

DESCRIPTION

PMI MODEL NUMBER PS-500M2G-10B-SFF-MIL IS A 0.5 TO 2GHz DIGITALLY CONTROLLED ANALOG PHASE SHIFTER WITH CAPABILITY FOR PHASE SHIFTING FROM 0° TO 360°. THE UNIT CONSISTS OF AN ANALOG PHASE SHIFTER AND A DIGITAL-TO-ANALOG CONVERTER. TEN LOGIC INPUT LINES ALLOW 1024 DISCRETE VALUES OF PHASE.

SPECIFICATIONS

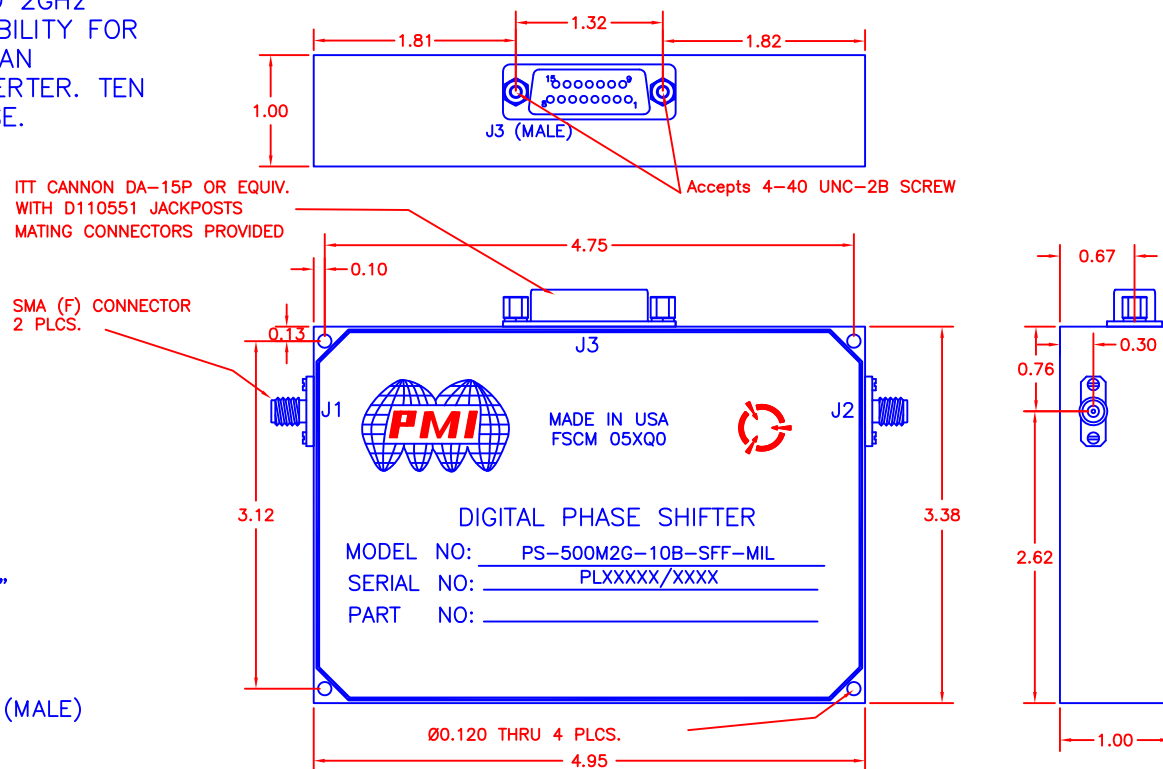
- FREQUENCY RANGE: 0.5 TO 2 GHz
- CONTROL 10 BIT TTL
- INSERTION LOSS 13dB MAX
- PHASE SHIFT 360° TYP
- AMPLITUDE ERROR ±1.0 dB MAX.
- PHASE SHIFT ERROR ±5° MAX.
- SWITCHING SPEED 500 nsec MAX.
- POWER SUPPLY
 - +V: +15V @ 250 mA TYP.
 - V: -15V @ 20 mA TYP.
- SIZE: 4.95" X 3.38" X 1.00"
- WEIGHT: 14 OZ.
- CONNECTORS(RF): SMA FEMALE
- CONNECTOR (CONTROL): 15 PIN SUBMINIATURE D (MALE)
- TEMPERATURE: 0°C TO +50° C
- 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.

ENVIRONMENTAL RATINGS

- **TEMPERATURE:** -20°C TO +85°C (OPERATING)
-40°C TO +85°C (STORAGE)
- **HUMIDITY:** MIL-HDBK-5400 4.6.2.4 NOTE: Operating Relative Humidity: 90% max. with non-condensation. **Condensation control is implemented by the system.
- **SHOCK:** MIL-HDBK-5400 4.6.2.6
Only, Sawtooth wave 20G, 11ms (MIL-STD-810 method 516.5 procedure I)
Altitude : MIL-HDBK-5400 CLASS1 Note: Upper limit of Altitude shall be 10,500ft.
- **VIBRATION:** MIL-HDBK-5400 4.6.2.5 Only, JET AIRCRAFT
Functional test: W1=0.04G²/Hz, W2=0.03G²/Hz,
Overall=6.86Grms: 0.5Hr x 2times x 3directions
Endurance test: W1=0.04G²/Hz, W2=0.166G²/Hz,
Overall=15.07Grms: 3Hr x 3directions."

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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	9/22/22	



ELECTRICAL CONNECTOR PIN ASSIGNMENTS	
PIN LETTER	FUNCTION
1	0.35 DEGREES
2	0.7 DEGREES
3	1.41 DEGREES
4	2.81 DEGREES
5	5.63 DEGREES
6	11.25 DEGREES
7	22.5 DEGREES
8	45 DEGREES
9	90 DEGREES
10	180 DEGREES
11	NC
12	NC
13	+ 15 VDC
14	- 15 VDC
15	GROUND

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

PMI CONFIDENTIAL AND PROPRIETARY

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APPROVALS		DATE	TITLE			
DRAWN		9/22/22	PRODUCT FEATURE			
MODIFIED			PS-500M2G-10B-SFF-MIL			
ISSUED			0.5-2.0GHz, 0°-360° PHASE SHIFTER			
			SIZE	FSCM NO.	DWG NO.	REV.
			A	05XQ0	PRELIMINARY	-
			SCALE	N:S	SHEET	1 OF 1