

## 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 LV TTL
- 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 IAW MIL-C-28748
- 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: ..... PAINTED GRAY

## CONTROL (J3) SELECT & DC POWER INPUTS

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

## ENVIRONMENTAL RATINGS

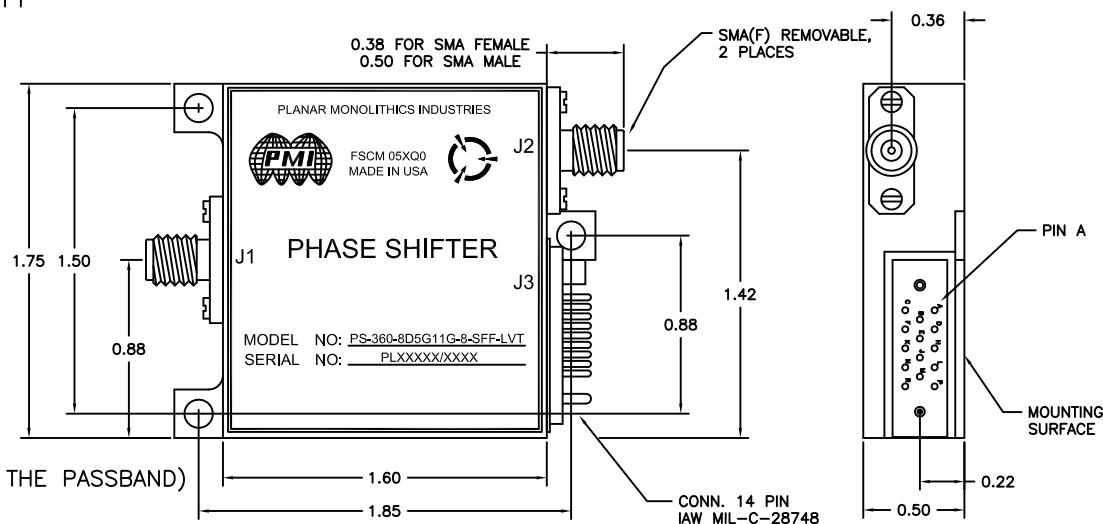
- TEMPERATURE: ..... 0°C TO +85°C (OPERATING)  
..... -20°C TO +85°C (STORAGE)
- SHOCK: ..... MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: ..... MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: ..... MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE: ..... MIL-STD-202F, METHOD 107D COND. A

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

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| REVISIONS |      |                  |         |          |
|-----------|------|------------------|---------|----------|
| ZONE      | REV. | DESCRIPTION      | DATE    | APPROVED |
|           | A    | ORIGINAL RELEASE | 12/2/11 |          |



| 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              |

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ISO 9001:2000 CERTIFIED



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