

PMI MODEL NO.: PS-360-DC-3-OPT6R7G12R8G-15D IS AN 8-BIT DIGITAL CONTROLLED PHASE SHIFTER OPERATING FROM THE 6.7 TO 12.8 GHz FREQUENCY RANGE. THE PHASE SHIFTER HAS A 360° RANGE AND IS HIGH SPEED.

- FREQUENCY RANGE: 6.7 – 12.8 GHz
- INSERTION LOSS: 12.0 dB MAXIMUM, 10 dB TYPICAL
- VSWR: 2.0:1 MAXIMUM
- ACCURACY: $\pm 15^\circ$ MAXIMUM (PEAK TO PEAK)
- PM/AM: ± 2.5 dB MAXIMUM
- TRANSLATION RATE: 0 TO 500 kHz
- CARRIER SUPPRESSION: 18 dB
- SIDE BAND SUPPRESSION: 15 dB
- PHASE SHIFT:
 - RANGE: 360° IN 256 STEPS
 - CONTROL INPUT: 8 BIT TTL
 - SWITCHING SPEED: 50% TTL TO WITHIN 500ns MAX
(10° OF FINAL PHASE VALUE)
 - HARMONICS: -25dBc
- POWER HANDLING CAPABILITY:
 - WITHOUT DEGRADATION: $+10\text{dBm}$
 - SURVIVAL POWER: $+20\text{dBm}$
- POWER SUPPLY: $+5\text{VDC}$ ($\pm 5\%$) @ 115mA
..... -12 TO -15VDC @ 20mA
- CONNECTORS:
 - INPUT/OUTPUT: SMA FEMALE
 - POWER & CONTROL: 15 PIN MICRO-D
- SIZE: (L) 1.60 X (W) 1.75" X (H) 0.50"
..... *EXCLUDING MOUNTING HOLES + CONNECTOR
- FINISH: GRAY EPOXY POLIMIDE COATING IAW MIL-C-22750,
..... TYPE I OVER EPOXY POLIMIDE PRIMER
..... IAW MIL-P-23377, TYPE I, CLASS 1 OR 3.

The image shows a mechanical drawing of the device, likely a PCB or component, with dimensions indicated in red. The dimensions are 1.75, 1.50, and 0.88, which correspond to the size specifications listed in the table: (L) 1.60 X (W) 1.75" X (H) 0.50". The drawing shows a rectangular component with a coiled inductor-like structure on the right side and two SMA connectors at the top and bottom right.

- TEMPERATURE: -55°C TO +85°C (OPERATING)
..... -65°C TO +125°C (STORAGE)
- HUMIDITY: MIL-STD-202G, METHOD 103B COND. B (96 HRS AT 95%)
- SHOCK: MIL-STD-202G, METHOD 213B COND. B (75 G, 6 MSEC)
- VIBRATION: MIL-STD-202G, METHOD 204D COND. B (0.06" DOUBLE
AMPLITUDE OR 15G, WHICHEVER IS LESS)
- ALTITUDE: MIL-STD-202G, METHOD 105C COND. B (50,000 FT.)
- 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	APPROVED
	—	PRELIMINARY	08/24/16	

0.38 FOR SMA FEMALE
0.50 FOR SMA MALE

PLANAR MONOLITHICS INDUSTRIES

FSCM 05XQ0
MADE IN USA

J2 OUT

J1 IN

PHASE SHIFTER

MODEL NO: PS-360-DC-3-OPT67R6G12R8G-15D
SERIAL NO: PLXXXXXX

0.88

1.75

1.50

0.88

1.60

1.85

0.88

1.42

0.36

SMA(F) REMOVABLE,
2 PLACES

0.82

0.11

PIN 1

MOUNTING SURFACE

0.25

0.50

15 PIN MICRO-D,
MALE CONNECTOR

CONNECTOR TABLE			
PIN	FUNCTION	PIN	FUNCTION
1	GROUND	9	90°
2	+5V	10	180° (MSB)
3	-12V TO -15V	11	N/C
4	1.4° (LSB)	12	45°
5	2.8°	13	GROUND
6	5.6°	14	N/C
7	22.5°	15	N/C
8	11.3°		

PMI CONFIDENTIAL AND PROPRIETARY

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ISO 9001 CERTIFIED



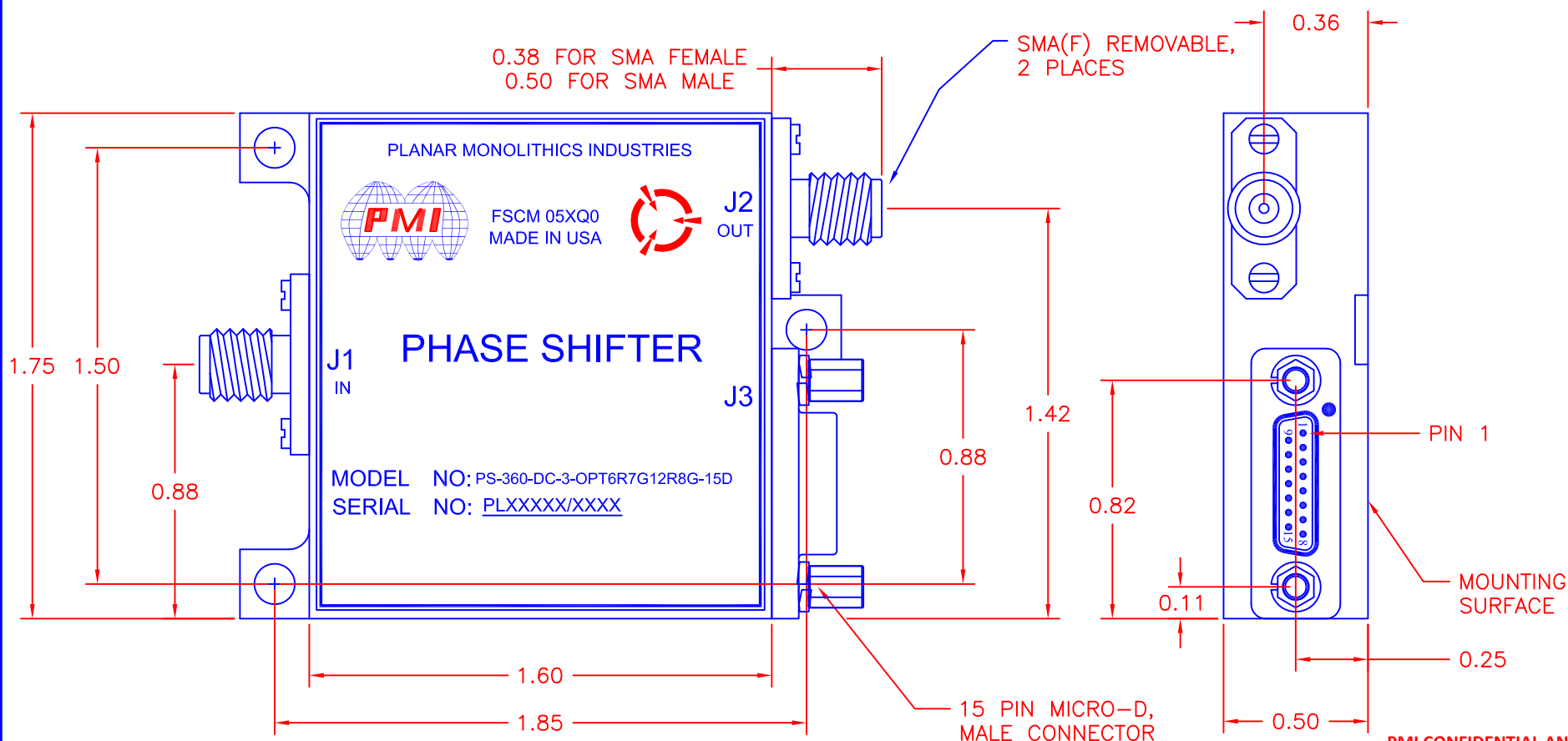
		TITLE PRODUCT FEATURE			
APPROVALS	DATE	PS-360-DC-3-OPT6R7G12R8G-15D 6.7 TO 12.8 GHz DIGITAL CONTROLLED PHASE SHIFTER			
DRAWN	08/24/18	SIZE	FSCM NO.	OWG NO.	REV.
EMF		A	05XQ0	PRELIMINARY	A
CHECKED		SCALE	N:S	SHEET	1 OF 3
ISSUED					

DESCRIPTION

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MECHANICAL OUTLINE



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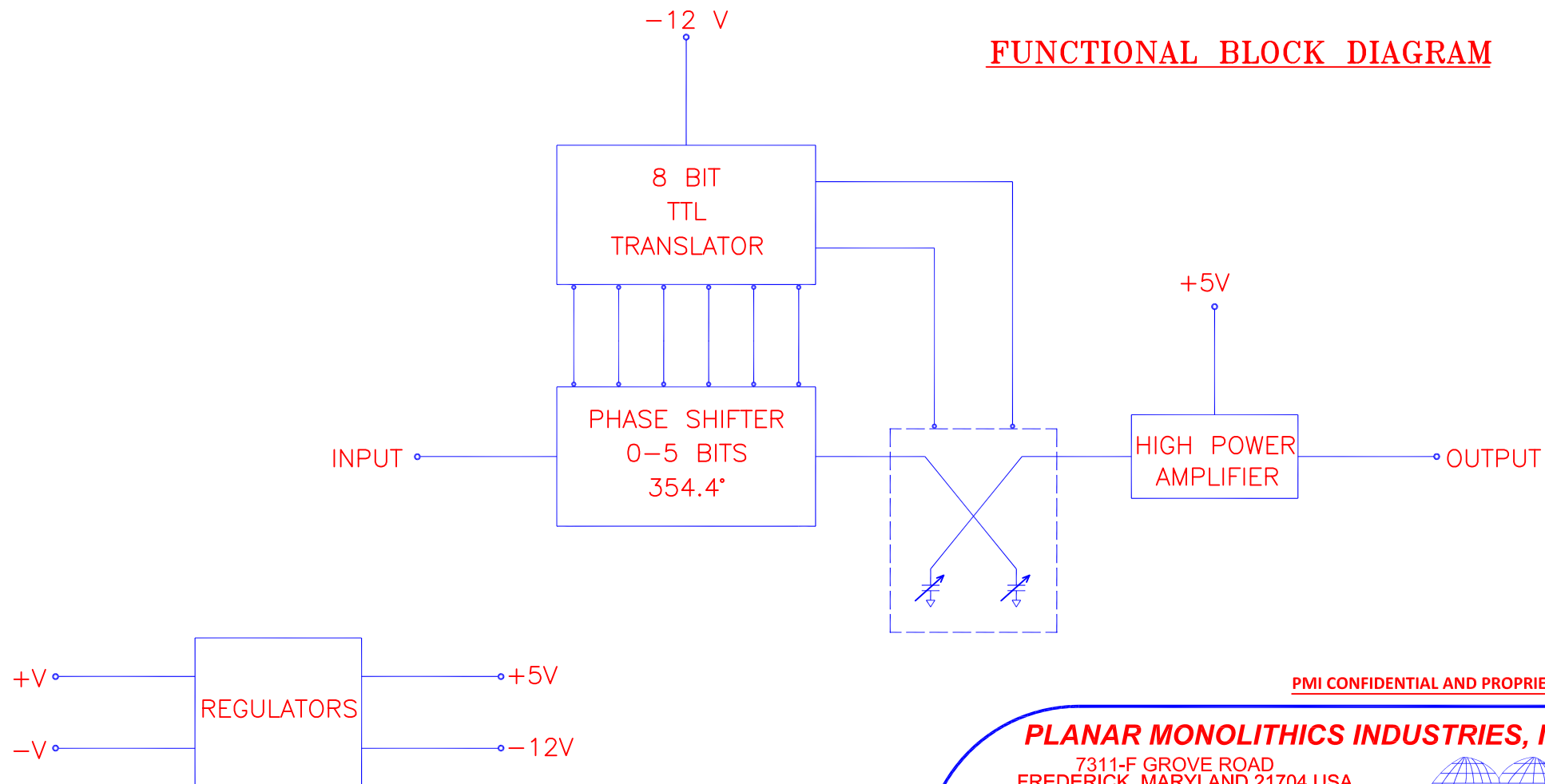


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TOLERANCES:
X.XX ±0.020
X.XXX ±0.010

APPROVALS		DATE	TITLE	
DRAWN	E.M.F.	08/24/16	PRODUCT FEATURE	PS-360-DC-3-OPT6R7G12R8G-15D
CHECKED			6.7 TO 12.8 GHz DIGITAL CONTROLLED PHASE SHIFTER	
ISSUED				
SIZE	FSCM NO.	DWG NO.	REV.	
A	05XQ0	PRELIMINARY	—	
SCALE	N:S	SHEET	2 OF 3	

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APPROVALS	DATE				
DRAWN	08/24/16				
CHECKED		SIZE	FSCM NO.	DWG NO.	REV.
		A	05XQ0	PRELIMINARY	—
ISSUED		SCALE	N:S	SHEET	3 OF 3

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TOLERANCES:
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X.XXX ±0.010