

DESCRIPTION:

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER PS-360-DC-3 OPTION 618-15D-10BIT IS A 10-BIT DIGITALLY CONTROLLED PHASE SHIFTER OPERATING FROM THE 6 TO 18 GHz FREQUENCY RANGE. THE PHASE SHIFTER HAS A 360° RANGE AND IS HIGH SPEED.

SPECIFICATIONS:

FREQUENCY RANGE:.....6.0 GHz TO 18.0 GHz

INSERTION LOSS:.....12.0 dB MAXIMUM, 10 dB TYPICAL

VSWR (IN/OUT):.....2.0 : 1 MAXIMUM

ACCURACY:.....± 15° 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 1024 STEPS

CONTROL INPUT:.....10 BIT TTL

SWITCHING SPEED:.....500 ns MAXIMUM

(50% TTL TO WITHIN 10° OF FINAL PHASE VALUE)

HARMONICS:.....-25 dBc

POWER HANDLING CAPABILITY:

WITHOUT DEGRADATION:.....+10 dBm

SURVIVAL POWER:.....+20 dBm

POWER SUPPLY:.....+5 VDC (± 5%) @ 115 ma

.....-12 TO -15 VDC @ 20 ma

CONNECTORS:

INPUT/OUTPUT:.....SMA FEMALE (FIELD REMOVABLE)

POWER AND CONTROL:.....15 PIN MICRO-D

SIZE:.....(L) 1.60" X (W) 1.75" X (H) 0.50"

.....*EXCLUDING MOUNTING HOLES & CONNECTORS

FINISH:.....PAINTED BLUE

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°	12	45°
5	2.8°	13	GROUND
6	5.6°	14	0.7°
7	22.5°	15	0.35° (LSB)
8	11.3°		

3X Ø 0.14in [3.6mm] THRU

0.38in [9.5mm] FOR SMA FEMALE

0.50in [12.7mm] FOR SMA MALE

SMA(F) REMOVABLE, 2 PLACES

MOUNTING SURFACE

PIN 1

PIN 15

15 PIN MICRO-D MALE CONNECTOR

1.50in [38.2mm]

1.75in [44.5mm]

0.88in [22.4mm]

0.12in [3mm]

1.60in [40.6mm]

1.85in [46.9mm]

1.42in [36.1mm]

1.00in [25.4mm]

0.25in [6.4mm]

0.50in [12.7mm]

0.72in [18.2mm]

0.11in [2.8mm]

2X 0.36in [9.1mm]

PLANAR MONOLITHICS INDUSTRIES

PMI

CAGE 05XQ0

PHASE SHIFTER

MODEL NO: PS-360-DC-3 OPTION 618-15D-10BIT

SERIAL NO: PLXXXX/YYWW

J1 RF IN

J2 RF OUT

J3

ENVIRONMENTAL RATINGS:

TEMPERATURE:.....-55°C TO +85°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.

ZONE

REV.

DESCRIPTION

DATE

APPROVED

A1

ORIGINAL RELEASE

3/14/2018

APPROVALS

DATE

DRAWN

M. HANKEN

REDRAWN

ISSUED

UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES

TOLERANCES ARE:

FRACTIONS

DECIMALS

ANGLES

±

.XX ± 0.02

.XXX ± 0.01

PLANAR MONOLITHICS INDUSTRIES, INC.

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ISO 9001 CERTIFIED

TITLE

OUTLINE

PS-360-DC-3 OPTION 618-15D-10BIT

SIZE

FSCM NO.

DWG NO.

REV.

B

05XQ0

27034080

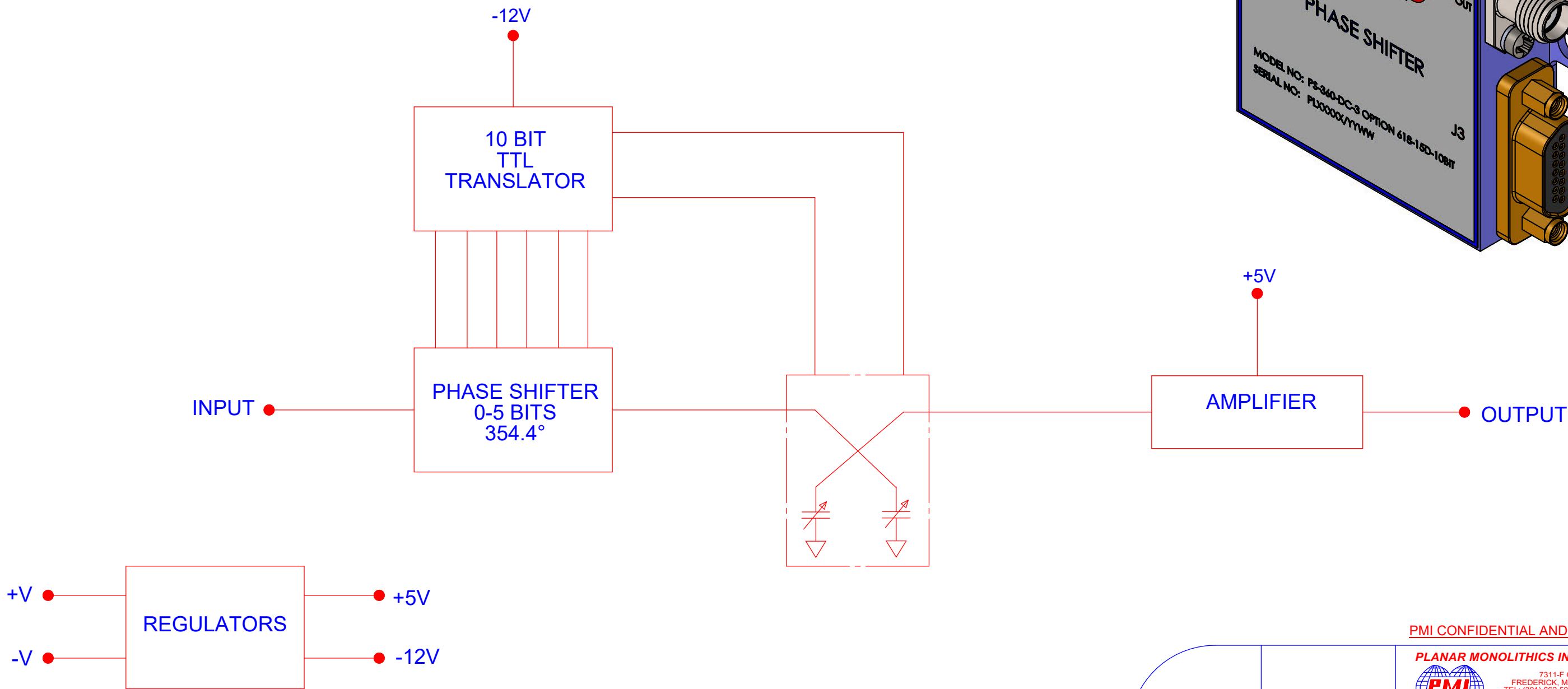
A1

SCALE

2:1

SHEET 1 OF 2

FUNCTIONAL BLOCK DIAGRAM



PMI CONFIDENTIAL AND PROPRIETARY

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			APPROVALS	DATE	TITLE OUTLINE PS-360-DC-3 OPTION 618-15D-10BIT			
			DRAWN M. HANKEN	3/14/2018				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± .XX ± 0.02 ± .XXX ± 0.01			REDRAWN					
			ISSUED					
						SIZE B	FSCM NO. 05XQ0	DWG NO. 27034080
			SCALE 2:1			SHEET 2 OF 2		