

## DESCRIPTION

PMI MODEL NUMBER PS-360-8D5G11G-8-SFF-LVT IS AN 8.5 TO 11 GHz 8 BIT DIGITALLY CONTROLLED PHASE SHIFTER WITH CAPABILITY FOR PHASE SHIFTING FROM 0° TO 360°, WITH RESOLUTION AS FINE AS 1.41°.

## SPECIFICATIONS

- FREQUENCY RANGE: 8.5 TO 11 GHz
- INPUT POWER: (OPERATING): 13dBm Max
- INPUT POWER (SURVIVAL): 30dBm MAX.
- INSERTION LOSS 10dB TYP, 12dB MAX
- PHASE CONTROL RANGE: 360° Min
- PHASE CONTROL BITS POSITIVE BINARY 8 BIT LVTTL
- PHASE LSB STEP 1.41°
- PASSBAND PHASE ACCURACY: ±9° TYP, ±12° MAX
- PHASE FLATNESS ±12° MAX (OVER ANY 1 GHz IN THE PASSBAND)
- PM/AM ±2 dB MAX
- SPURIOUS SIGNALS -130 dBm MAX( NO RF INPUT OR CONTROL UPDATES)
- SWITCHING SPEED 500 ns MAX. (DIGITAL DELAY + RF ENVELOPE RISE/FALL TIME)
- VSWR: (IN/OUT) 2.0:1 MAX.
- CONNECTORS (RF) SMA FEMALE
- CONNECTOR (CONTROL) 14-PIN MALE HERMETIC CONNECTOR IAW MIL-C-28748  
MATING CONNECTOR SHIPPED WITH UNIT (\*18 WEEK LEAD TIME\*)
- POWER SUPPLY +15VDC @ 250mA MAX ±5%.  
-15VDC @ 20mA MAX ±5%.
- SIZE: (L) 1.60" X (W) 1.75" X (H) 0.50"  
\*EXCLUDING MOUNTING HOLES + CONNECTOR
- FINISH: GRAY EPOXY POLIMIDE COATING IAW MIL-C-22750,  
TYPE I OVER EPOXY POLIMIDE PRIMER  
IAW MIL-P-23377, TYPE I, CLASS 1 OR 3.

## CONTROL (J3) SELECT & DC POWER INPUTS

- SIGNAL TYPE: LVTTL POSITIVE BINARY LOGIC PHASE SHIFT CONTROL
  - BIT SELECTED: LVTTL HIGH
  - BIT NOT SELECTED: LVTTL LOW
- \* INPUTS SHALL NOT PRESENT A VOLTAGE OUTSIDE THE RANGE OF 0V TO +3.3V AT ANY TIME

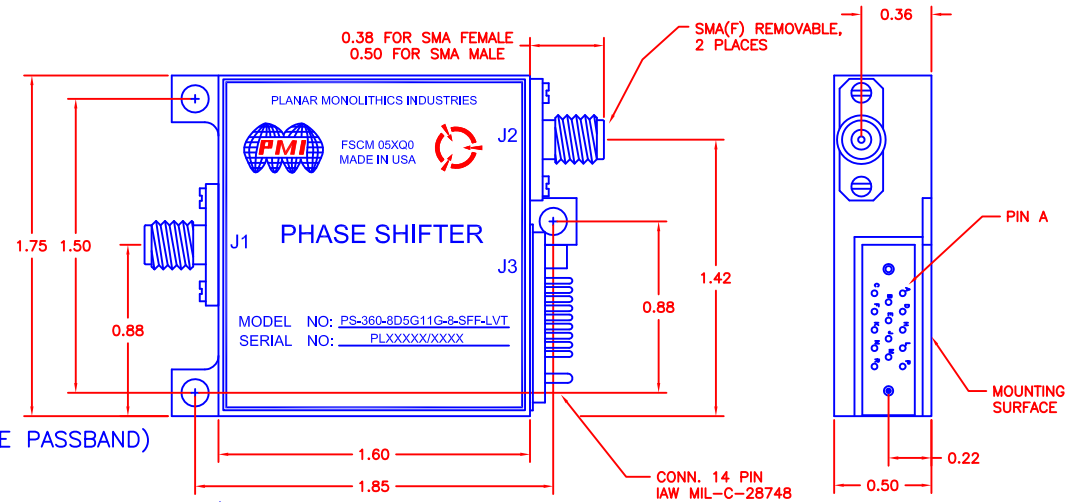
## ENVIRONMENTAL RATINGS

- TEMPERATURE: 0°C TO +85°C (OPERATING)  
-20°C TO +85°C (STORAGE)
- 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

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

| REVISIONS |      |                  |         |          |
|-----------|------|------------------|---------|----------|
| ZONE      | REV. | DESCRIPTION      | DATE    | APPROVED |
|           | A1   | ORIGINAL RELEASE | 12/2/11 |          |
|           | A2   | ECN # 14-0096    | 7/09/14 |          |



| PIN NO: | J3 PIN FUNCTIONS |
|---------|------------------|
| A       | GND              |
| B       | N/C              |
| C       | -15VDC           |
| D       | 1.41° (LSB)      |
| E       | 2.82°            |
| F       | 5.68°            |
| H       | 22.5°            |
| J       | 11.3°            |
| K       | 90.0°            |
| L       | 180° (MSB)       |
| M       | +15VDC           |
| N       | 45.0°            |
| P       | GND              |
| R       | N/C              |

PMI CONFIDENTIAL AND PROPRIETARY

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| APPROVALS |     | DATE    | TITLE                        |          |              |
|-----------|-----|---------|------------------------------|----------|--------------|
|           |     |         | PRODUCT FEATURE              |          |              |
|           |     |         | PS-360-8D5G11G-8-SFF-LVT     |          |              |
|           |     |         | 8.5 to 11 GHz, PHASE SHIFTER |          |              |
| DRAWN     | NJA | 12/2/11 | SIZE                         | FSCM NO. | DWG NO.      |
| MODIFIED  |     |         | A                            | 05XQ0    | 27015701     |
| ISSUED    |     |         | SCALE                        | N:S      | SHEET 1 OF 1 |
|           |     |         |                              |          | A2           |