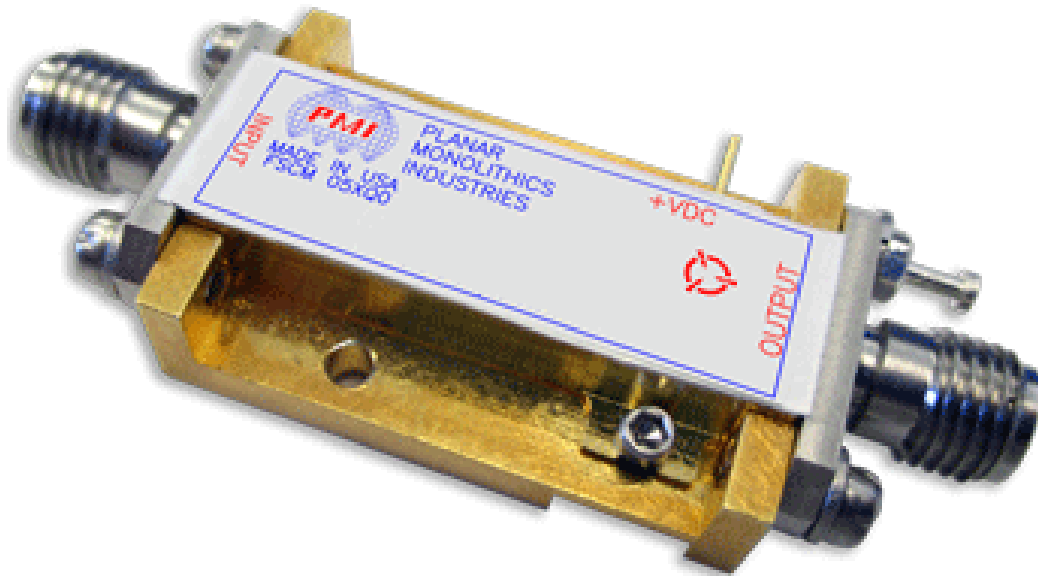




**TYPICAL CHARACTERISTICS
ON
PE2-30-2R018R0-4R5-22-12-SFF**

PMI MODEL: PE2-30-2R018R0-4R5-22-12-SFF IS A LOW NOISE AMPLIFIER OPERATING OVER THE 2.0 TO 18.0 GHz FREQUENCY RANGE. OFFERING A TYPICAL GAIN OF 30 dB WHILE MAINTAINING ± 1.5 dB OF GAIN FLATNESS MAXIMUM, THIS MODEL IS SUPPLIED IN OUR PE2 HOUSING THAT CAN BE USED AS AN SMA CONNECTORIZED OR SURFACE MOUNTED COMPONENT. OTHER CONNECTOR TYPES ARE AVAILABLE.



September 9, 2016

**Designed By: PMI Engineering
Tested & Reported By: PMI Engineering**



**TYPICAL CHARACTERISTICS
ON
PE2-30-2R018R0-4R5-22-12-SFF**

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TYPICAL CHARACTERISTICS ON PE2-30-2R018R0-4R5-22-12-SFF

DESCRIPTION

PMI MODEL: PE2-30-2R018R0-4R5-22-12-SFF IS A LOW NOISE AMPLIFIER DESIGNED FOR MILITARY AND INDUSTRIAL APPLICATIONS. THIS AMPLIFIER IS SUPPLIED IN OUR PE2 HOUSING THAT CAN BE USED AS AN SMA CONNECTORIZED OR SURFACE MOUNTED COMPONENT. OTHER PACKAGES AND CONNECTOR TYPES ARE AVAILABLE. DATA IS AVAILABLE UPON REQUEST.

SPECIFICATIONS

- FREQUENCY RANGE: 2.0 TO 18.0 GHz
- GAIN: 30 dB TYPICAL
- GAIN FLATNESS: ±1.5 dB MAXIMUM
- NOISE FIGURE: 4.5 dB TYPICAL
- OP1dB: +20 dBm MINIMUM
- VSWR (INPUT/OUTPUT): 2.0:1 MAXIMUM
- DC VOLTAGE SUPPLY: +12 TO +15 VDC
- DC CURRENT DRAW: 325 mA MAXIMUM
- CONNECTORS: SMA FEMALE (X2)
- FINISH: GOLD PLATED

FEATURES

- INTERNAL VOLTAGE REGULATION
- UNCONDITIONAL STABILITY
- STANDARD OPERATING TEMPERATURE (-20 °C TO +70 °C)

AVAILABLE OPTIONS

- VARIOUS PACKAGE TYPES
- VARIOUS CONNECTOR TYPES
- TEMPERATURE COMPENSATION
- HERMETIC SEALING
- GAIN AND PHASE MATCHING
- MIL-STD-883 SCREENING AVAILABLE

ENVIRONMENTAL RATINGS

- TEMPERATURE: -20 °C TO +70 °C (OPERATING)
-55 °C TO +85 °C (AVAILABLE)
-65 °C TO +125 °C (STORAGE)
- HUMIDITY: MIL-STD-202, METHOD 103B COND. B
- SHOCK: MIL-STD-202, METHOD 213B COND. B
- ALTITUDE: MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202, METHOD 107D COND. A

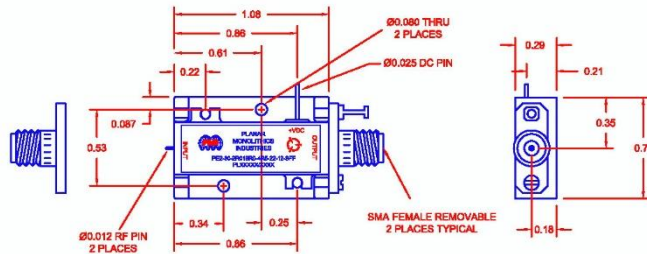
NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ±0.010
X.XXX ±0.005

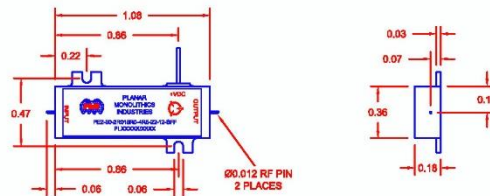
PMI CONFIDENTIAL AND PROPRIETARY

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	ORIGINAL RELEASE	09/12/16	

PE2 HOUSING WITH CARRIER



PE2 HOUSING WITHOUT CARRIER (SURFACE MOUNT)



PLANAR MONOLITHICS INDUSTRIES, INC.
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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		REV.
DRAWN	<i>K. Mason</i>	08/21/08	PRODUCT FEATURE		
UPDATED	<i>M. Berry</i>	09/12/16	PE2-30-2R018R0-4R5-22-12-SFF		
ISSUED			2.0 to 18.0 GHz Low Noise Amplifier		
			SIZE	FROM NO.	DWG NO.
			A	05XQ0	27006762
			SCALE: N:S		SHEET 1 OF 1



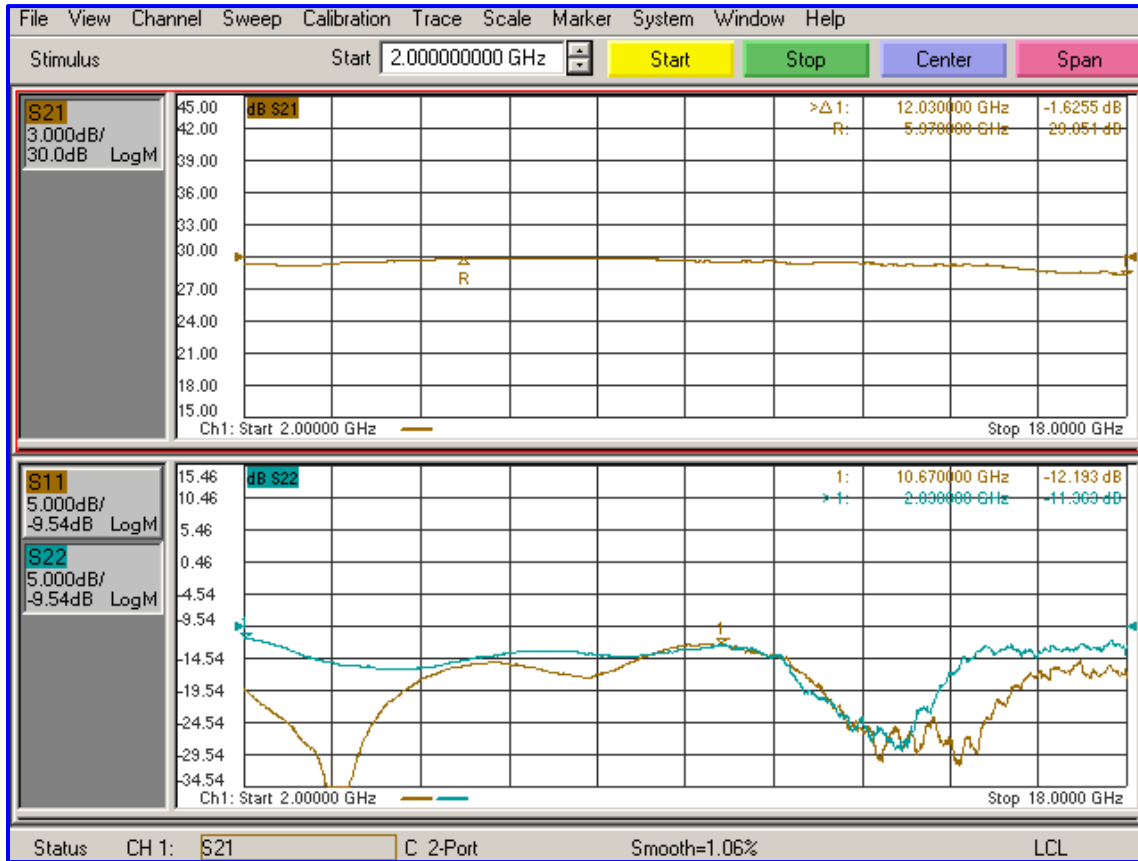
**TYPICAL CHARACTERISTICS
ON
PE2-30-2R018R0-4R5-22-12-SFF**

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	Frequency Range	2.0 to 18.0 GHz	Pass (See Plot)	
2	Gain	30 dB Typ	Pass (See Plot)	
3	Flatness	±1.5 dB Max	±0.81dB	
4	Noise Figure	4.5 dB Typ	Pass (See Plot)	
5	Pout @ 1dB Compression	+22 dBm Min	≥ +22dBm	
6	VSWR	Input: 2.0:1 Max Output: 2.0:1 Max	Pass (See Plot)	
7	DC Supply	+12 to +15 VDC @ 325 mA Max	309mA	



TYPICAL CHARACTERISTICS ON PE2-30-2R018R0-4R5-22-12-SFF

VNA Plot





**TYPICAL CHARACTERISTICS
ON
PE2-30-2R018R0-4R5-22-12-SFF**

Noise Figure Plot

