

DESCRIPTION

PMI MODEL: PIQ-2G18G-360-16-CD-1 IS A 2.0 TO 18.0 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 16 dB OF AMPLITUDE CONTROL.

SPECIFICATIONS

- FREQUENCY RANGE: 2.0 TO 18.0 GHz
- DYNAMIC RANGE: 16 dB & 360°
- RF INPUT POWER: +10 dBm CW, 1.0 WATT MAX
- INSERTION LOSS: 16.0 dB MAX
- VSWR: 2.2:1 MAX (50 OHM SYSTEM)
- ATTENUATION VS FREQUENCY: ±3.5 dB TYP
- PHASE VS FREQUENCY: ±20.0° TYP
- CONTROL LOGIC: 2X12 BITS (I&Q), TTL COMPATIBLE
- CONTROL SLOPES: LINEAR
- SWITCHING SPEED: 500 ns MAX
- POWER SUPPLY: ± 12V TO ±15V @ ±100mA 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: NICKEL PLATED

ENVIRONMENTAL RATINGS

- TEMPERATURE: -10 °C TO +60 °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
	1	ORIGINAL RELEASE	12/8/15	

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
6	I-11	25	I-12 (LSB)
7	NC	26	NC
8	+12V TO +15V	27	NC
9	GND	28	GND
10	GND	29	NC
11	-12V TO -15V	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
17	Q-7	36	Q-11
18	Q-8	37	Q-10
19	Q-9		

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

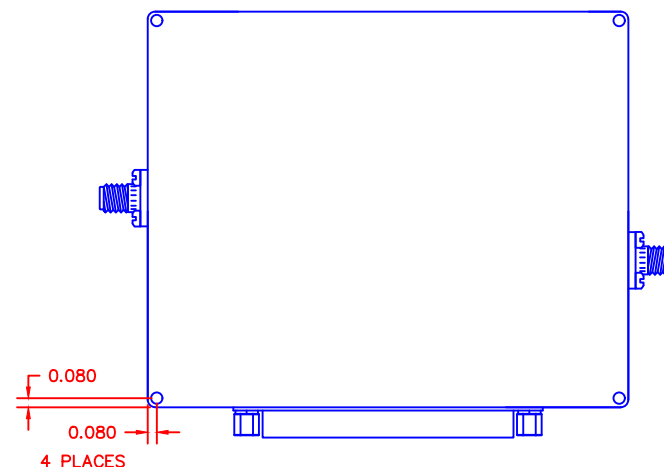
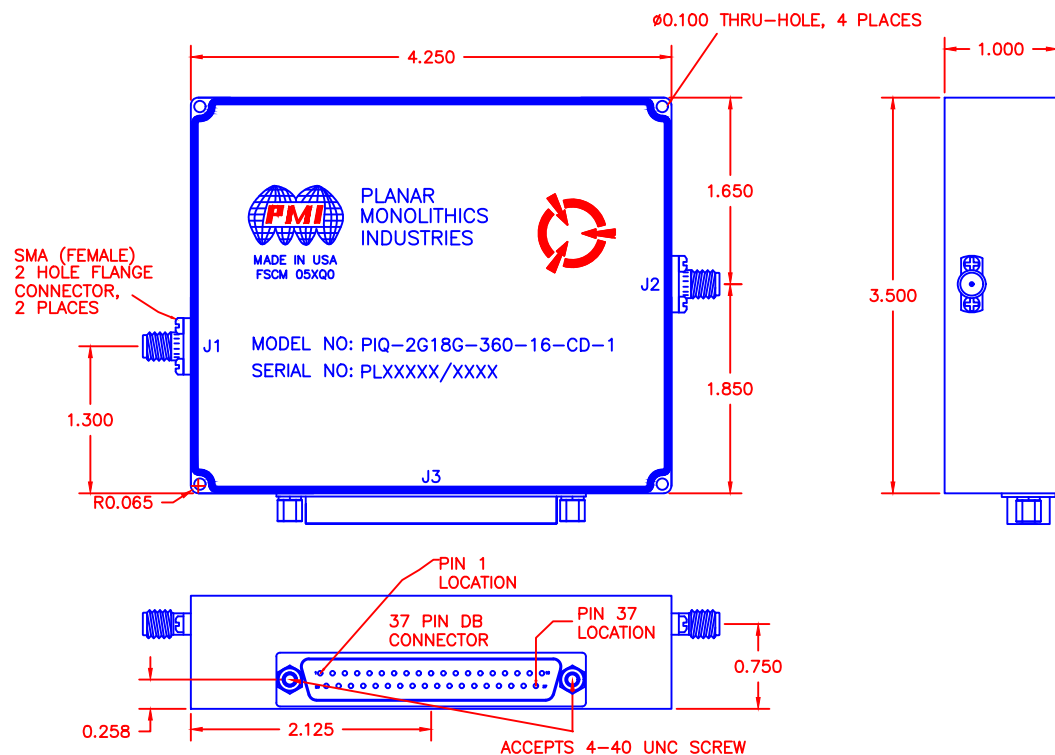
ISO 9001 CERTIFIED



APPROVALS		DATE		TITLE PRODUCT FEATURE PIQ-2G18G-360-16-CD-1			
DRAWN <i>M&B</i>		12/8/15					
CHECKED		SIZE A	FSCM NO. 05XQ0	DWG NO. 27025300	REV. 1		
ISSUED		SCALE N:S		SHEET 1 OF 2			

MECHANICAL OUTLINE

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	ORIGINAL RELEASE	12/8/15	



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

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APPROVALS		DATE		TITLE	
DRAWN	<i>MJB</i>		12/8/15	PRODUCT FEATURE PIQ-2G18G-360-16-CD-1	
CHECKED				SIZE	FSCM NO.
ISSUED				A	05XQ0
				DWG NO.	27025300
				SCALE	N:S
				SHEET	2 OF 2