

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 ISLATION OF 50 dB. THIS UNIT HAS AN INPUT POWER OF +38 dBm AVERAGE OR +50 dBm PEAK

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	8/12/24	
	A2	ECN # 25-0049	2/21/2025	
	B1	ECN # 25-0085	3/24/2025	

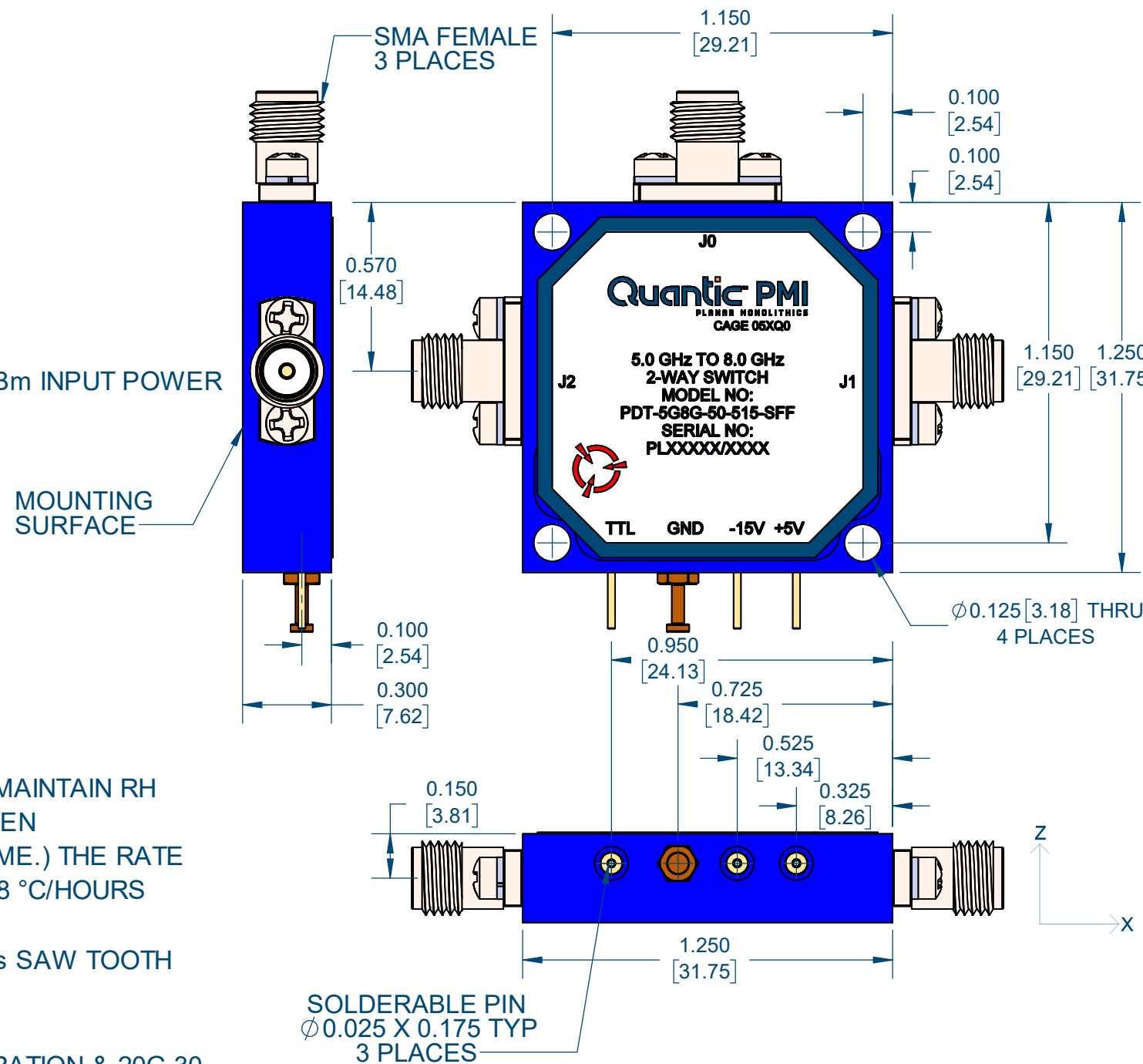
SPECIFICATIONS:

- FREQUENCY RANGE:..... 5.0 TO 8.0 GHz
- INSERTION LOSS:..... 2 dB MAXIMUM
- ISOLATION:..... 50 dB MINIMUM
- INPUT POWER:..... +38 dBm CW, +50 dBm PEAK *
* 1 μs PULSE WIDTH, 1% DUTY CYCLE
- VSWR:..... 1.5:1 MAX, 1.3:1 GOAL
- SWITCHING SPEED:..... 200 ns MAXIMUM
- SUPPLY:..... +5 V @ 100 mA MAXIMUM
-15 V @ 60 mA MAXIMUM
- IM3: (INTERMODULATION DISTORTION) -55 dBc MINIMUM (2 TONES @ +16.5 dBm INPUT POWER)
- FINISH:..... BLUE PAINTED
(MOUNTING SURFACE TO BE 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 200 Km (8.47E-7 hPa OR 6.353E-7 torr/DURING OPERATION)
- TEMPERATURE CYCLE:..... MIL-STD-202, METHOD 107D COND. A



PMI CONFIDENTIAL AND PROPRIETARY

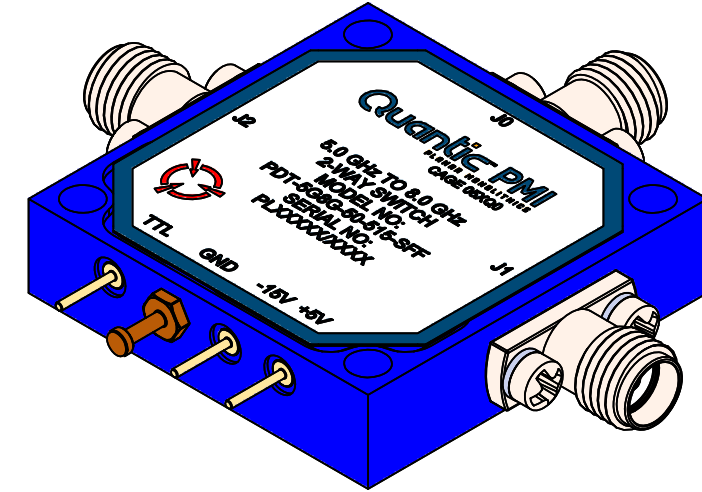
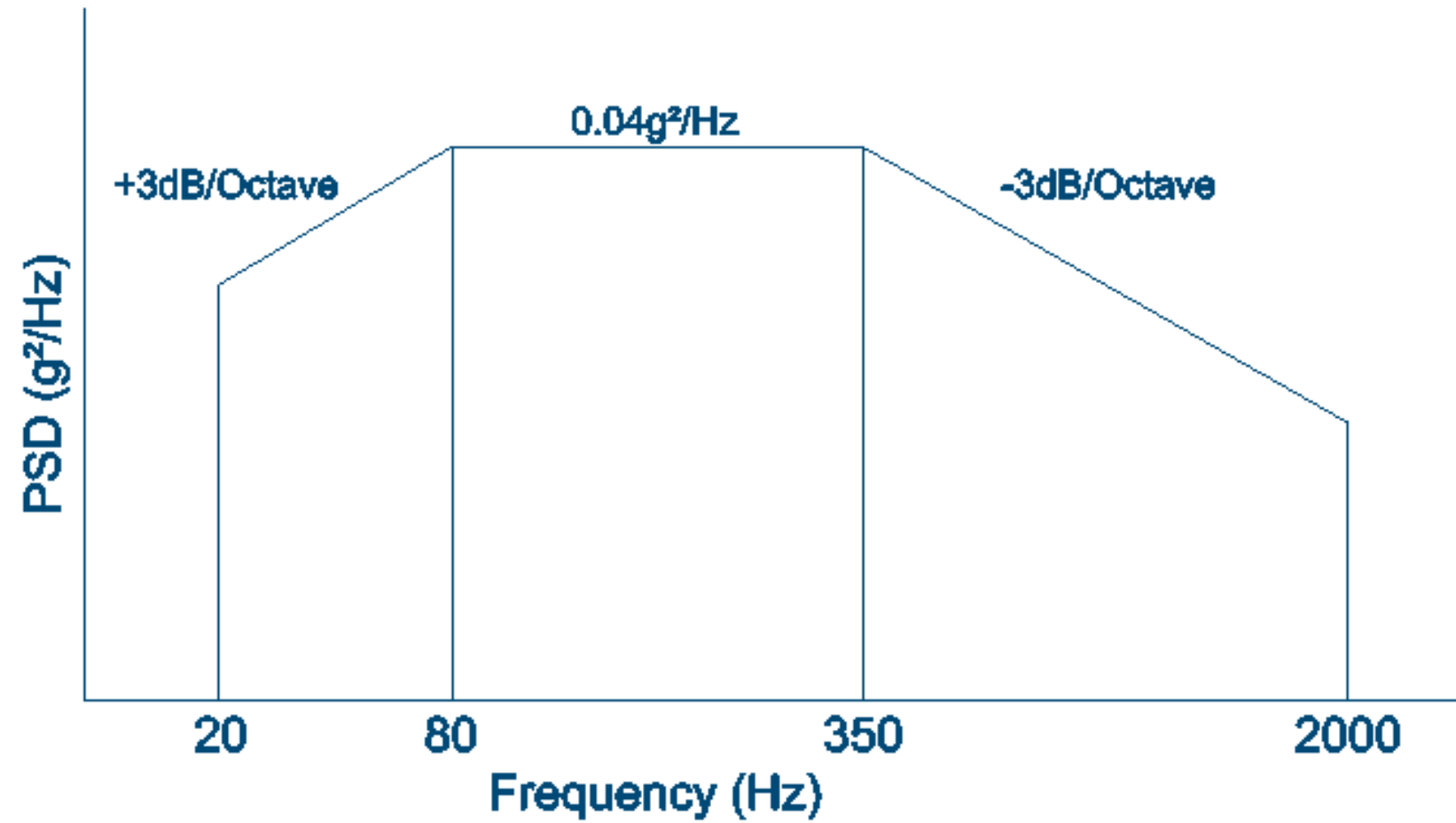
NOTE: SPECIFICATIONS WILL VARY OVER TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± .XX ± 0.02 ± XXX ± 0.01		APPROVALS DATE DRAWN D. Hoschar 8/9/24 REDRAWN ISSUED		TITLE Outline PDT-5G8G-50-515-SFF		SIZE FSCM NO. DWG NO. REV. B 05XQ0 27049040 B1	
SCALE 2:1				SHEET 1 OF 2			

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ISO 9001 CERTIFIED

VIBRATION TESTING PROFILE:

1. VIBRATION DIRECTION IS Z-AXIS
2. VIBRATION FREQUENCY IS RANDOM VIBRATION 20-2000 Hz AND EXCLUDES RESONANCE FREQUENCY OF A TEST ZIG
3. VIBRATION MAGNITUDE IS 6grms, $0.04g^2/Hz \pm 3$ dB OCTAVE FOR 10 MINUTES



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TITLE		Outline	
		PDT-5G8G-50-515-SFF	
SIZE	FSCM NO.	DWG NO.	REV.
B	05XQ0	27049040	B1
SCALE 2:1			SHEET 2 OF 2