

DESCRIPTION

PMI MODEL: PDT-8G12G-40-515-SFF IS A 2-WAY HIGH POWER SWITCH THAT OPERATES OVER THE 8.0 TO 12.0 GHz FREQUENCY RANGE. THIS SWITCH HAS A MAXIMUM INSERTION LOSS OF 2 dB, A TYPICAL VSWR OF 1.8:1, AND A MINIMUM ISOLATION OF 40 dB. THIS UNIT HAS AN OPERATING POWER OF +40 dBm CW AVERAGE OR +57 dBm AT A 1 μ s PULSE WIDTH AND A 1% DUTY CYCLE.

SPECIFICATIONS

- FREQUENCY: ----- 8.0 TO 12.0 GHz
- INSERTION LOSS: ----- 2.0 dB MAXIMUM - 8.0 TO 10.0 GHz
2.3 dB MAXIMUM - 10.0 TO 12.0 GHz
- ISOLATION: ----- 40 dB MINIMUM
- OPERATING POWER: ----- +40 dBm CW AVERAGE
+57 dBm @ 1 μ s PULSE WIDTH, 1% DUTY CYCLE
- VSWR: ----- 1.8:1 TYPICAL
- SWITCHING SPEED: ----- 200 ns MAXIMUM
- SUPPLY: ----- +5 V @ 100 mA
-15 V @ 60 mA
- 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 \pm 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

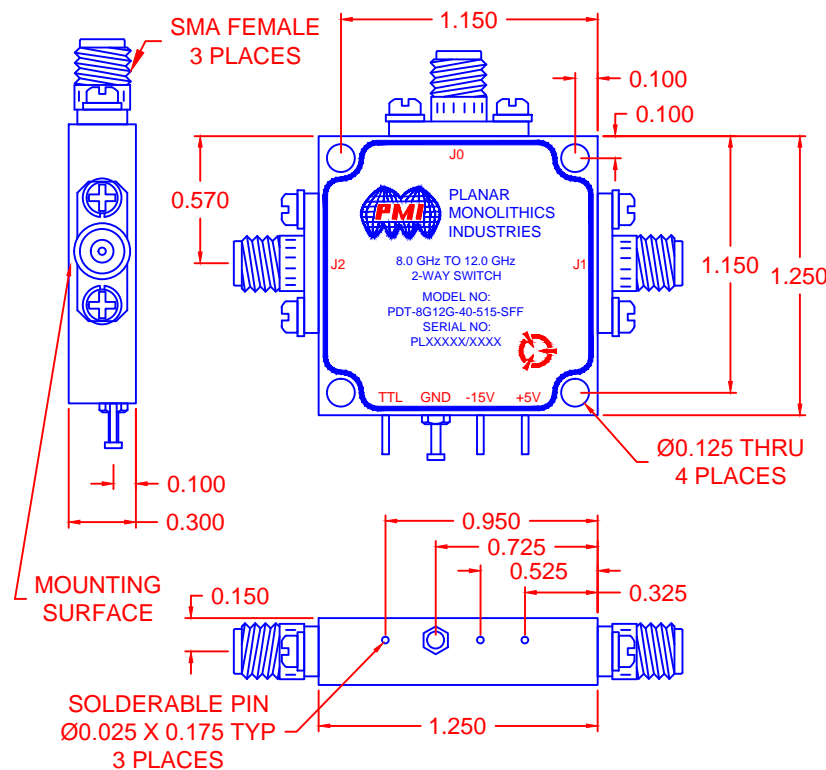
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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

PMI CONFIDENTIAL AND PROPRIETARY

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	ORIGINAL RELEASE	10/18/18	
	A1	ECN# 17-0165	7/11/2017	
	B1	INSERTION LOSS UPDATE	5/2/2018	

MECHANICAL OUTLINE



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ISO 9001 CERTIFIED



APPROVALS		DATE		TITLE	
DRAWN <i>M. Berry</i>		10/18/18		PRODUCT FEATURE PDT-8G12G-40-515-SFF 8.0 GHz to 12.0 GHz 2-Way Switch	
CHECKED				SIZE A	FSCM NO. 05XQ0
ISSUED				DWG NO. 27030580	REV. B1
				SCALE N:S	SHEET 1 OF 1