

## DESCRIPTION

PMI MODEL NUMBER: PSD-25R5G27G-360 IS A 8 BIT DIGITALLY CONTROLLED PHASE SHIFTER, OPERATING OVER THE 25.5 TO 27 GHz FREQUENCY RANGE. THIS MODEL FEATURES AN LSB OF 1.4° AND 360° OF PHASE CONTROL, ALL IN A SLIM LINE PACKAGE MEASURING ONLY (L) 2.0" X (W) 1.8" (H) 0.4".

## SPECIFICATIONS

- FREQUENCY RANGE: . . . . . 25.5 TO 27 GHz
- INSERTION LOSS: . . . . . 9.0 dB MAX
- VSWR: . . . . . 2.2:1 MAX
- PHASE CONTROL RANGE: . . . . . 360 DEGREES
- PHASE LSB STEP: . . . . . 1.4 DEGREES
- SWITCHING SPEED: . . . . . 200ns MAX
- INPUT POWER: . . . . . +10dBm MAX (OPERATING)  
+30dBm MAX (SURVIVAL)
- DC SUPPLY: . . . . . +12 to +15VDC @ 100mA
- SIZE: . . . . . (L) 2.0" X (W) 1.8" (H) 0.4"
- PWR/CTL CONNECTORS: . . . . . 15 PIN MICRO-D-FEMALE (MATING CONNECTOR SUPPLIED)
- FINISH: . . . . . BLUE PAINT

| PIN NO: | J3 PIN FUNCTIONS |
|---------|------------------|
| 1       | 11.25°           |
| 2       | 5.625°           |
| 3       | 2.813°           |
| 4       | 1.406° (LSB)     |
| 5       | GND              |
| 6       | Not Used         |
| 7       | Not Used         |
| 8       | GND              |
| 9       | Not Used         |
| 10      | Not Used         |
| 11      | +12V to +15V     |
| 12      | 180° (MSB)       |
| 13      | 90°              |
| 14      | 45°              |
| 15      | 22.5°            |

## ENVIRONMENTAL RATINGS:

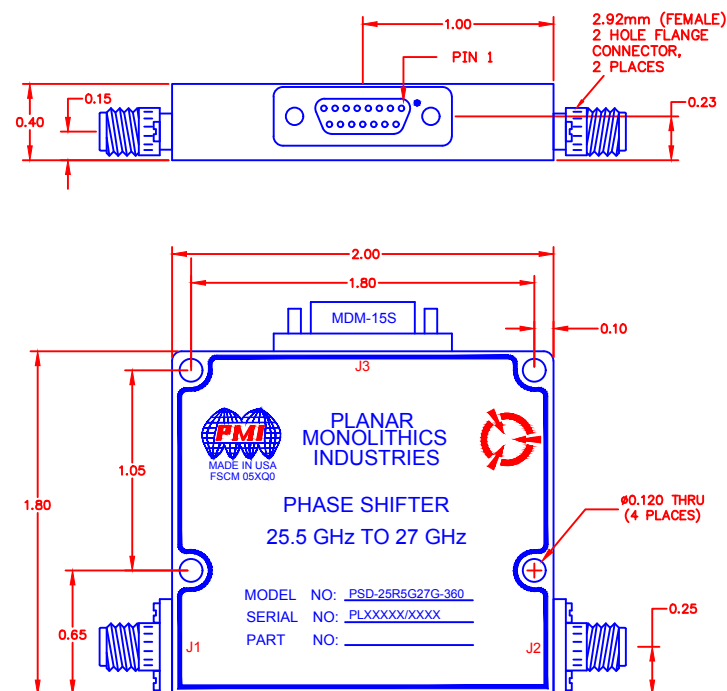
TEMPERATURE: . . . . . -40°C TO +85°C (OPERATING)  
-65°C TO +125°C (STORAGE)  
HUMIDITY: . . . . . MIL-STD-202F, METHOD 103B COND. B  
SHOCK: . . . . . MIL-STD-202F, METHOD 213B COND. B  
VIBRATION: . . . . . MIL-STD-202F, METHOD 204D COND. B  
ALTITUDE: . . . . . MIL-STD-202F, METHOD 105C COND. B 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

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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

| REVISIONS |      |                     |        |          |
|-----------|------|---------------------|--------|----------|
| ZONE      | REV. | DESCRIPTION         | DATE   | APPROVED |
|           | —    | PRELIMINARY RELEASE | 9/9/15 |          |
|           |      |                     |        |          |
|           |      |                     |        |          |

## MECHANICAL OUTLINE



PMI CONFIDENTIAL AND PROPRIETARY

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ISO 9001 CERTIFIED



| APPROVALS |      | DATE     |        | TITLE            |          |
|-----------|------|----------|--------|------------------|----------|
| DRAWN     | PJK  |          | 9/9/15 | PRODUCT FEATURE  |          |
| CHECKED   |      |          |        | PSD-25R5G27G-360 |          |
| ISSUED    |      |          |        |                  |          |
| SIZE      | A    | FSCM NO. | 05XQ0  | DWG NO.          | 270XXXXX |
| SCALE     | N: S |          |        | SHEET            | 1 OF 1   |