

DESCRIPTION

PMI MODEL: PIQ-6G18G-360-20-A-2 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&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
- POWER/LOGIC CONNECTIONS: DC-37P, SUB MINIATURE D MULTI-PIN
- SIZE: 4.25" X 3.50" X 1.00"
- 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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY RELEASE	12/21/15	PK

37-PIN CONNECTOR PIN-OUT

PIN	FUNCTION	PIN	FUNCTION
1	I CONTROL (0-10V)	20	NC
2	I GND	21	NC
3	Q CONTROL (0-10V)	22	NC
4	Q GND	23	NC
5	NC	24	NC
6	NC	25	NC
7	NC	26	NC
8	+12V TO +15V	27	NC
9	GND	28	NC
10	GND	29	NC
11	-12V TO -15V	30	NC
12	NC	31	NC
13	NC	32	NC
14	NC	33	NC
15	NC	34	NC
16	NC	35	NC
17	NC	36	NC
18	NC	37	NC
19	NC		

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

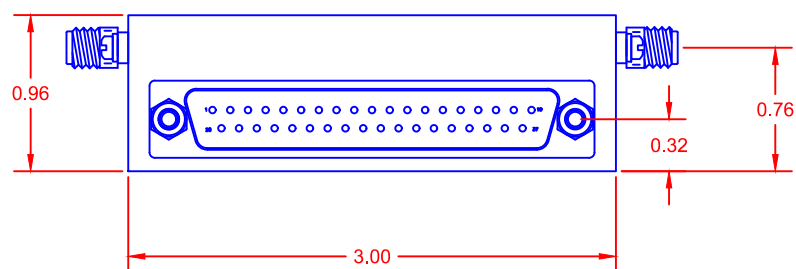
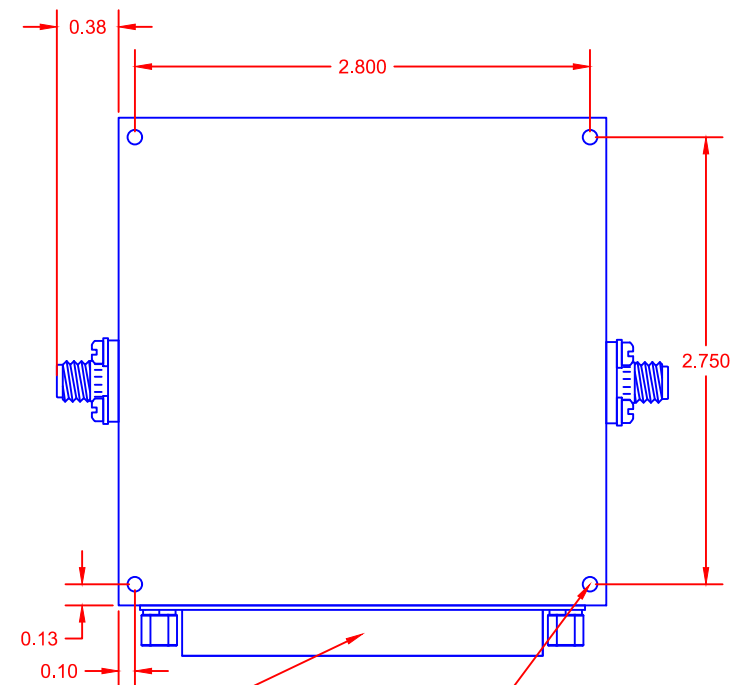
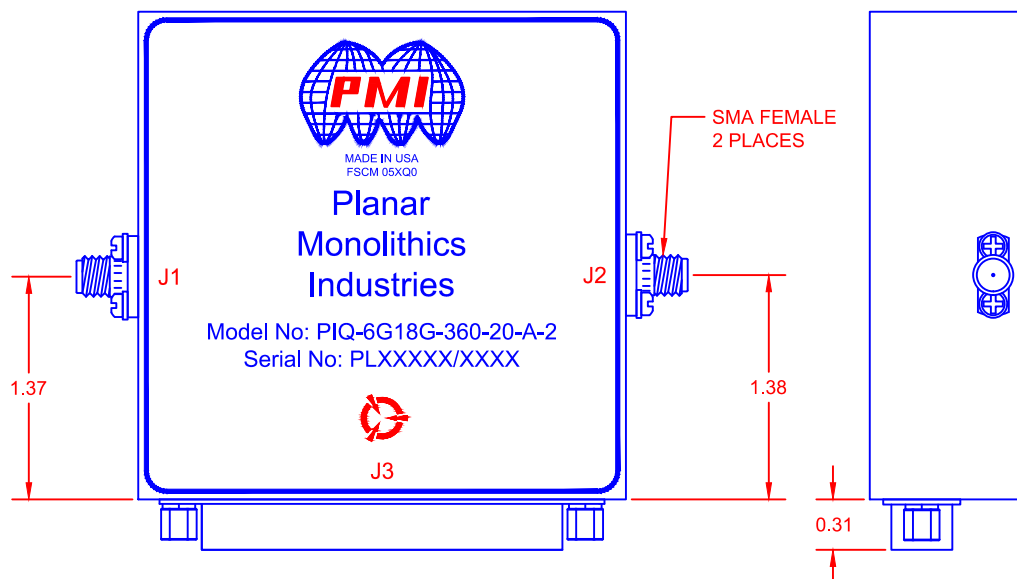
ISO 9001 CERTIFIED



APPROVALS		DATE		TITLE			
DRAWN		12/21/15		PRODUCT FEATURE			
CHECKED				PIQ-6G18G-360-20-A-2			
ISSUED							
SIZE	FSCM NO.	DWG NO.		REV.			
A	05XQ0	PRELIMINARY		-			
SCALE		N:S		SHEET		1 OF 2	

MECHANICAL OUTLINE

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY RELEASE	12/21/15	PK



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

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APPROVALS		DATE	TITLE		
DRAWN	MEB	12/21/15	PRODUCT FEATURE PIQ-6G18G-360-20-A-2		
CHECKED			SIZE	FSCM NO.	DWG NO.
ISSUED			A	05XQ0	PRELIMINARY
			SCALE	N:S	SHEET 2 OF 2