

## DESCRIPTION

PMI MODEL: PS-24R3G24R4-360-10B IS A 24.3 TO 24.4 GHz 10-BIT DIGITALLY CONTROLLED PHASE SHIFTER. THIS MODEL FEATURES PHASE ACCURACY OF TYPICALLY  $\pm 1^\circ$  AT 25°C AND PHASE FLATNESS OF  $\pm 5^\circ$  MAX, ALL IN A SLIMLINE PACKAGE MEASURING ONLY 2.1" X 2.0" X 0.5".

## SPECIFICATIONS

- FREQUENCY RANGE: ----- 24.3 to 24.4 Ghz
- INSERTION LOSS: ----- 14 dB MAX
- VSWR: ----- 2.0:1 MAX
- PHASE ACCURACY: -----  $\pm 1^\circ$  TYP @ 25°C
- PHASE FLATNESS: -----  $\pm 5^\circ$  MAX
- SWITCHING SPEED: ----- 500 ns MAX
- OPERATING POWER: ----- +10 dBm CW
- SURVIVAL POWER: ----- +25 dBm CW MAX
- CONTROL: ----- 10 BIT TTL
- I/O INFORMATION: ----- BI-DIRECTIONAL UNIT (TESTED J1 IN, J2 OUT)
- RF CONNECTOR: ----- SMA FEMALE
- BIT CONNECTOR: ----- 15 PIN D-SUB
- POWER SUPPLY: ----- +12 to +15V @ 100 mA MAX
- SIZE: ----- (L) 2.0" X (W) 2.1" X (H) 0.5"
- FINISH: ----- PAINTED BLUE

### J3 PIN FUNCTION

| PIN | FUNCTION     | PIN | FUNCTION    |
|-----|--------------|-----|-------------|
| 1   | N/C          | 9   | GROUND      |
| 2   | +12 to +15   | 10  | 0.7°        |
| 3   | N/C          | 11  | 22.5°       |
| 4   | 1.4°         | 12  | 2.8°        |
| 5   | 5.6°         | 13  | 11.3°       |
| 6   | 45.0°        | 14  | 0.35° (LSB) |
| 7   | 180.0° (MSB) | 15  | N/C         |
| 8   | 90.0°        |     |             |

## ENVIRONMENTAL RATINGS

- TEMPERATURE: ----- -40 °C TO +85 °C (OPERATING)  
----- -65 °C TO +125 °C (STORAGE)
- HUMIDITY: ----- MIL-STD-202, METHOD 103B COND. B
- SHOCK: ----- MIL-STD-202, METHOD 213B COND. B
- VIBRATION: ----- MIL-STD-202, METHOD 204D COND. B
- ALTITUDE: ----- MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE: ----- MIL-STD-202, METHOD 107D COND. A

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE

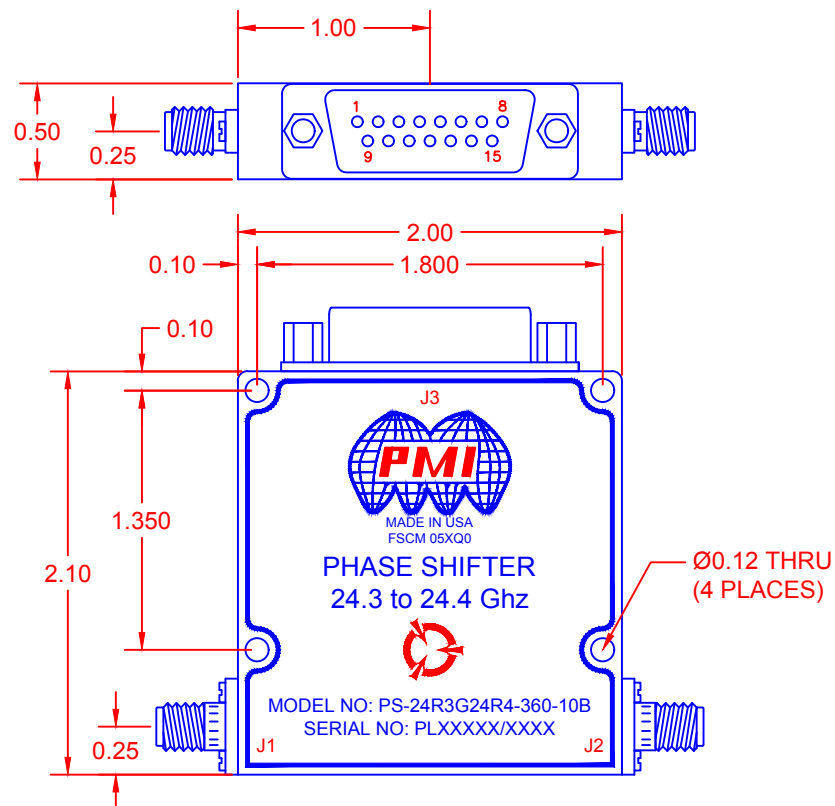
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

**PMI CONFIDENTIAL AND PROPRIETARY**

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

| REVISIONS |      |             |         |          |
|-----------|------|-------------|---------|----------|
| ZONE      | REV. | DESCRIPTION | DATE    | APPROVED |
|           | -    | PRELIMINARY | 2/29/16 | PK       |
|           |      |             |         |          |
|           |      |             |         |          |

## MECHANICAL OUTLINE



## PLANAR MONOLITHICS INDUSTRIES, INC.

7311-F GROVE ROAD

FREDERICK, MARYLAND 21704 USA

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

WEB: [www.pmi-rf.com](http://www.pmi-rf.com), EMAIL: [sales@pmi-rf.com](mailto:sales@pmi-rf.com)

ISO 9001 CERTIFIED



| APPROVALS |     | DATE     |       | TITLE   |             |
|-----------|-----|----------|-------|---------|-------------|
| DRAWN     |     | MSB      |       | 2/29/16 |             |
| CHECKED   |     |          |       |         |             |
| ISSUED    |     |          |       |         |             |
| SIZE      | A   | FSCM NO. | 05XQ0 | DWG NO. | PRELIMINARY |
| SCALE     | N:S |          |       | SHEET   | 1 OF 1      |