

DESCRIPTION

PMI MODEL PIQ-5G15G-360-60 IS A 5.0 TO 15.0 GHz HIGH PERFORMANCE I/Q VECTOR MODULATOR WITH 2 X 12 BIT MONOTONIC TTL COMPATIBLE CHANNELS (I AND Q). THIS MODEL OFFERS A FULL 360 DEGREES OF PHASE SHIFT WITH A MINIMUM OF 60 dB OF AMPLITUDE CONTROL.

SPECIFICATIONS

- FREQUENCY RANGE: 5.0-15.0 GHz
- DYNAMIC RANGE: 60 dB & 360 DEGREES
- RF INPUT POWER: +15 dBm CW, 1.0 Watt MAX
- INSERTION LOSS: 17.5 dB MAX
- VSWR: 1.8:1 MAX (50 OHM SYSTEM)
- ATTENUATION VS FREQUENCY: ± 2.2 dB TYP.
- PHASE VS FREQUENCY: ± 16.0 DEGREES TYP.
- CONTROL LOGIC: 2X12 BITS (I & Q), TTL COMPATIBLE
- CONTROL SLOPES: LINEAR
- SWITCHING SPEED: 500 nSec MAX
- POWER SUPPLY: $\pm 5V$ @ $\pm 100mA$ MAX
- RF CONNECTORS: SMA FEMALE INPUT AND OUTPUT
- POWER/LOGIC CONNECTIONS: DC-37P, SUB MINIATURE D MULTI-PIN
- SIZE: 3.25" X 3.00" X 1.00"
- FINISH: PAINTED BLUE

ENVIRONMENTAL RATINGS

- TEMPERATURE RANGE: -10°C TO +60°C (OPERATING)
-65°C TO +125°C (STORAGE)
- HUMIDITY: MIL-STD-202G, METHOD 103B COND. B
- SHOCK: MIL-STD-202G, METHOD 213B COND. B
- VIBRATION: MIL-STD-202G, METHOD 204D COND. B
- ALTITUDE: MIL-STD-202G, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202G, 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

REVISIONS			
ZONE	REV.	DESCRIPTION	DATE
	1	PRELIMINARY RELEASE	11-18-14

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

PMI CONFIDENTIAL AND PROPRIETARY

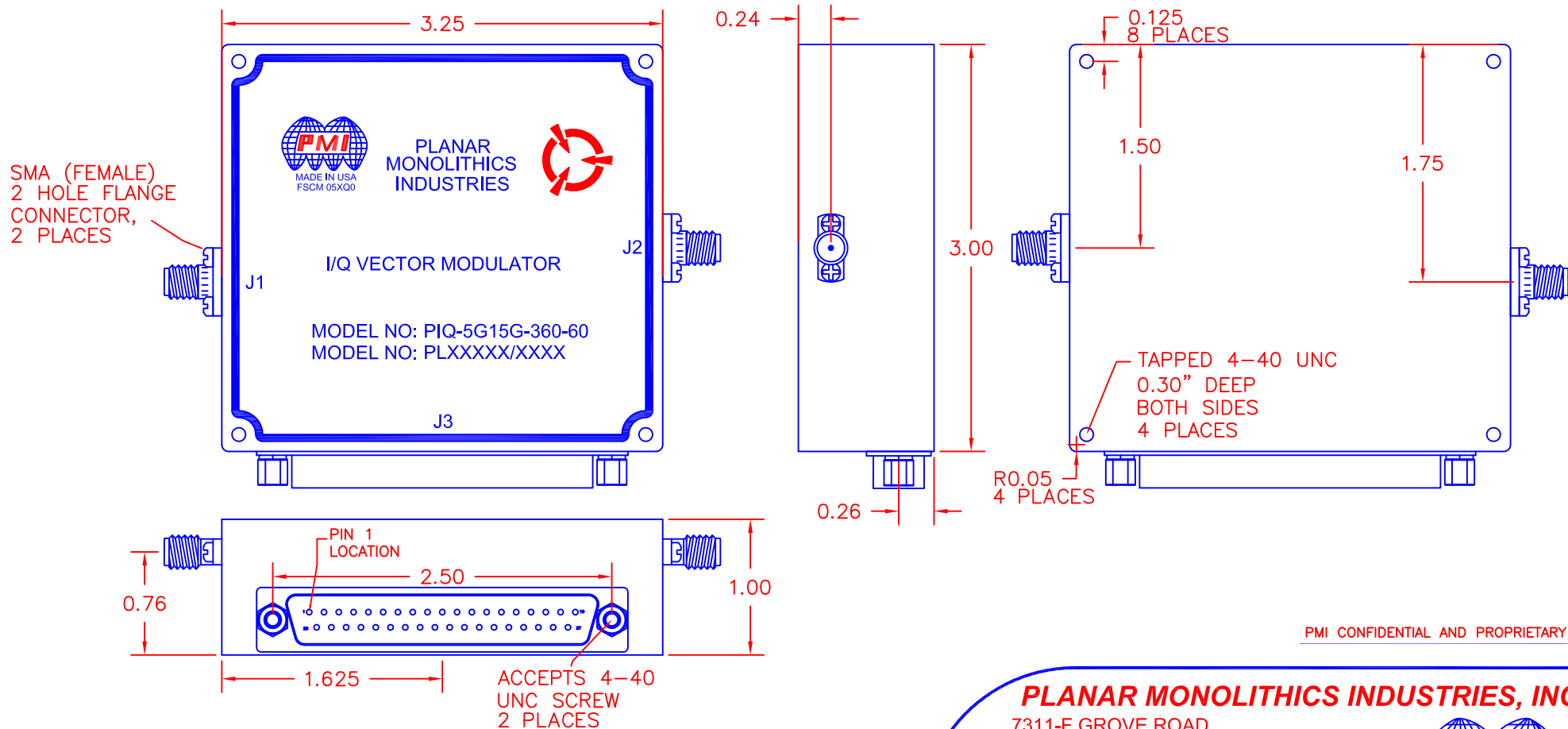
PLANAR MONOLITHICS INDUSTRIES, INC.

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ISO 9001:2008 CERTIFIED



APPROVALS		DATE		TITLE			
DRAWN	PJK		11-18-14	PRODUCT FEATURE PIQ-5G15G-360-60			
MODIFIED				SIZE	FSCM NO.	DWG NO.	REV.
ISSUED				A	05XQ0	270XXXXX	1
SCALE		N:S		SHEET		1 OF 2	

REVISIONS				
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MODIFIED						PIQ-5G15G-360-60	
ISSUED							
SIZE		FSCM NO.		DWG NO.		REV.	
A		05XQ0		270XXXXX		1	
SCALE		N:S				SHEET	
						2 OF 2	

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