

## DESCRIPTION

PMI MODEL NUMBER PS-204-1G2G-8B-SFF-LM IS A 1.0 TO 2.0 GHz 8 BIT DIGITALLY CONTROLLED PHASE SHIFTER WITH CAPABILITY FOR PHASE SHIFTING FROM 0° TO 204°, WITH RESOLUTION AS FINE AS 0.8°.

## SPECIFICATIONS

- FREQUENCY RANGE: 1.0 TO 2.0 GHz
- RF INPUT POWER: 10 dBm
- PHASE CONTROL RANGE: 204° TYP
- LSB: 0.8°
- SWITCHING SPEED: 1  $\mu$ s, 500 ns TYP
- INSERTION LOSS: 6.0 dB TYP
- AMPLITUDE ERROR:  $\pm 1.0$  dB MAX
- PHASE FLATNESS:  $\pm 10.0^\circ$  MAX
- ABSOLUTE MAXIMUM INPUT POWER W/O DAMAGE: 20 WATTS @ J1(INPUT)
- CONNECTORS (RF): SMA FEMALE
- CONNECTORS (CONTROL): 15 PIN SUBMINIATURE D (MALE) MATING CONNECTOR SUPPLIED
- RF IMPEDANCE: 50  $\Omega$
- VSWR: 2.5:1 TYP
- LOGIC BITS: 8 (SEE PIN FUNCTION TABLE)
- LOGIC: TTL COMPATIBLE
- POWER SUPPLY: +12 V TO +15 V @ 50 mA TYP
- SIZE: 2.00" X 2.10" X 0.50"
- 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.

## FEATURES

- SINGLE POSITIVE VOLTAGE SUPPLY OPERATION
- LOW DC CURRENT CONSUMPTION
- SLIM-LINE DESIGN

## ENVIRONMENTAL RATINGS

- TEMPERATURE: -40 °C TO +85 °C (OPERATING)
- 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

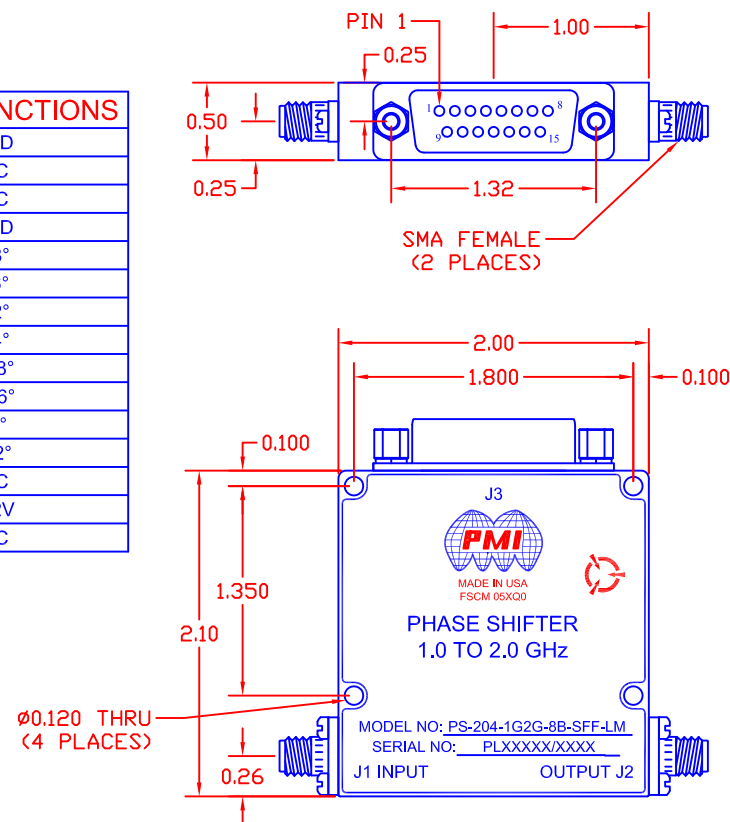
NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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

| REVISIONS |      |             |         |          |
|-----------|------|-------------|---------|----------|
| ZONE      | REV. | DESCRIPTION | DATE    | APPROVED |
|           | -    | PRELIMINARY | 9/10/16 |          |
|           |      |             |         |          |
|           |      |             |         |          |

## MECHANICAL OUTLINE



PMI CONFIDENTIAL AND PROPRIETARY

## 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, EMAIL: sales@pmi-rf.com

ISO 9001 CERTIFIED



| APPROVALS |  | DATE     |  | TITLE                        |  |
|-----------|--|----------|--|------------------------------|--|
| DRAWN     |  | 9/10/16  |  | PRODUCT FEATURE              |  |
| CHECKED   |  |          |  | PS-204-1G2G-8B-SFF-LM        |  |
| ISSUED    |  |          |  | 1.0 TO 2.0 GHz PHASE SHIFTER |  |
| SIZE      |  | FSCM NO. |  | DWG NO.                      |  |
| A         |  | 05XQ0    |  | PRELIMINARY                  |  |
| SCALE     |  | N:S      |  | SHEET                        |  |
|           |  |          |  | 1 OF 1                       |  |