

# DESCRIPTION

PMI MODEL: P2T-0R5G8G-45-R-50W-AL IS A SINGLE POLE, TWO THROW REFLECTIVE SWITCH DESIGNED TO OPERATE OVER THE 0.5 GHz TO 8.0 GHz FREQUENCY RANGE. THIS MODEL IS DESIGNED TO HANDLE 50 WATTS AVERAGE INPUT POWER.

# SPECIFICATIONS

- FREQUENCY** 0.5 TO 8.0 GHz
- RF INPUT POWER:** --- 50 WATTS AVERAGE (COLD SWITCHING)
- INSERTION LOSS:** ---
  - 1.30 dB MAX, 0.90 dB TYP @ 0.5 - 1.0 GHz
  - 1.40 dB MAX, 1.00 dB TYP @ 1.0 - 2.0 GHz
  - 1.60 dB MAX, 1.30 dB TYP @ 2.0 - 4.0 GHz
  - 2.30 dB MAX, 2.00 dB TYP @ 4.0 - 6.0 GHz
  - 2.60 dB MAX, 2.40 dB TYP @ 6.0 - 8.0 GHz
- ISOLATION:** -----
  - 48 dB MIN, 52 dB TYP @ 0.5 - 1.0 GHz
  - 42 dB MIN, 45 dB TYP @ 1.0 - 2.0 GHz
  - 36 dB MIN, 38 dB TYP @ 2.0 - 4.0 GHz
  - 35 dB MIN, 37 dB TYP @ 4.0 - 6.0 GHz
  - 30 dB MIN, 33 dB TYP @ 6.0 - 8.0 GHz
- VSWR:** -----
  - 1.5:1 MAX, 1.30:1 TYP @ 0.5 - 1.0 GHz
  - 1.5:1 MAX, 1.30:1 TYP @ 1.0 - 2.0 GHz
  - 1.5:1 MAX, 1.30:1 TYP @ 2.0 - 4.0 GHz
  - 1.9:1 MAX, 1.80:1 TYP @ 4.0 - 6.0 GHz
  - 2.0:1 MAX, 1.80:1 TYP @ 6.0 - 8.0 GHz
- SWITCHING SPEED:** -- 100 ns Max.
- HOT SWITCHING:** ---
  - 40 Watts (CW) Max (1KHz, 50% Duty Cycle, At 0.5 To 8GHz)
  - 10 Watts (CW) Max (1MHz, 50% Duty Cycle, At 8GHz)
  - 16 Watts (CW) Max (1MHz, 50% Duty Cycle, At 0.5GHz)
- POWER SUPPLY:** ----- +5V @ 100 mA MAXIMUM
- CONTROL:** ----- TTL (SEE LOGIC TABLE BELOW)
- FINISH:** ----- PAINTED BLUE  
(NO PAINT ON MOUNTING SURFACE)
- CONNECTORS:** ----- FIELD REPLACEABLE SMA FEMALE

# ENVIRONMENTAL RATINGS

- TEMPERATURE:** ----- -45 °C TO +85 °C (OPERATING)  
-54 °C TO +125 °C (STORAGE)
- ENVIRONMENTAL:** ----- MIL-STD-810E
- EMI/EMC:** ----- MIL-STD-461

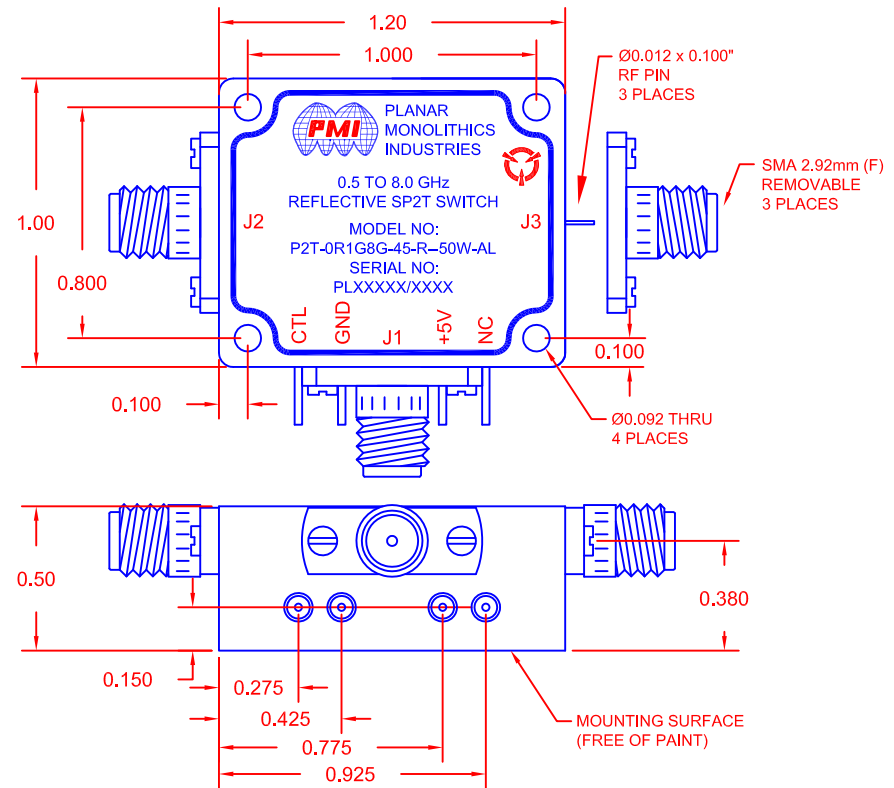
NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE  
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

LOGIC TABLE		
CTL	J1 - J2	J1 - J3
0	ON	OFF
1	OFF	ON

ALL DIMENSIONS ARE IN INCH [mm]  
TOLERANCES:  
X.XX ± 0.020 [0.508]  
X.XXX ± 0.010 [0.254]

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	INITIAL RELEASE	09/20/20	

# MECHANICAL OUTLINE



**PMI CONFIDENTIAL AND PROPRIETARY**

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APPROVALS		DATE	TITLE		
DRAWN <i>SPR</i>		09/20/20	PRODUCT FEATURE P2T-0R5G8G-45-R-50W-AL 0.5 to 8.0 GHz Reflective SP2T Switch		
REDRAWN			SIZE A	FSCM NO. 05XQ0	DWG NO. 27038360
ISSUED			SCALE N:S		SHEET 1 OF 1