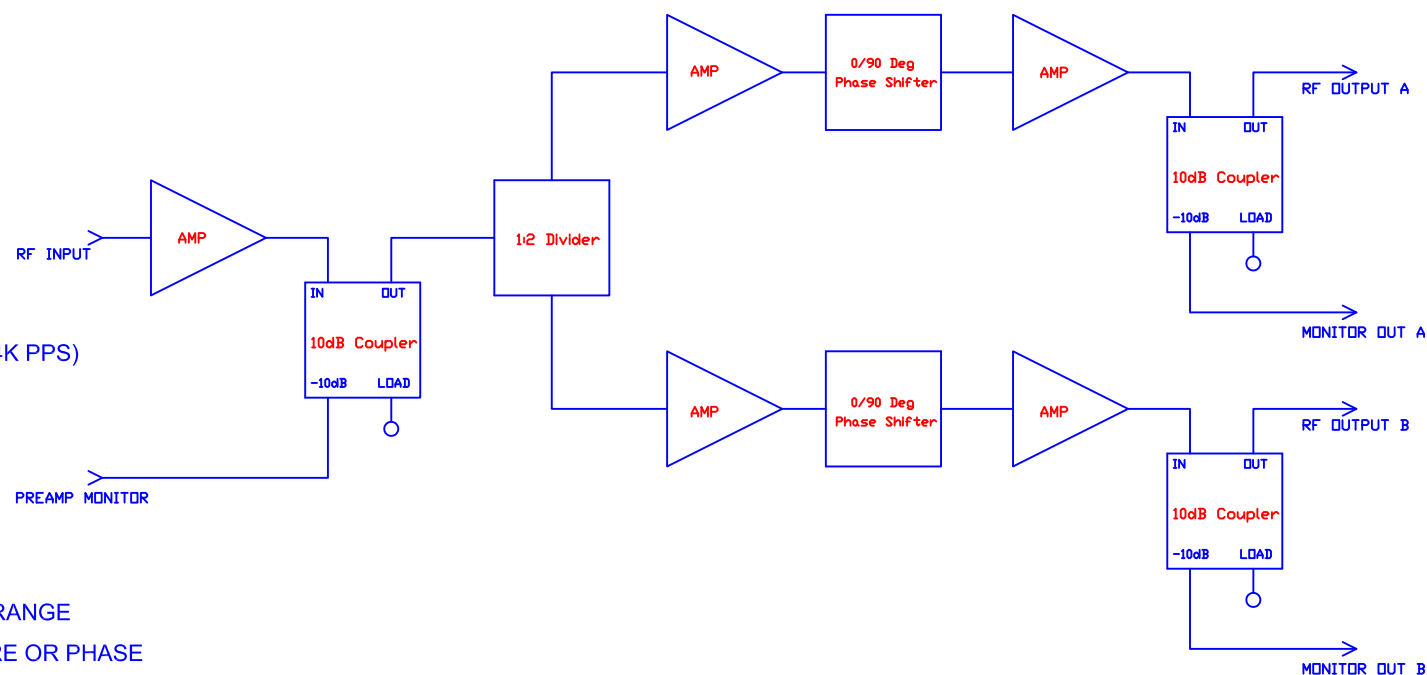


## DESCRIPTION

PMI MODEL NO. 5829474 IS A DUAL OUTPUT AMPLIFIER THAT OPERATES OVER 8.9 TO 9.4GHZ. THIS MODEL PROVIDES TWO OUTPUTS WITH EACH HAVING AN OUTPUT POWER OF 1.15 W WITH AN INPUT POWER OF 0.5 TO 5mW. EACH OUTPUT PATH HAS THE ABILITY TO SHIPFT PHASE BY 90 DEGREES VIA DIFFERENTIAL CONTROL. AS WELL, EACH OUTPUT FEATURES A MONITOR OUTPUT PORT.

## SPECIFICATIONS:

- FREQUENCY RANGE: 8.9 TO 9.4GHz
- VSWR: 1.3:1 INPUT (J5) & OUTPUT (J1 & J3)
- RF PULSES: 0.1μS TO 33.6μS (REP RATES UP TO 4K PPS)
- RISE & FALL TIMES: 30nS
- IMPEDENCE: 50Ω
- RF INPUT POWER: +0.5mW MIN; +5.0mW MAX
- RF INPUT SURVIVAL: +10mW MAX
- RF OUTPUT POWER: +1.15W MIN
- RF OUTPUT POWER VARIATION OVER FRQUENCY: ≤±0.5dB OVER ENTIRE FREQUENCY RANGE
- RF OUTPUT POWER OVER TEMPERATURE: -0.038dB/°C MAX OVER TEMPERATURE OR PHASE
- RF OUTPUT PHASE TRACKING OUTPUT TO OUTPUT: ±5° MAX OVER FREQUENCY @ 0° PHASE SETTING & +45°C)
- RF OUTPUT PHASE OFFSET OUTPUT TO OUTPUT: 15° MAX (CALCULATED PER SCD PARA. 2.1.6.1)
- NOISE FIGURE: 10dB MAX
- DESCRETE SPURIOUS: -60dBc MAX (DC TO 12GHz @ RF OUTPUT POWER RATED)
- TOTAL SPURIOUS: -30dBm MAX
- 2nd HARMONIC: 30dBc MIN
- DC POWER SUPPLY: +15VDC ±2% @ 4.0A MAX; -15VDC ±2% @ 0.6A MAX
- SIZE & WEIGHT: 9.0 x 5.0 x 3.25 INCHES @ ≤6.0lb. MAX (INCLUDING FINS)
- ENVIRONMENTAL STRESS TESTING: PER 53711-WS32884 (PARA. 4.42 & 4.5)



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	—	PRELIMINARY	3/2/15	

## ENVIRONMENTAL RATINGS

- TEMPERATURE: 0°C TO + 50°C  
-62°C TO +75°C (STORAGE)
- HUMIDITY: MIL-STD-202, METHOD 103, COND. B
- SHOCK: MIL-STD-202, METHOD 213, COND. A
- VIBRATION: MIL-STD-167, TYPE I, EXCEPT 3 TIMES MIL-STD-167  
INPUT UP TO A MAXIMUM OF 3 G's AND UP TO 70Hz.
- STORAGE LIFE:

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

PMI CONFIDENTIAL AND PROPRIETARY

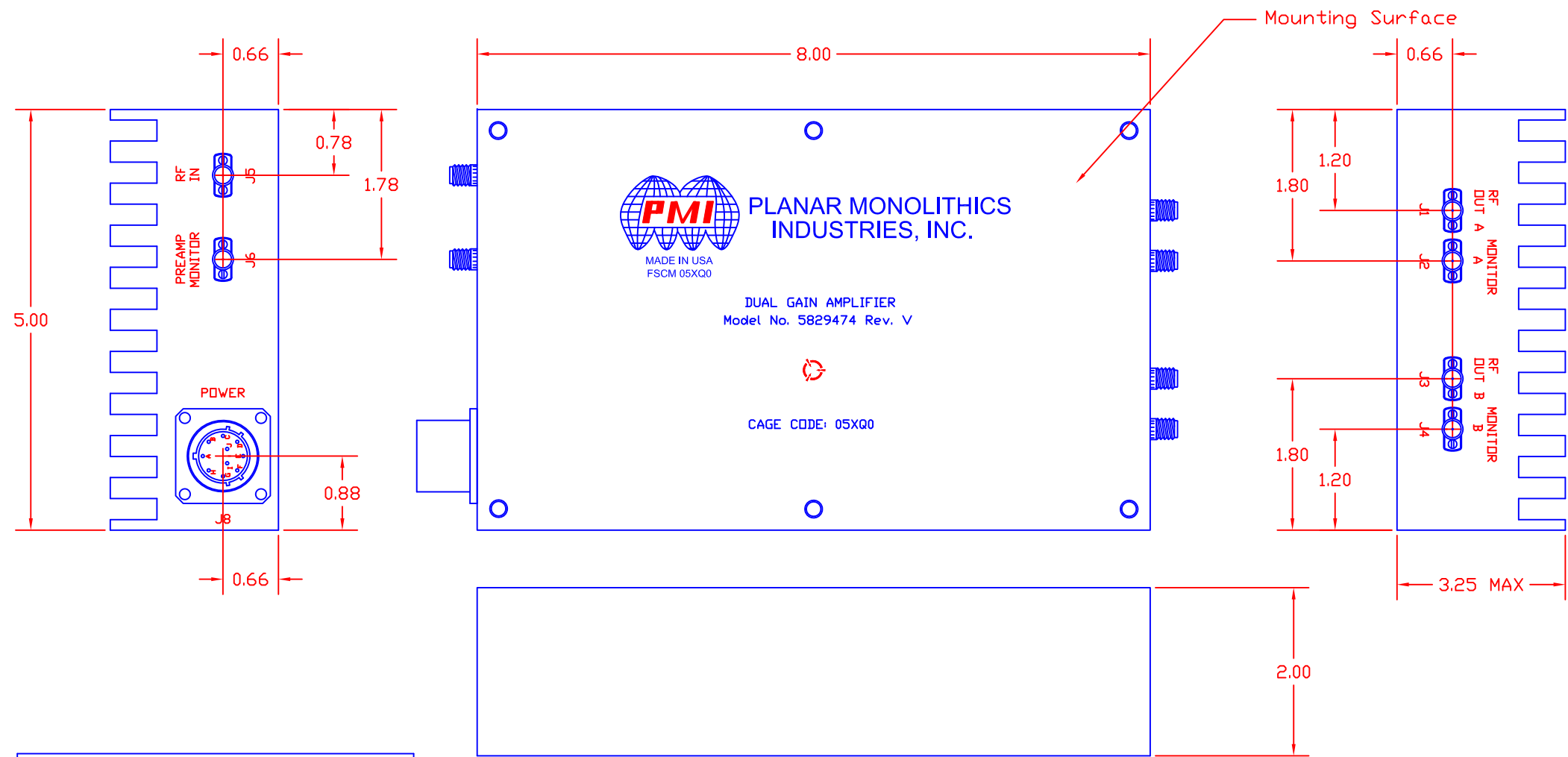
**PLANAR MONOLITHICS INDUSTRIES, INC.**  
7311-F GROVE ROAD  
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TEL: 301-662-5019 FAX: 301-662-1731  
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E-MAIL: [sales@pmi-rf.com](mailto:sales@pmi-rf.com)  
ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN <i>K. MASON</i>		3/2/15	PRODUCT FEATURE 5829474 Rev. V		
CHECKED			SIZE A	FSCM NO. 05XQ0	DWG NO. PRELIMINARY
ISSUED			SCALE N: S		REV. —
				SHEET	1 OF 2

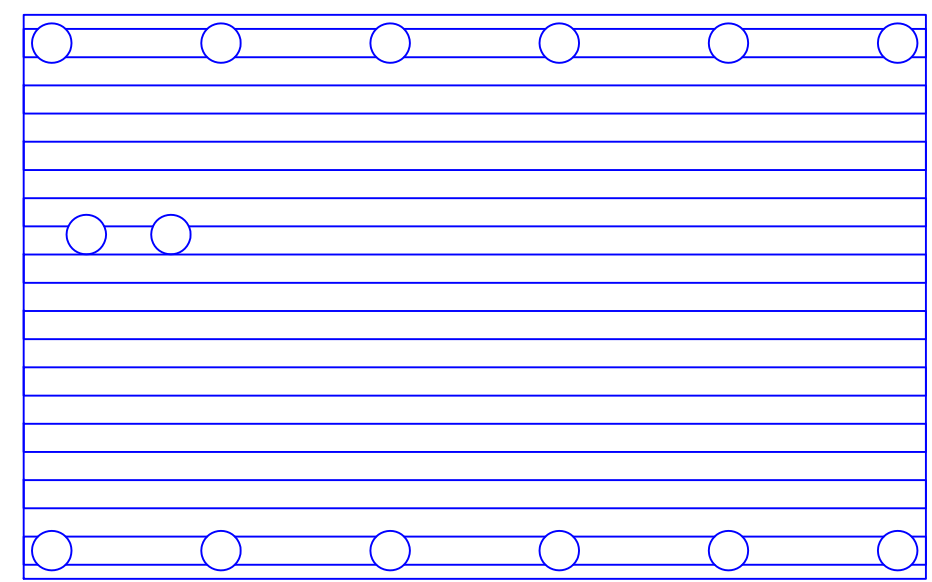
# MECHANICAL LAYOUT

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	3/2/15	



J8 PIN OUT	
PIN NUMBER:	FUNCTION
A	BAL LN RCVR LOGIC '1' YIELDS 90° STEP AT J1 OUTPUT (PHASE SHIFTER A).
B	BAL LN RCVR RETURN. LOGIC '0' YIELDS 90° STEP AT J1.
C	GROUND FOR BOTH BAL LN RCVRS.
D	BAL LN RCVR. LOGIC '1' YIELDS 90° STEP AT J3 OUTPUT (PHASE SHIFTER B).
E	BAL LN RCVR RETURN. LOGIC '0' YIELDS 90° STEP AT J3
F	GROUND AND POWER SUPPLY RETURNS
G	+15VDC
H	-15VDC
I	SPARE/UNUSED
J	SPARE/UNUSED

NOTE: BAL LN RCVR = BALANCED LINE RECEIVER



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

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APPROVALS		DATE	TITLE			
DRAWN <i>K. MASON</i>		3/2/15	PRODUCT FEATURE 5829474 Rev. V			
CHECKED			SIZE A	FSCM NO. 05XQ0	DWG NO. PRELIMINARY	REV. -
ISSUED			SCALE N: S	SHEET 2 OF 2		