

## DESCRIPTION

PMI MODEL: PDT-5G8G-50-515-SFF IS A 2-WAY HIGH POWER SWITCH THAT OPERATES OVER THE 5.0 TO 8.0 GHz FREQUENCY RANGE. THIS SWITCH HAS A MAXIMUM INSERTION LOSS OF 2 dB, A MAXIMUM VSWR OF 1.5:1, AND A MINIMUM ISOLATION OF 50 dB. THIS UNIT HAS AN INPUT POWER OF +38 dBm AVERAGE OR +50 dBm PEAK.

## SPECIFICATIONS

- FREQUENCY: ----- 5.0 TO 8.0 GHz
- INSERTION LOSS: ----- 2 dB MAXIMUM
- ISOLATION: ----- 50 dB MINIMUM
- INPUT POWER: ----- +38 dBm AVERAGE  
+50 dBm PEAK
- VSWR: ----- 1.5:1 MAX, 1.3:1 GOAL
- SWITCHING SPEED: ----- 200 ns MAXIMUM
- SUPPLY: ----- +5 V @ 100 mA  
-15 V @ 60 mA
- IM3: ----- -55 dBc MINIMUM (+33 dBm/2 SIGNAL INPUT)
- FINISH: ----- BLUE EPOXY POLIMIDE COATING IAW  
MIL-C-22750, TYPE I OVER EPOXY POLIMIDE  
PRIMER IAW MIL-P-23377, TYPE I, CLASS 1 OR 3.  
MOUNTING SURFACE FREE OF PAINT

### LOGIC CONTROL TTL

TTL	J0-J1	J0-J2
HIGH	INSERTION LOSS	ISOLATION
LOW	ISOLATION	INSERTION LOSS

## ENVIRONMENTAL RATINGS

- TEMPERATURE: ----- -54 °C TO +95 °C (OPERATING)  
-65 °C TO +125 °C (STORAGE)
- HUMIDITY: ----- MIL-STD-202, METHOD 103B COND. B MAINTAIN  
RH 95±4% @ 63 °C (ALLOWED RF 85% WHEN  
TEMPERATURE-DOWN TRANSITION TIME.)  
THE RATE OF TEMPERATURE CHANGE: ABOVE  
8 °C/HOURS
- SHOCK: ----- MIL-STD-202, METHOD 213, COND J  
20G (DURING OPERATION) & 125g, 6 ms SAW  
TOOTH TYPE, 3-AXIS (NO OPERATION)
- VIBRATION: ----- MIL-STD-202, METHOD 214, COND A  
12G 30 MIN X, Y, Z-AXIS (DURING OPERATION) &  
20G 30 MIN X, Y, Z-AXIS (DURING OPERATION)
- ALTITUDE: ----- MIL-STD-202, METHOD 105C, COND B  
200Km (8.47e-7 hPa or 6.353e-7 torr/DURING  
OPERATION)
- 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

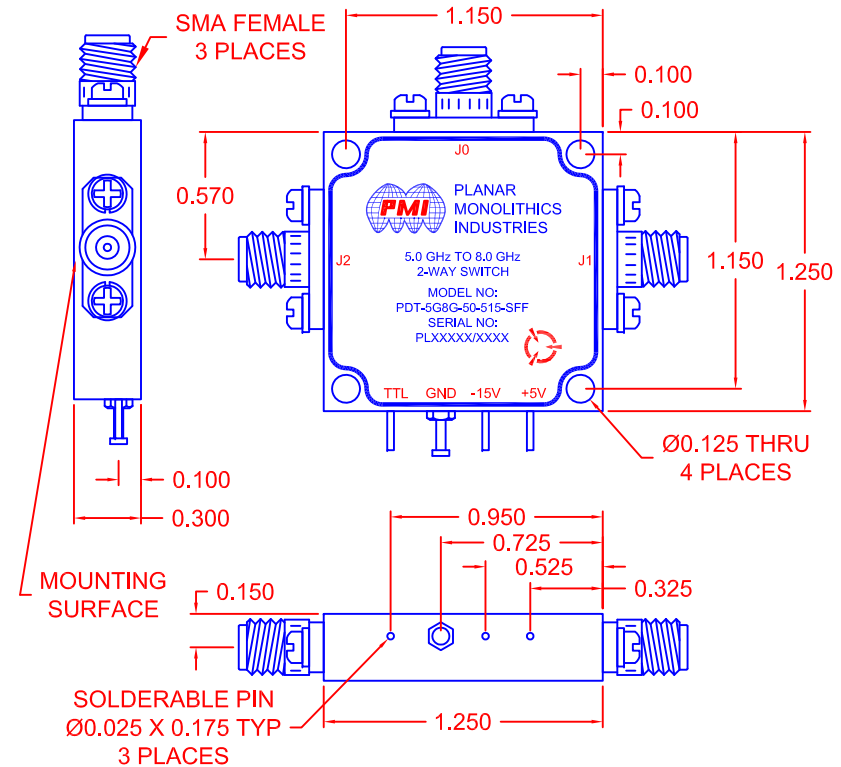
ALL DIMENSIONS  
ARE IN INCHES  
TOLERANCES:  
X,XX ±0.020  
X,XXX ±0.010

**PMI CONFIDENTIAL AND PROPRIETARY**

### REVISIONS

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	—	PRELIMINARY	12/6/17	

## MECHANICAL OUTLINE



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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE				REV.
DRAWN <i>M. Berry</i>		10/18/16	PRODUCT FEATURE PDT-5G8G-50-515-SFF 5.0 GHz to 8.0 GHz 2-Way Switch				-
REDRAWN <i>EW</i>		12/6/17	SIZE A	FSCM NO. 05XQ0	DWG NO. PRELIMINARY		
ISSUED			SCALE N:S	SHEET		1 OF 1	