

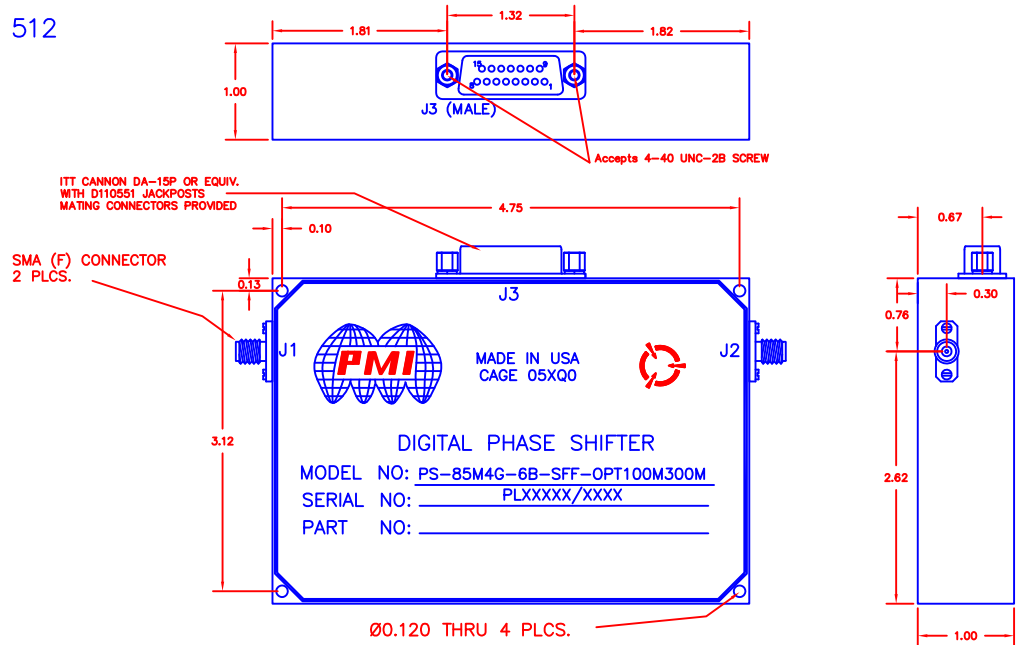
**DESCRIPTION**

PMI MODEL NUMBER PS-85M4G-6B-SFF-OPT100M300M IS A 100 TO 300 MHz 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. NINE LOGIC INPUT LINES ALLOW 512 DISCRETE VALUES OF PHASE.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	—	PRELIMINARY	4/4/18	JD

**SPECIFICATIONS**

- FREQUENCY RANGE: ..... 100 TO 300 MHz
- CONTROL ..... 6 BIT TTL
- INSERTION LOSS ..... 13dB MAX
- PHASE SHIFT ..... 360° TYP
- AMPLITUDE ERROR ..... ±1.0 dB TYP.
- PHASE SHIFT ERROR ..... ±10° TYP.
- SWITCHING SPEED ..... 500 nsec MAX.
- POWER SUPPLY
  - +V: ..... +15V @ 250 mA
  - V: ..... -15V @ 20 mA
- SIZE: ..... 4.95" X 3.38" X 1.00"
- WEIGHT: ..... TBD
- CONNECTORS (RF) ..... SMA FEMALE
- CONNECTOR (CONTROL) ..... 15 PIN SUBMINIATURE D (MALE)
- 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.



ELECTRICAL CONNECTOR PIN ASSIGNMENTS	
PIN LETTER	FUNCTION
1	LOGIC INPUTS (LSB)
2	LOGIC INPUTS
3	LOGIC INPUTS
4	LOGIC INPUTS
5	LOGIC INPUTS
6	LOGIC INPUTS (MSB)
7	NC
8	NC
9	NC
10	NC
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

**ENVIRONMENTAL RATINGS**

- TEMPERATURE: ..... -55°C TO +85°C (OPERATING)  
..... -65°C TO +125°C (STORAGE)
- HUMIDITY: ..... MIL-STD-202F, METHOD 103B COND. B
- SHOCK: ..... MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: ..... MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: ..... MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE: ..... MIL-STD-202F, METHOD 107D COND. A

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

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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE			
DRAWN <i>EMF</i>		12/9/15	PRODUCT FEATURE			
MODIFIED <i>EW</i>		4/4/18	PS-85M4G-6B-SFF-OPT100M300M			
ISSUED			SIZE	FSCM NO.	DWG NO.	REV.
			A	05XQ0	PRELIMINARY	—
			SCALE	N:S		SHEET 1 OF 1