

DESCRIPTION

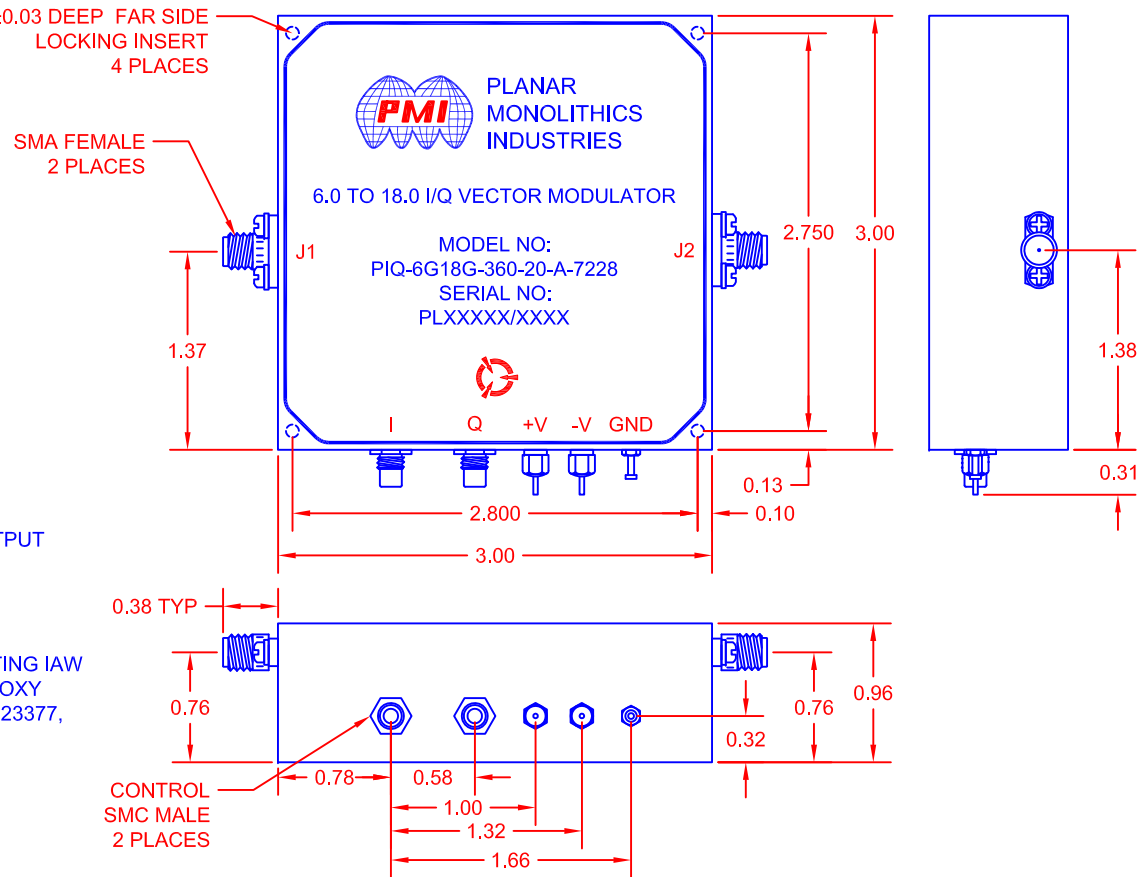
PMI MODEL: PIQ-6G18G-360-20-A-7228 IS A 6.0 TO 18.0 GHz HIGH PERFORMANCE I/Q VECTOR MODULATOR WITH 2 X 0-10 VOLT MONOTONIC CHANNELS (I AND Q). THIS MODEL OFFERS A FULL 360 DEGREES OF PHASE SHIFT WITH A MINIMUM OF 20 dB OF AMPLITUDE CONTROL.

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

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: ----- ±15.0° MAX
- CONTROL VOLTAGE: ----- 2 X 0-10V (I AND Q)
- CONTROL SLOPES: ----- LINEAR
- SWITCHING SPEED: ----- 500 ns MAX
- POWER SUPPLY: ----- ± 12V TO ±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.

MECHANICAL OUTLINE



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

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

PMI CONFIDENTIAL AND PROPRIETARY

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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE			
DRAWN <i>M. Berry</i>		09/14/16	PRODUCT FEATURE PIQ-6G18G-360-20-A-7228 6.0 to 18.0 GHz I/Q Vector Modulator			
CHECKED			SIZE	FSCM NO.	DWG NO.	REV.
ISSUED			A	05XQ0	27029210	1
			SCALE	N:S	SHEET	1 OF 1