

DESCRIPTION

PMI MODEL: PIQ-6G18G-360-20-A-7228 IS A 6.0 TO 18.0 GHz HIGH PERFORMANCE I/Q VECTOR MODULATOR WITH 2 X 0-10 VOLT MONOTONIC CHANNELS (I AND Q). THIS MODEL OFFERS A FULL 360 DEGREES OF PHASE SHIFT WITH A MINIMUM OF 20 dB OF AMPLITUDE CONTROL.

SPECIFICATIONS

- FREQUENCY RANGE: 6.0 TO 18.0 GHz
- DYNAMIC RANGE: 20 dB & 360° MIN
- RF INPUT POWER: +20 dBm CW, 1.0 WATT MAX
- INSERTION LOSS: 12.0 dB MAX
- VSWR: 2.0:1 MAX (50 OHM SYSTEM)
- VARIATION OF PHASE VS. TEMPERATURE: ± 0.1 deg / °C MAX
- VARIATION OF AMPLITUDE VS. TEMPERATURE: 0.02 dB / °C MAX
- PHASE VS FREQUENCY: $\pm 15.0^\circ$ MAX
- CONTROL VOLTAGE: 2 X 0-10V (I AND Q)
- CONTROL SLOPES: LINEAR
- SWITCHING SPEED: 500 ns MAX
- POWER SUPPLY: $\pm 12V$ TO $\pm 15V$ @ 70 mA MAX
- RF CONNECTORS: SMA FEMALE INPUT AND OUTPUT
- CONTROL CONNECTIONS: SMC (MALE) (I AND Q)
- POWER CONNECTIONS: 0.025" PINS
- SIZE: 3.00" X 3.00" X 0.96"
- 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.

ENVIRONMENTAL RATINGS

- TEMPERATURE: -54 °C TO +100 °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 107D COND. A

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE

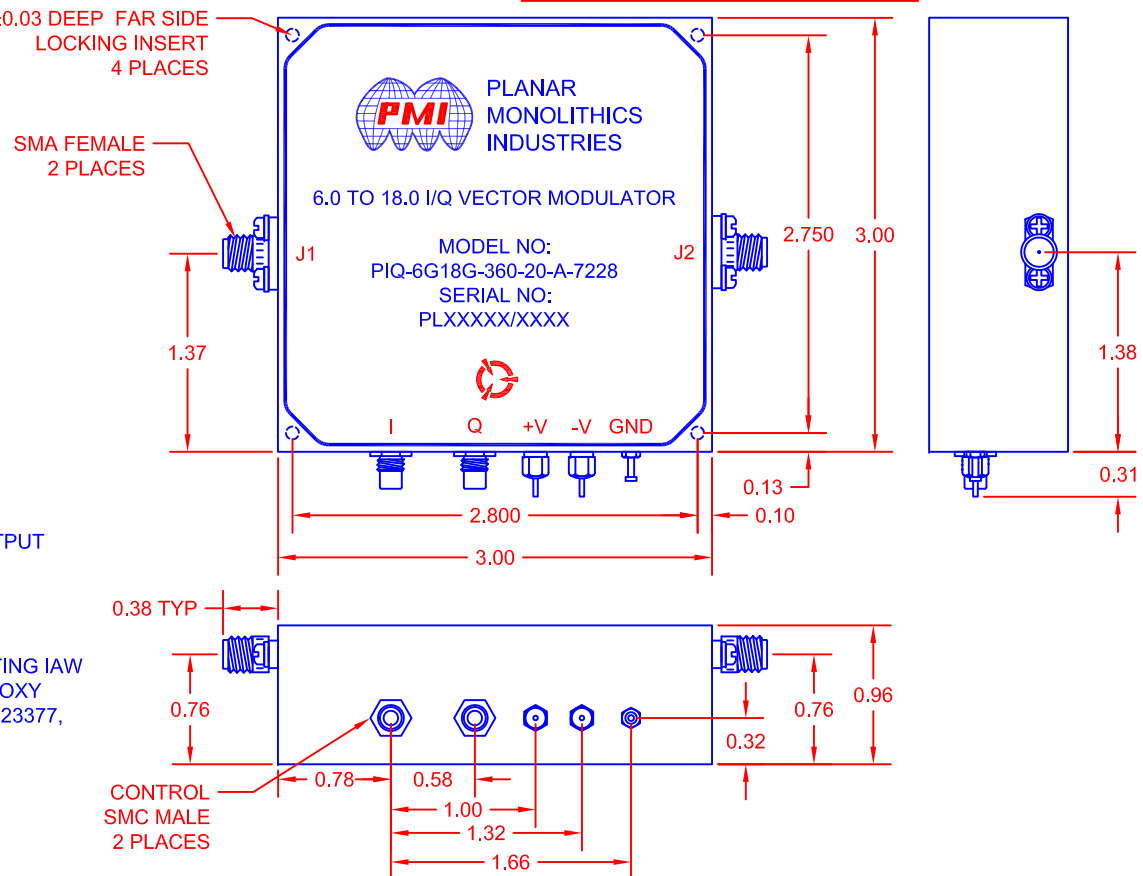
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

PMI CONFIDENTIAL AND PROPRIETARY

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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	ORIGINAL RELEASE	9/14/2016	

MECHANICAL OUTLINE



PLANAR MONOLITHICS INDUSTRIES, INC.

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ISO 9001 CERTIFIED



APPROVALS		DATE		TITLE	
DRAWN		M. Berry		09/14/16	
CHECKED					
ISSUED					
SIZE		FSCM NO.		DWG NO.	
A		05XQ0		27029210	
SCALE		N:S		SHEET	
				1 OF 1	

PRODUCT FEATURE

PIQ-6G18G-360-20-A-7228

6.0 to 18.0 GHz I/Q Vector Modulator