

DESCRIPTION

PMI MODEL PDPS-3F-6 OPTION AL, IS A SIX BIT PHASE SHIFTER WITH A SPEED OF 300 nSEC MAXIMUM, (100 nSEC TYPICAL). DESIGNED TO OPERATE AT A FREQUENCY OF 3.0 GHz, WITH A VSWR OF 2.0:1. THIS UNIT HAS AN INSERTION LOSS OF 10 dB MAXIMUM AND A PHASE ACCURACY OF $\pm 6^\circ$ MAXIMUM, 3° TYPICAL AT 3 GHz.

SPECIFICATIONS

- FREQUENCY RANGE: 3.0 GHz (BANDWIDTH 500MHz)
- INSERTION LOSS: 9 dB TYPICAL, 10 dB MAXIMUM
- VSWR: 2.0:1
- PHASE STATES: 5.6° , 11.2° , 22.4° , 45° , 90° , 180°
- PHASE ACCURACY: $\pm 6^\circ$ MAXIMUM, 3° TYPICAL @ 3 GHz
- SWITCHING SPEED: 300nSEC MAXIMUM, 100nSEC TYPICAL
- POWER SUPPLY: +5V @ 70 mA TYPICAL, 100 mA MAXIMUM
-15V @ 70 mA TYPICAL, 100 mA MAXIMUM
- CONNECTORS:
 - RF: SMA FEMALE INPUT & OUTPUT
 - CONTROL: TTL THRU "D" MULTIPIN CONNECTOR
- SIZE: 3.00" X 2.70" X 0.53"
- FINISH: 50 uin. GOLD PLATING MIN. OVER COPPER FLASH OVER NICKEL FLASH PER MIL-G 45204 TYPE 2

15 Pin Sub-D Connector Pin Out	
Pin 1	TTL CONTROL 180° MSB
Pin 2	TTL CONTROL 90°
Pin 3	TTL CONTROL 45°
Pin 4	TTL CONTROL 22.5°
Pin 5	TTL CONTROL 11.25°
Pin 6	TTL CONTROL 5.6° LSB
Pin 7	(+5VDC)
Pin 8	(-15VDC)
Pin 9	P.S. RETURN (CASE GROUND)
Pin 10-15	TTL RETURN (CASE GROUND)

ENVIRONMENTAL RATINGS:

- TEMPERATURE: -40°C TO +85°C (OPERATING)
-65°C TO +100°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

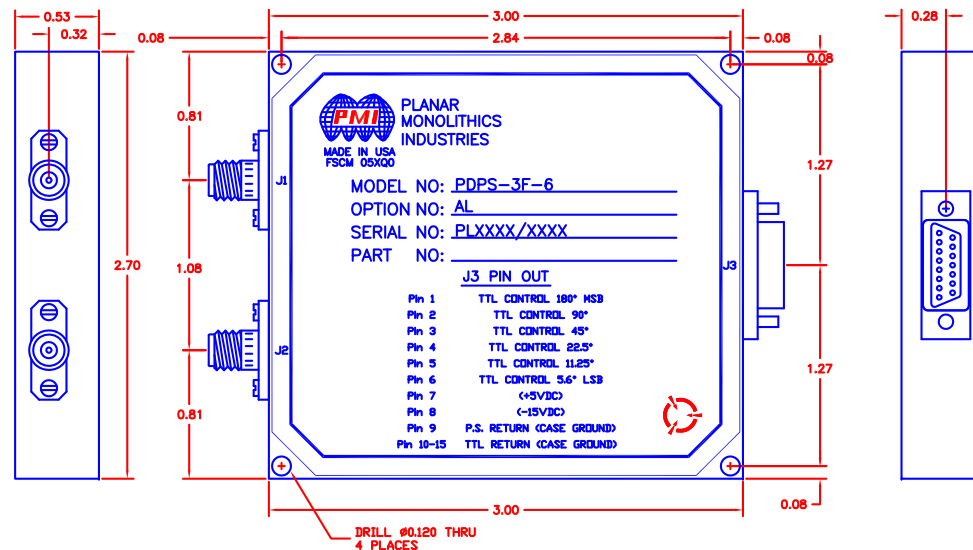
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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

PMI CONFIDENTIAL AND PROPRIETARY

REVISIONS			
ZONE	REV.	DESCRIPTION	DATE
	A1	ORIGINAL RELEASE	6/1/2009

MECHANICAL OUTLINE



PLANAR MONOLITHICS INDUSTRIES, INC.

7311-F GROVE ROAD

FREDERICK, MARYLAND 21704 USA

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WEB: www.pmi-rf.com, EMAIL: sales@pmi-rf.com

ISO 9001 CERTIFIED

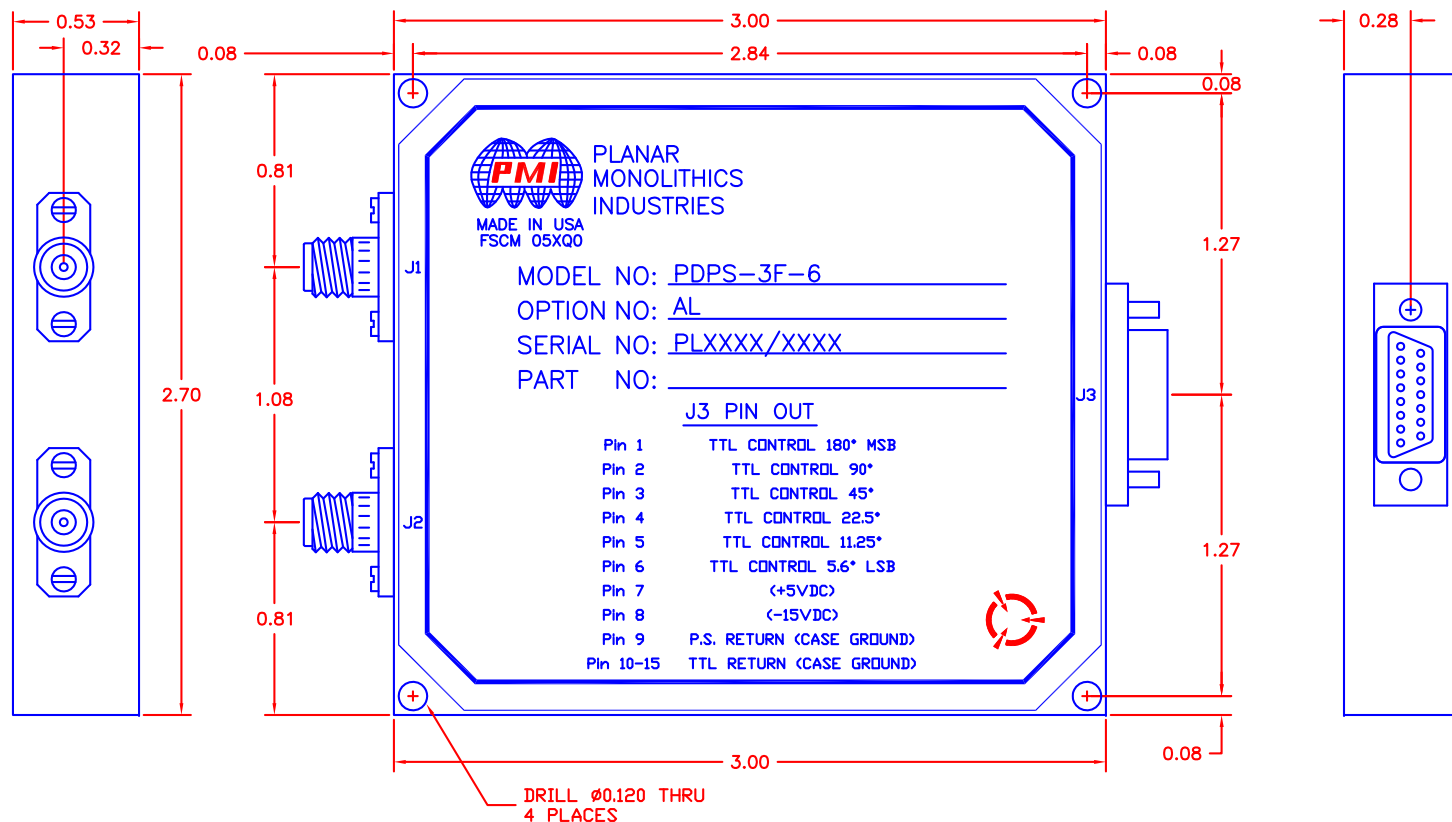


APPROVALS		DATE		TITLE		PRODUCT FEATURE	
DRAWN		02/17/05				PDPS-3F-6	
CHECKED						OPTION: AL	
ISSUED						3 GHz, 6-BIT PHASE SHIFTER	
				SIZE	FSCM NO.	DWG NO.	REV.
				A	05XQ0	27000672	A1
				SCALE	N:S	SHEET	1 OF 3

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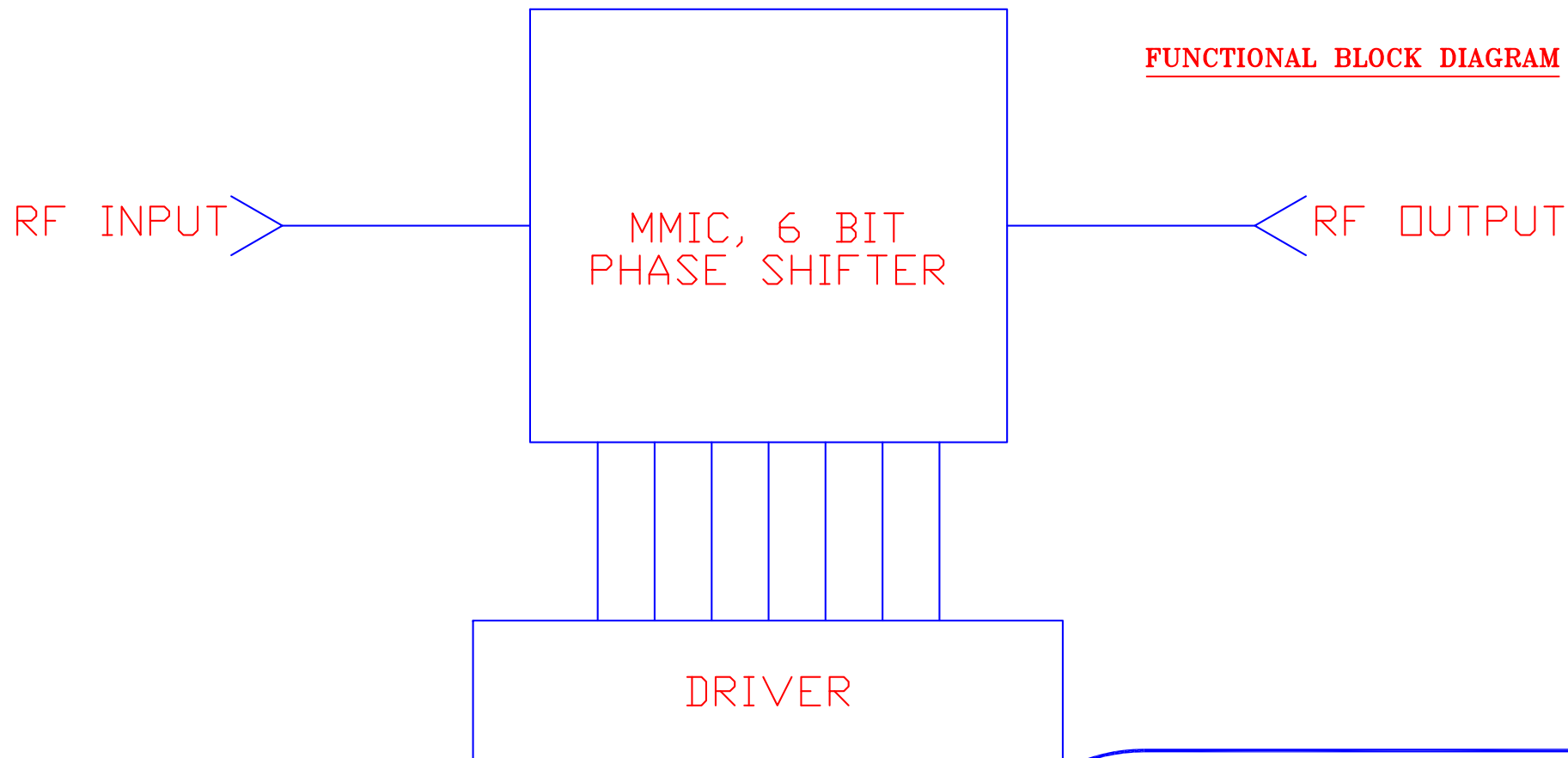
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APPROVALS		DATE		TITLE			
DRAWN		JRM		PRODUCT FEATURE			
CHECKED				PDPS-3F-6			
ISSUED				OPTION: AL			
				3 GHz, 6-BIT PHASE SHIFTER			
				SIZE	FSCM NO.	DWG NO.	REV.
				A	05XQ0	27000672	A1
				SCALE	N:S	SHEET	2 OF 3

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PMI MODEL PDPS-3F-6 OPTION AL, IS A SIX BIT PHASE SHIFTER WITH A SPEED OF 300 nSEC MAXIMUM, (100 nSEC TYPICAL). DESIGNED TO OPERATE AT A FREQUENCY OF 3.0 GHz, WITH A VSWR OF 2.0:1. THIS UNIT HAS AN INSERTION LOSS OF 10 dB MAXIMUM AND A PHASE ACCURACY OF $\pm 6^\circ$ MAXIMUM, 3° TYPICAL AT 3 GHz.

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		TITLE PRODUCT FEATURE PDPS-3F-6 OPTION: AL 3 GHz, 6-BIT PHASE SHIFTER					
APPROVALS	DATE						
DRAWN <i>JKM</i>	<i>02/17/05</i>						
CHECKED		SIZE A	FSCM NO. 05XQ0	DWG NO. 27000672	REV. A		
ISSUED		SCALE N:S			SHEET 3 OF 3		