEL P2T-500M20G-70-T-55-SFF-I IS AN ABSORPTIVE, SINGLE POLE, TWO THROW PIN DIODE SWITCH THAT OPERATES OVER THE 0.5 GHz TO 20 GHz FREQUENCY RANGE. THIS MODEL INCORPORATES A TTL COMPATIBLE DRIVER FOR EASY SYSTEM INTEGRATION.

## SPECIFICATIONS

- FREQUENCY RANGE: ..... 0.5 TO 20 GHz
- ISOLATION: ..... 70dB MIN
- INSERTION LOSS: ..... 2.75 dB MAX
- VSWR IN / OUT: ..... 2.0:1 TYP
- INPUT POWER: ..... +23 dBm CW MAX
- SURVIVAL POWER: ..... 1W PEAK 1 us
- RF SWITCHING SPEED: ..... RISE: 15ns MAX  
FALL: 15ns MAX  
DELAY ON: 50ns MAX  
DELAY OFF: 50ns MAX
- DC VOLTAGE: ..... +5 V @ 200 mA MAX  
-5 V @ 100 mA MAX
- CONTROL SIGNAL: ..... TTL LOGIC  
SEE LOGIC TABLE
- CONNECTORS IN/OUT: ..... SMA FEMALE CONNECTORS
- CONTROL CONNECTORS: ..... SOLDER PINS
- SIZE: ..... (L) 1.0" X (W) 1.0" X (H) 0.5"
- FINISH: ..... PAINTED BLUE

| TRUTH TABLE |       |                   |
|-------------|-------|-------------------|
| CTL 2       | CTL 1 | STATE             |
| 0           | 0     | ALL OFF           |
| 0           | 1     | J1-J2 ON / J3 OFF |
| 1           | 0     | J1-J3 ON / J2 OFF |
| 1           | 1     | ALL ON            |

## ENVIRONMENTAL RATINGS

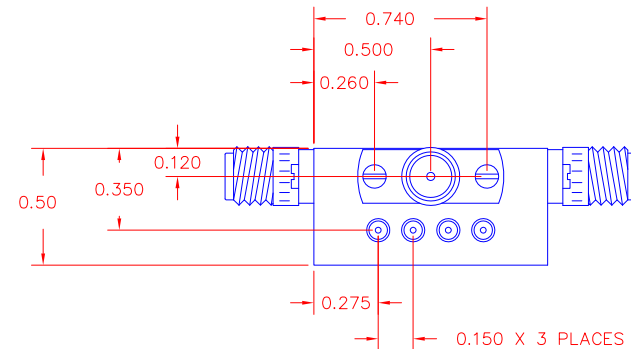
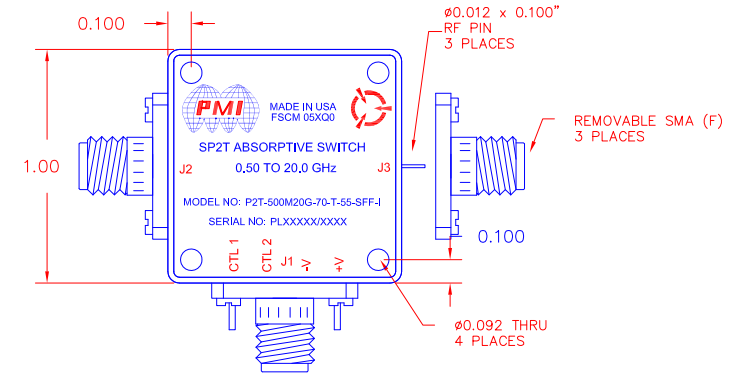
- TEMPERATURE: ..... -40°C TO +85°C (OPERATING)  
-55°C TO +125°C (STORAGE)

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 ±0.010  
X.XXX ±0.005

| REVISIONS |      |             |           |          |
|-----------|------|-------------|-----------|----------|
| ZONE      | REV. | DESCRIPTION | DATE      | APPROVED |
|           | -    | PRELIMINARY | 5/18/2021 |          |

## MECHANICAL OUTLINE



PMI CONFIDENTIAL AND PROPRIETARY

## PLANAR MONOLITHICS INDUSTRIES, INC.

7311-F GROVE ROAD  
FREDERICK, MARYLAND 21704 USA  
TEL: 301-662-5019 FAX: 301-662-1731  
WEBSITE: [www.pmi-rf.com](http://www.pmi-rf.com)  
E-MAIL: [sales@pmi-rf.com](mailto:sales@pmi-rf.com)

ISO 9001:2008 CERTIFIED



| APPROVALS |  | DATE    | TITLE  |                |                     |
|-----------|--|---------|--|----------------|---------------------|
| DRAWN SPH |  | 5/18/21 | OUTLINE DRAWING<br>P2T-500M20G-70-T-55-SFF-I |                |                     |
| CHECKED   |  |         | SIZE A                                       | FSCM NO. 05XQ0 | DWG NO. PRELIMINARY |
| ISSUED    |  |         | SCALE N: S                                   |                | SHEET 1 OF 1        |