

DESCRIPTION

PMI MODEL: P3T-89-45-R-SFF IS A 8.0 TO 9.0 GHz, SP3T REFLECTIVE SWITCH CAPABLE OF SWITCHING WITHIN 100 ns MAXIMUM. THIS UNIT HAS A MAXIMUM INSERTION LOSS OF 2.7 dB AND ISOLATION OF 45 dB MINIMUM WITH A VSWR OF 1.8:1.

SPECIFICATIONS

- FREQUENCY: ----- 8.0 TO 9.0 GHz
- INSERTION LOSS: ----- 2.5 dB TYPICAL
2.7 dB MAXIMUM
- ISOLATION: ----- 45 dB MINIMUM
- VSWR: ----- 1.8:1 MAXIMUM
- LOGIC CONTROL: ----- SEE LOGIC TABLE BELOW
- SWITCHING SPEED: ----- 100 ns MAXIMUM
- POWER HANDLING: ----- 10 W CW MINIMUM
57 dBm PEAK @ 1 μs PULSE WIDTH, 1% DUTY CYCLE
- SUPPLY: ----- +5 V @ 85 mA
-15 V @ 75 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
- PACKAGE: ----- HERMETIC

LOGIC CONTROL TTL

L1	L2	L3	COMM-J1	COMM-J2	COMM-J3
TTL LO	TTL HI	TTL HI	INSERTION LOSS	ISOLATION	ISOLATION
TTL HI	TTL LO	TTL HI	ISOLATION	INSERTION LOSS	ISOLATION
TTL HI	TTL HI	TTL LO	ISOLATION	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

ALL DIMENSIONS
ARE IN INCHES (mm)
TOLERANCES:
X.XX ±0.020
X.XXX ±0.010

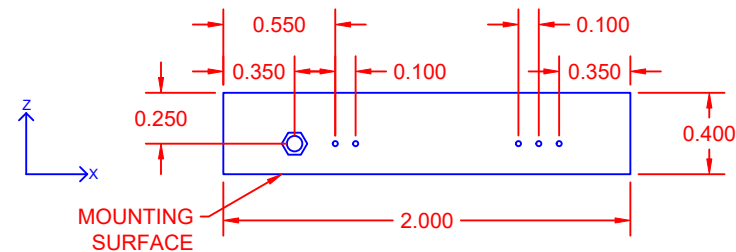
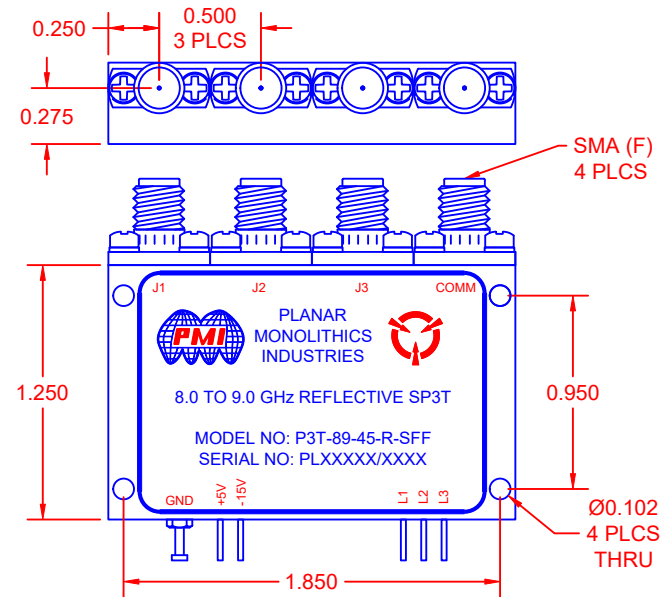
PMI CONFIDENTIAL AND PROPRIETARY

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	1/4/2021	
	A2	ECN # 25-0049	2/24/2025	

MECHANICAL OUTLINE



PLANAR MONOLITHICS INDUSTRIES, INC.

7311-F GROVE ROAD

FREDERICK, MARYLAND 21704 USA

TEL: (301)-662-5019, FAX: (301)-662-1731

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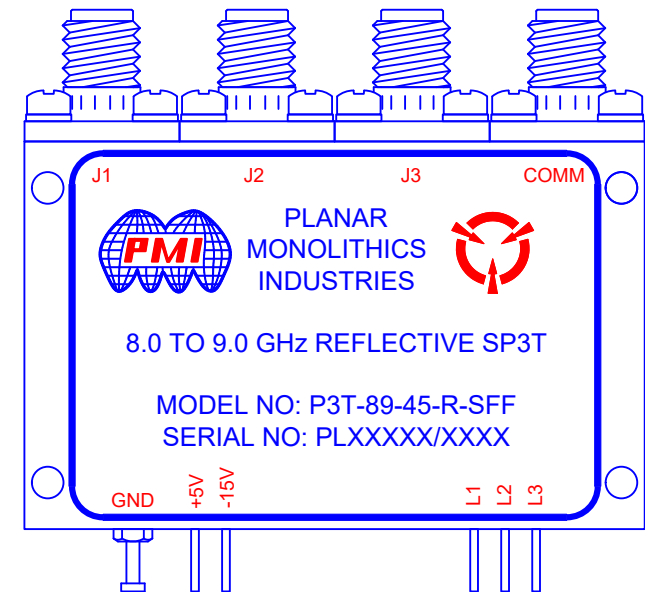
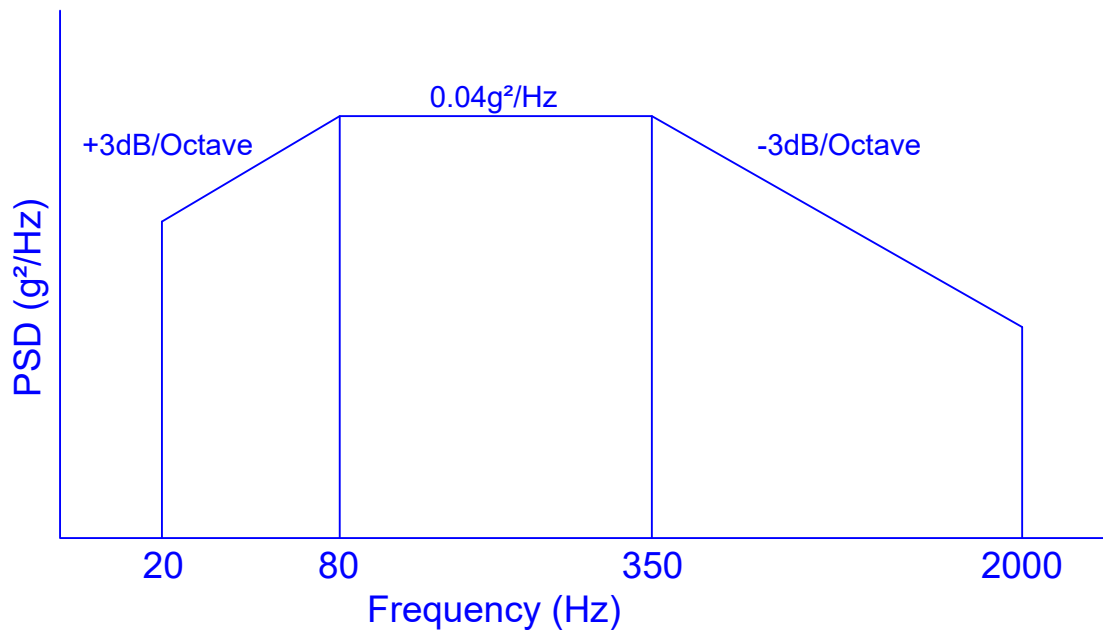
ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN ALC		1/4/21	PRODUCT FEATURE P3T-89-45-R-SFF 8.0 to 9.0 GHz, Single Pole, Three Throw Reflective Switch		
CHECKED			SIZE A	FSCM NO. 05XQ0	DWG NO. 27038961
ISSUED			SCALE N:S		SHEET 1 OF 2
					REV. A2

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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