

DESCRIPTION

PMI MODEL PDPS-5F-6, IS A SIX BIT PHASE SHIFTER WITH A SPEED OF 300 nSEC MAXIMUM, (100 nSEC TYPICAL). DESIGNED TO OPERATE AT A FREQUENCY OF 5.4 TO 5.9 GHz, WITH A VSWR OF 2.0:1. THIS UNIT HAS AN INSERTION LOSS OF 6.5 dB MAXIMUM AND A PHASE ACCURACY OF $\pm 6^\circ$ MAXIMUM, 3° TYPICAL.

SPECIFICATIONS

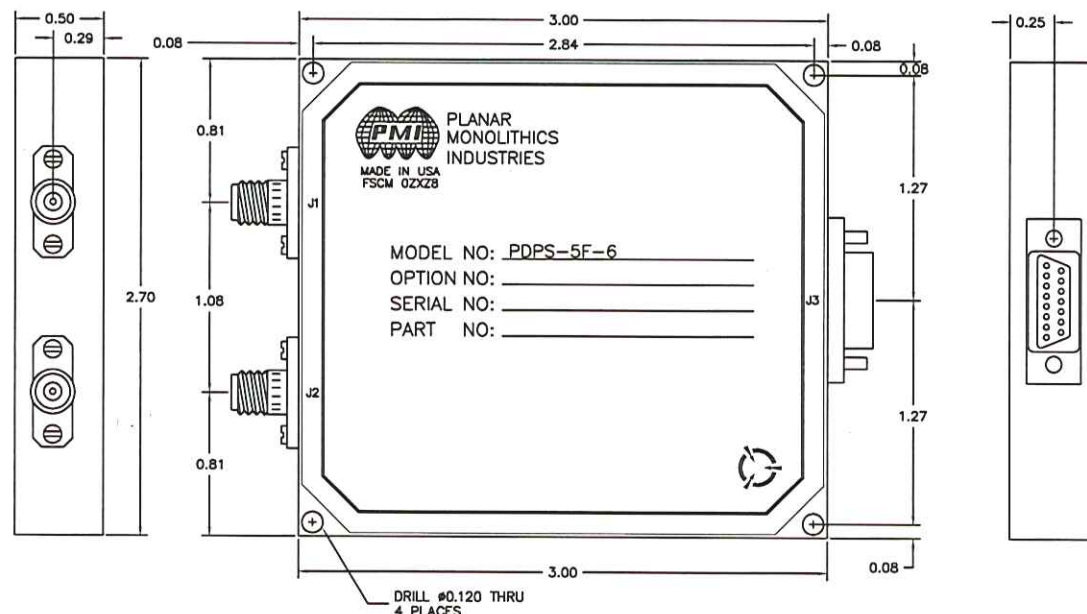
- FREQUENCY RANGE: 5.4 TO 5.9 GHz
- INSERTION LOSS: 6.5 dB MAXIMUM
- VSWR: 2.0:1
- PHASE STATES: 5.6° , 11.2° , 22.4° , 45° , 90° , 180°
- PHASE ACCURACY: $\pm 6^\circ$ MAXIMUM, 3° TYPICAL
- SWITCHING SPEED: 300nSEC MAXIMUM, 100nSEC TYPICAL
- POWER SUPPLY: +5V @ 50 mA MAXIMUM
 -15V @ 50 mA MAXIMUM
- CONNECTORS:
 RF: SMA FEMALE INPUT & OUTPUT
 CONTROL: TTL THRU "D" MULTIPIN CONNECTOR
- SIZE: 3.00" X 2.70" X 0.50"

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 $+85^\circ\text{C}$ (OPERATING)
 -65°C TO $+100^\circ\text{C}$ (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



PLANAR MONOLITHICS INDUSTRIES, INC.

7311-G GROVE ROAD
 FREDERICK, MARYLAND 21704 USA
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 WEBSITE: www.planarmonolithicsindustries.com
 E-MAIL: sales@planarmonolithics.com
 ISO 9001:2000 CERTIFIED



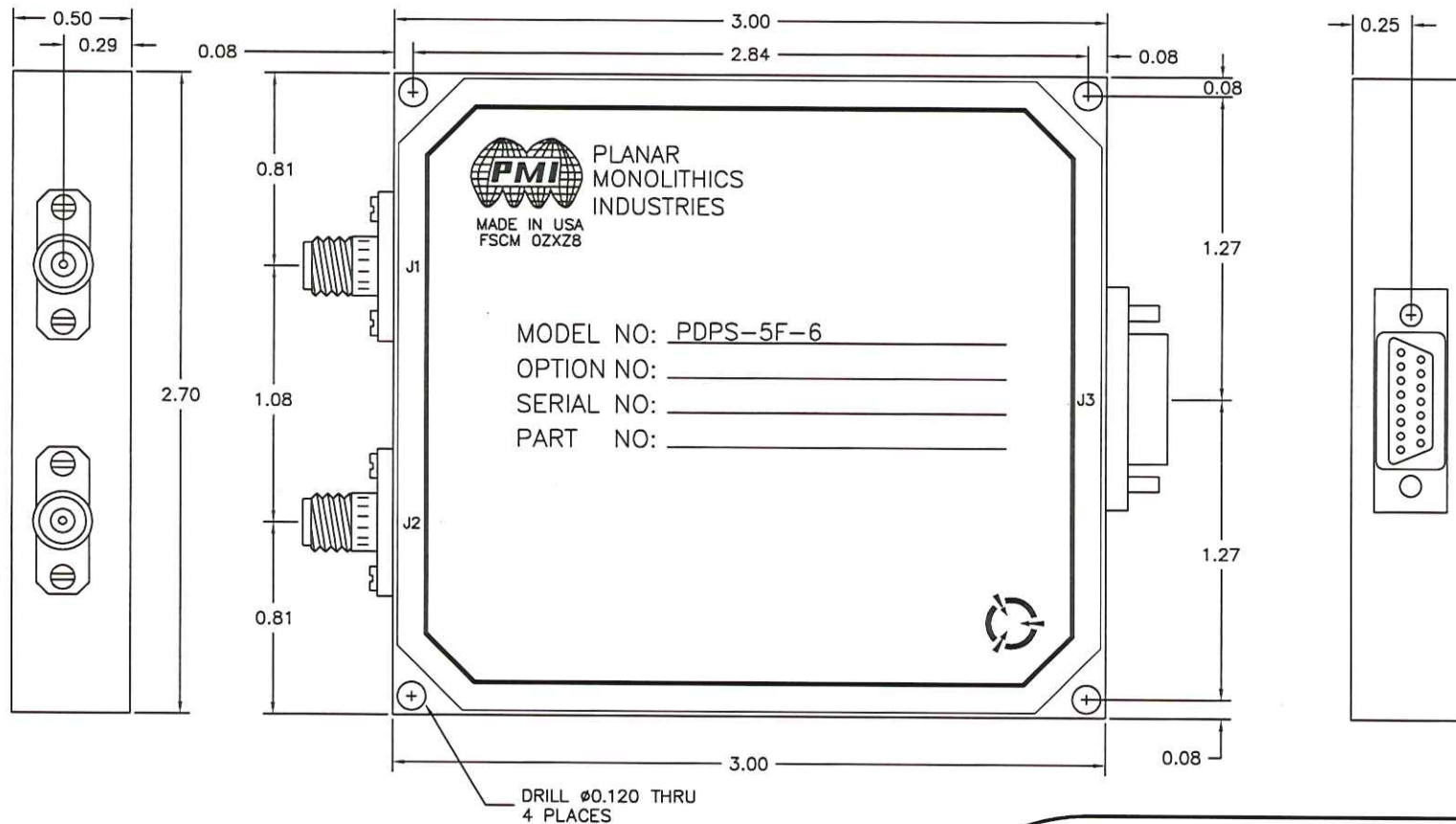
APPROVALS		DATE		TITLE			
DRAWN		05/08/07		PRODUCT FEATURE			
CHECKED		5/9/07		PDPS-5F-6			
ISSUED		5/14/07		5.4 - 5.9 GHz, 6-BIT PHASE SHIFTER			
SIZE	FSCM NO.	DWG NO.		REV.			
A	0ZXZ8	100-P001-000		-			
SCALE N:S				SHEET 1 OF 3			

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

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REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	SEE ECR# P07-010	05/08/07	



MECHANICAL OUTLINE

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

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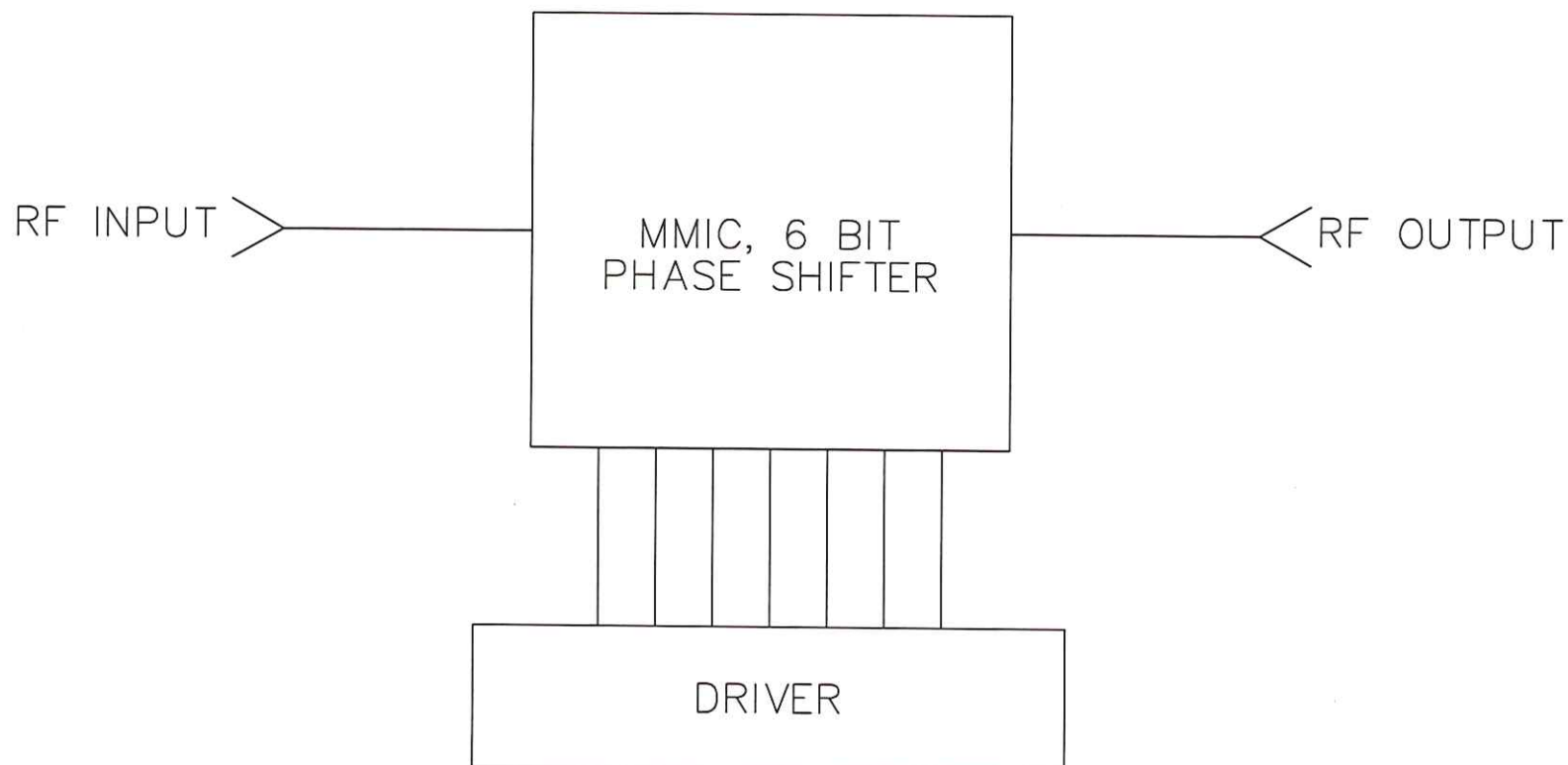
APPROVALS		DATE		TITLE			
DRAWN <i>W3LS</i>		05/08/07		MECHANICAL OUTLINE			
CHECKED <i>AS</i>		5/8/07		PDPS-5F-6			
ISSUED <i>W3LS</i>		5/14/07		5.4 - 5.9 GHz, 6-BIT PHASE SHIFTER			
SIZE	FSCM NO.	DWG NO.	REV.				
A	0ZXZ8	100-P001-000	-				
SCALE N:S				SHEET 2 OF 3			

DESCRIPTION

PMI MODEL PDPS-5F-6, IS A SIX BIT PHASE SHIFTER WITH A SPEED OF 300 nSEC MAXIMUM, (100 nSEC TYPICAL). DESIGNED TO OPERATE AT A FREQUENCY OF 5.4 TO 5.9 GHz, WITH A VSWR OF 2.0:1. THIS UNIT HAS AN INSERTION LOSS OF 6.5 dB MAXIMUM AND A PHASE ACCURACY OF $\pm 6^\circ$ MAXIMUM, 3° TYPICAL.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# P107019E AEROFLEX, OH	3/19/02	Rd
	A	SEE ECN# 04-054	4/26/04	Rd
	B	SEE ECN# P05-001	2/17/05	

FUNCTIONAL BLOCK DIAGRAM



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CONFIDENTIAL AND PROPRIETARY

APPROVALS		DATE	TITLE	
DRAWN <i>WHS</i>		05/08/07	FUNCTIONAL BLOCK DIAGRAM	
CHECKED <i>WHS</i>		5/8/07	PDPS-5F-6	
ISSUED <i>WHS</i>		5/14/07	5.4 - 5.9 GHz, 6-BIT PHASE SHIFTER	
SIZE	FSCM NO.	DWG NO.	REV.	
A	OZXZ8	100-P001-000	-	
SCALE N:S		SHEET		3 OF 3