

DESCRIPTION

THE PMI MODEL PS-90-2040 IS A MINIATURE, 0 TO 180 DEGREE BI-PHASE MODULATOR/PHASE SHIFTER WITH TTL CONTROL LOGIC (ECL LOGIC AVAILABLE) OPERATING OVER A FREQUENCY RANGE OF 2-4 GHz.

SPECIFICATIONS

- FREQUENCY RANGE: 2 TO 4 GHz
- PHASE SHIFT: 180° TYPICAL
- LOGIC "0": 0°
- LOGIC "1": 180°
- INSERTION LOSS: 2.5dB TYPICAL, 3.0dB MAXIMUM
- VSWR INPUT: 2.0:1
- OPERATING INPUT POWER: +20 dBm OPERATING
- SPEED: 15 ns TYPICAL ON/OFF
- MAXIMUM RF INPUT: 0.5 WATT CW, 1 us PULSE WIDTH
- CARRIER SUPPRESSION: 20 dB TYPICAL
- POWER SUPPLY
 - +V: +5V @ 75mA MAXIMUM
 - V: -5V @ 20mA MAXIMUM
- SIZE: 1.00" x 1.00" x 0.50"
- WEIGHT: ≤2.0 OZ.
- FINISH: PAINTED BLUE

OPTIONS

- HS: HIGH SPEED (15 ns TYPICAL)
- 01: SMC MALE CONTROL CONNECTOR
- 02: SMB MALE CONTROL CONNECTOR
- 03: SMA FEMALE CONTROL CONNECTOR
- 04: TWO SMA MALE RF CONNECTORS
- 05: ONE SMA MALE AND ONE SMA FEMALE RF CONNECTOR
- 06: +12 VDC POWER SUPPLY
- 07: -12 VDC POWER SUPPLY
- 08: +15 VDC POWER SUPPLY
- 09: -15 VDC POWER SUPPLY

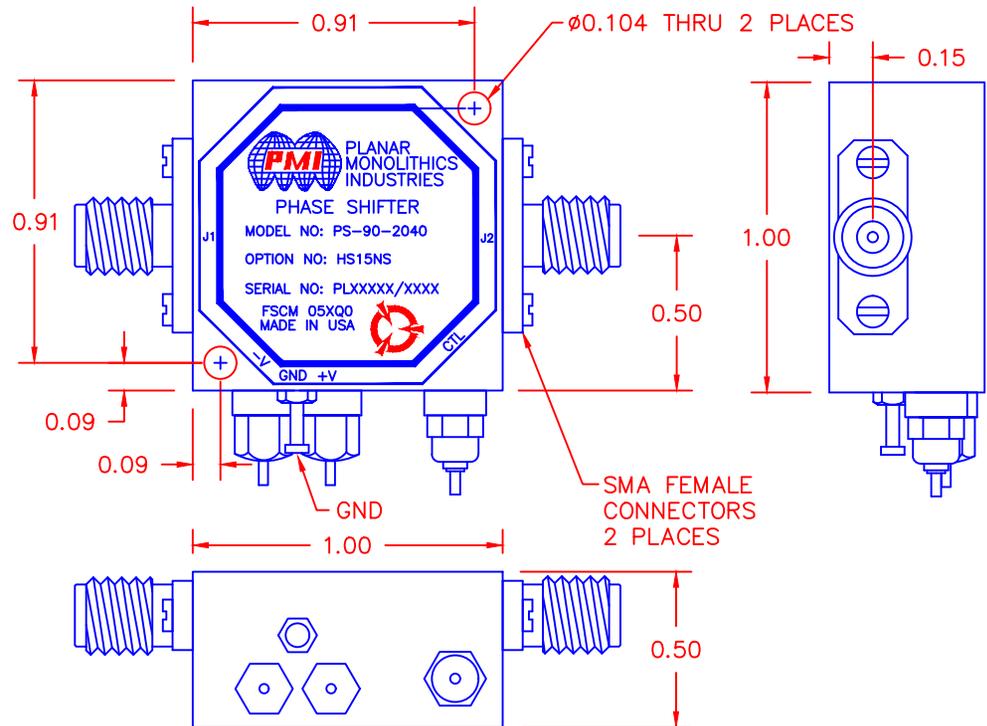
ENVIRONMENTAL RATINGS

- **TEMPERATURE:** -55°C TO +85°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

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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	12/3/08	
	B1	UPDATED SPECS, CONNECTORS	12/4/08	
	B2	ECN # 17-0062	04/01/17	



PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.

7311-G GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: 301-631-1579 FAX: 301-662-2029
WEBSITE: www.planarmonolithicsindustries.com
E-MAIL: sales@planarmonolithics.com
ISO 9001 CERTIFIED



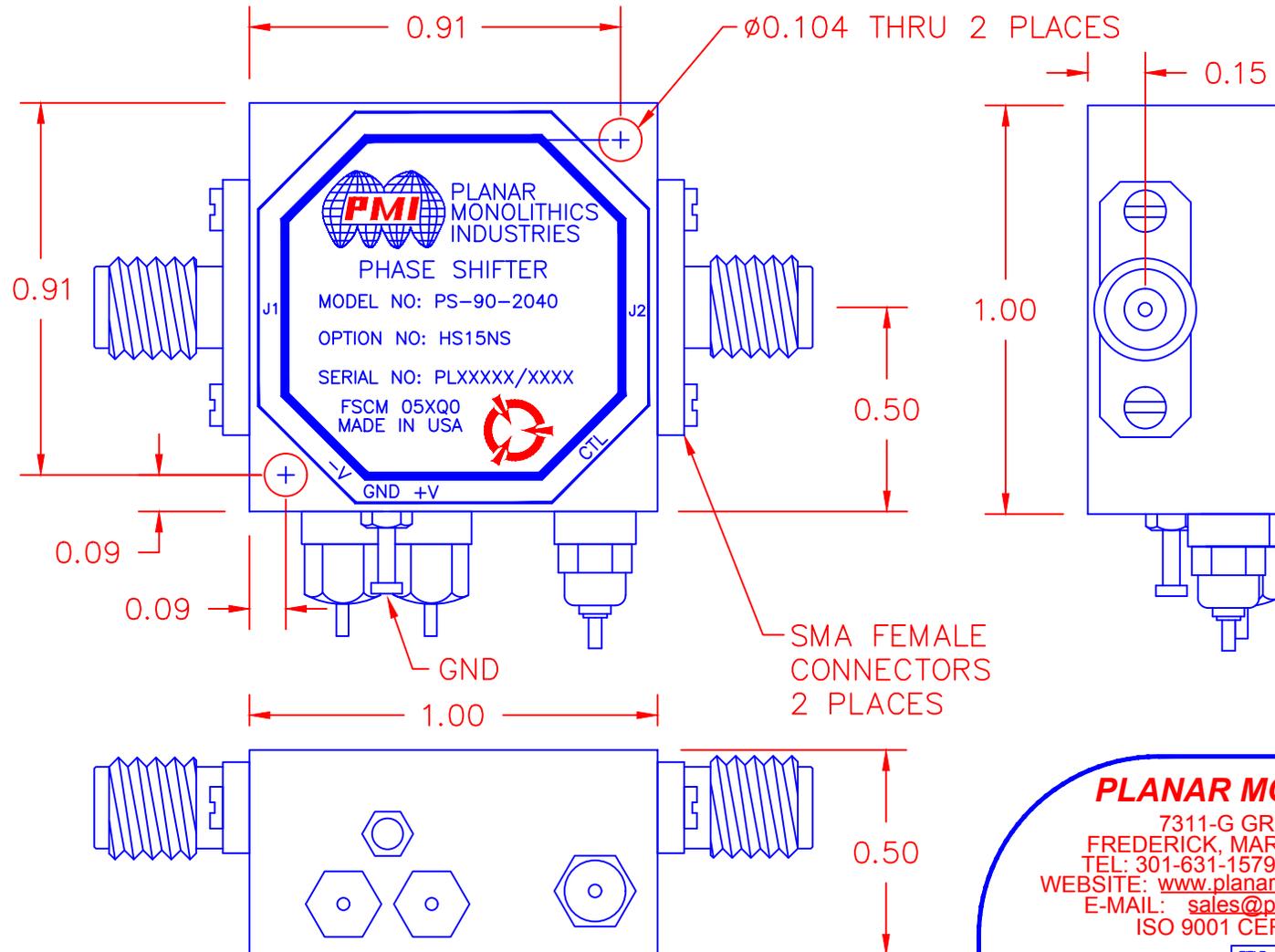
APPROVALS		DATE	TITLE		
DRAWN <i>EJE</i>		6/28/05	PRODUCT FEATURE		
CHECKED			PS-90-2040 OPT. HS15NS		
ISSUED			2 - 4 GHz BI-PHASE MODULATOR/PHASE SHIFTER		
SIZE	FSCM NO.	DWG NO.	REV.		
A	05XQ0	27010064-B	B2		
SCALE N:S		SHEET		1 OF 3	

DESCRIPTION

THE PMI MODEL PS-90-2040 IS A MINIATURE, 0 TO 180 DEGREE BI-PHASE MODULATOR/PHASE SHIFTER WITH TTL CONTROL LOGIC (ECL LOGIC AVAILABLE) OPERATING OVER A FREQUENCY RANGE OF 2-4 GHz.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	12/3/08	
	B1	UPDATED SPECS, CONNECTORS	12/4/08	
	B2	ECN # 17-0062	04/01/17	

MECHANICAL OUTLINE



SMA FEMALE CONNECTORS
2 PLACES

PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.

7311-G GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: 301-631-1579 FAX: 301-662-2029
WEBSITE: www.planarmonolithicsindustries.com
E-MAIL: sales@planarmonolithics.com
ISO 9001 CERTIFIED

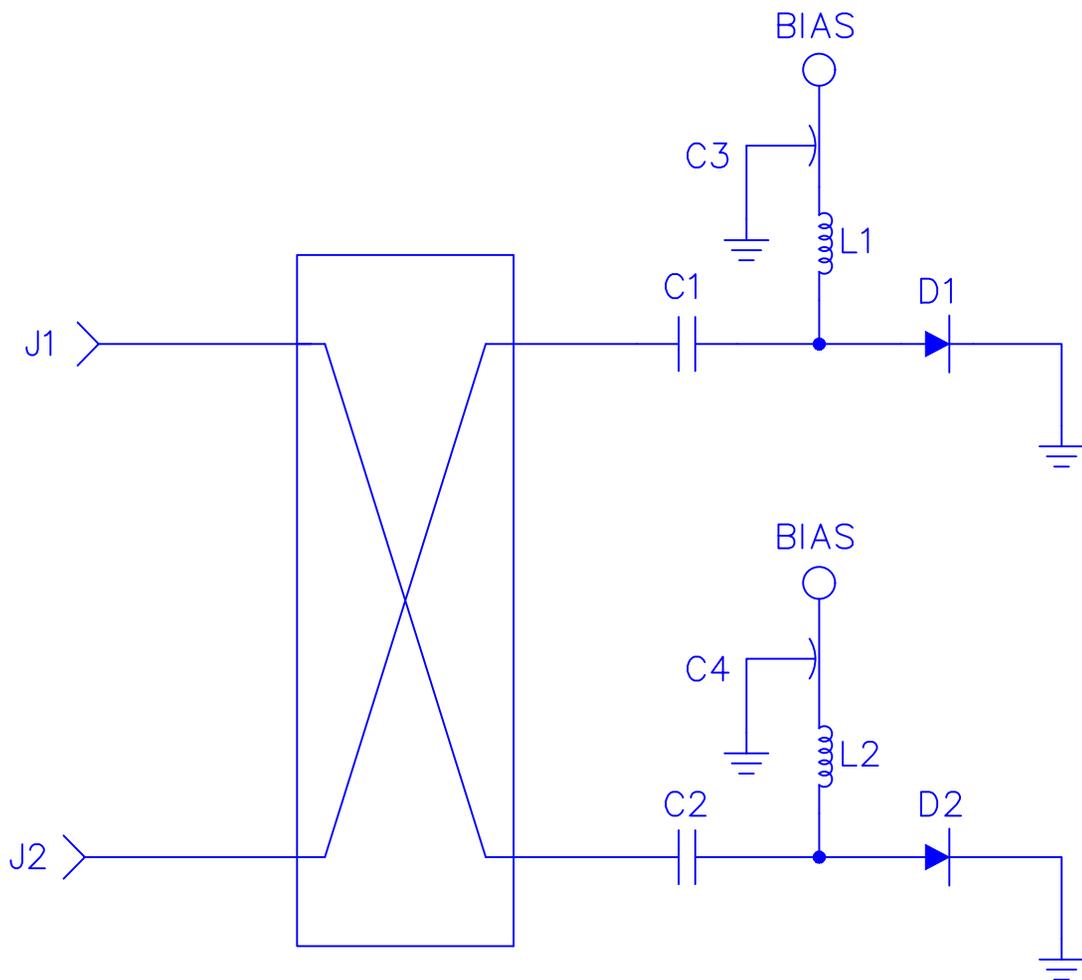


ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ±0.020
X.XXX ±0.010

APPROVALS		DATE	TITLE			
DRAWN <i>EJE</i>		6/28/05	MECHANICAL OUTLINE PS-90-2040 OPT. HS15NS			
CHECKED			2 - 4 GHz BI-PHASE MODULATOR/PHASE SHIFTER			
ISSUED			SIZE A	FSCM NO. 05XQ0	DWG NO. 27010064-B	REV. B2
SCALE N:S			SHEET		2 OF 3	

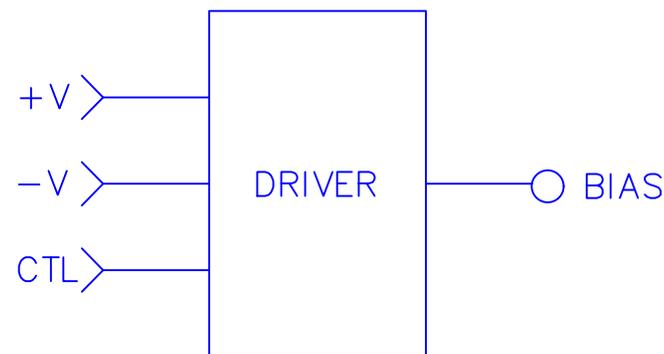
DESCRIPTION

THE PMI MODEL PS-90-2040 IS A MINIATURE, 0 TO 180 DEGREE BI-PHASE MODULATOR/PHASE SHIFTER WITH TTL CONTROL LOGIC (ECL LOGIC AVAILABLE) OPERATING OVER A FREQUENCY RANGE OF 2-4 GHz.



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	12/3/08	
	B1	UPDATED SPECS, CONNECTORS	12/4/08	
	B2	ECN # 17-0062	04/01/17	

FUNCTIONAL BLOCK DIAGRAM



PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.

7311-G GROVE ROAD
 FREDERICK, MARYLAND 21704 USA
 TEL: 301-631-1579 FAX: 301-662-2029
 WEBSITE: www.planarmonolithicsindustries.com
 E-MAIL: sales@planarmonolithics.com
 ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN <i>EGB</i>		6/28/05	FUNCTIONAL BLOCK DIAGRAM PS-90-2040 OPT. HS15NS		
CHECKED			2 - 4 GHz BI-PHASE MODULATOR/PHASE SHIFTER		
ISSUED			SIZE A	FSCM NO. 05XQ0	DWG NO. 27010064-B
			SCALE N:S	SHEET 3 OF 3	
			REV. B2		