



1.2 dB NF, 10 dBm P1dB, 2.6 GHz to 3.1 GHz, Input
Protected Low Noise Amplifier, 30 dB Gain, SMA

TECHNICAL DATA SHEET

PE15A63008

PE15A63008 is a Input Protected Low Noise RF coaxial amplifier operating in the 2.6 GHz to 3.1 GHz frequency range. The amplifier offers 1.2 dB typical noise figure, 10 dBm typical P1dB and high 30 dB small signal gain with gain flatness of ± 1 dB typical. The low noise amplifier requires typically a 12V DC power supply. The connectorized SMA module is unconditionally stable and includes built-in voltage regulation. This low noise amplifier requires only a single positive supply, is unconditionally stable and operates over the temperature range of -40°C and 75°C .

Features

- 2.6 GHz to 3.1 GHz Frequency Range
- P1dB: 10 dBm
- High Small Signal Gain: 30 dB typical
- Gain Flatness: ± 1 dB
- Gain Variance: ± 1 dB
- Noise Figure: 1.2 dB typ
- 50 Ohm Input and Output Matched
- -40 to 75°C Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply
- Built-in Voltage Regulator

Applications

- Laboratory Applications
- R&D Labs
- Radar Systems
- Test Instrumentation
- Communication Systems
- Low Noise Amplifier
- General Purpose Amplification
- Wideband Gain Block
- IF Amplifier/RF Driver Amplifier
- RF Wideband Front Ends
- Fixed and Land Mobile

Electrical Specifications (TA = $+25^{\circ}\text{C}$, DC Voltage = 12Vdc, DC Current = 120mA)

Description	Minimum	Typical	Maximum	Units
Frequency Range	2.6		3.1	GHz
Small Signal Gain		30		dB
Gain Flatness		± 1		dB
Gain Variance at OTR*		± 1		dB
Output at 1 dB Compression Point	+10			dBm
Noise Figure		1.2	1.6	dB
Input VSWR		1.5:1	1.7:1	
Output VSWR		1.5:1	1.8:1	
Spurious			-60	dBc
Input Power (CW)			+30	dBm
Operating DC Voltage		12		Volts
Operating DC Current		120		mA
Operating Temperature Range	-40		+75	$^{\circ}\text{C}$

*OTR= Base Plate Operating Temperature Range

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.2 dB NF, 10 dBm P1dB, 2.6 GHz to 3.1 GHz, Input Protected Low Noise Amplifier, 30 dB Gain, SMA PE15A63008](#)



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Mechanical Specifications

Size

Length	1.7 in [43.18 mm]
Width	0.95 in [24.13 mm]
Height	0.4 in [10.16 mm]
Weight	0.062 lbs [28.12 g]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature

Operating Range	-40 to +75 deg C
Storage Range	-45 to +125 deg C

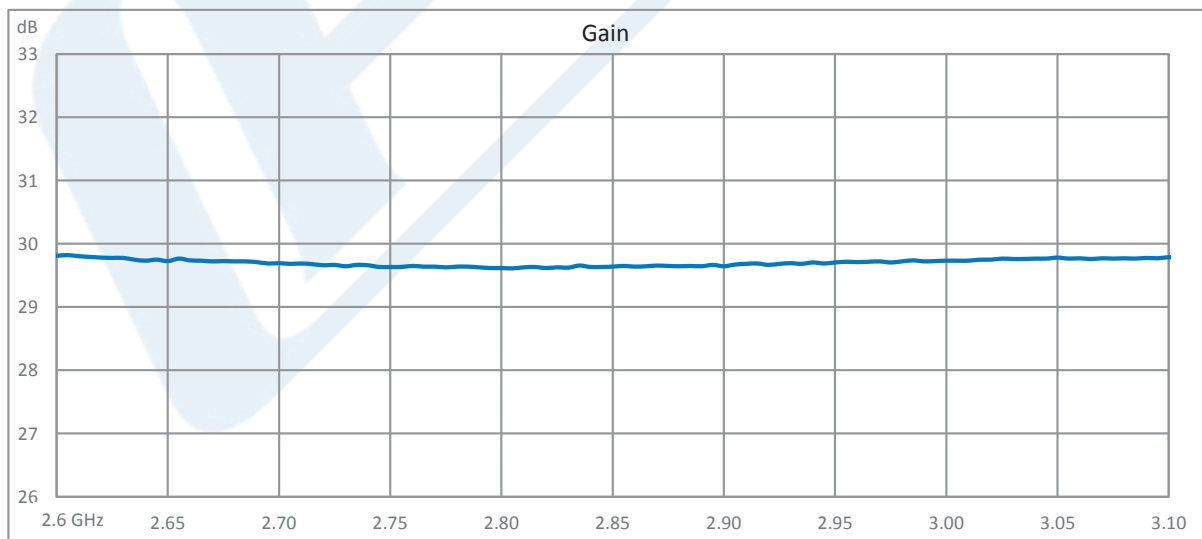
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

- Values at +25 °C, sea level

Typical Performance Data



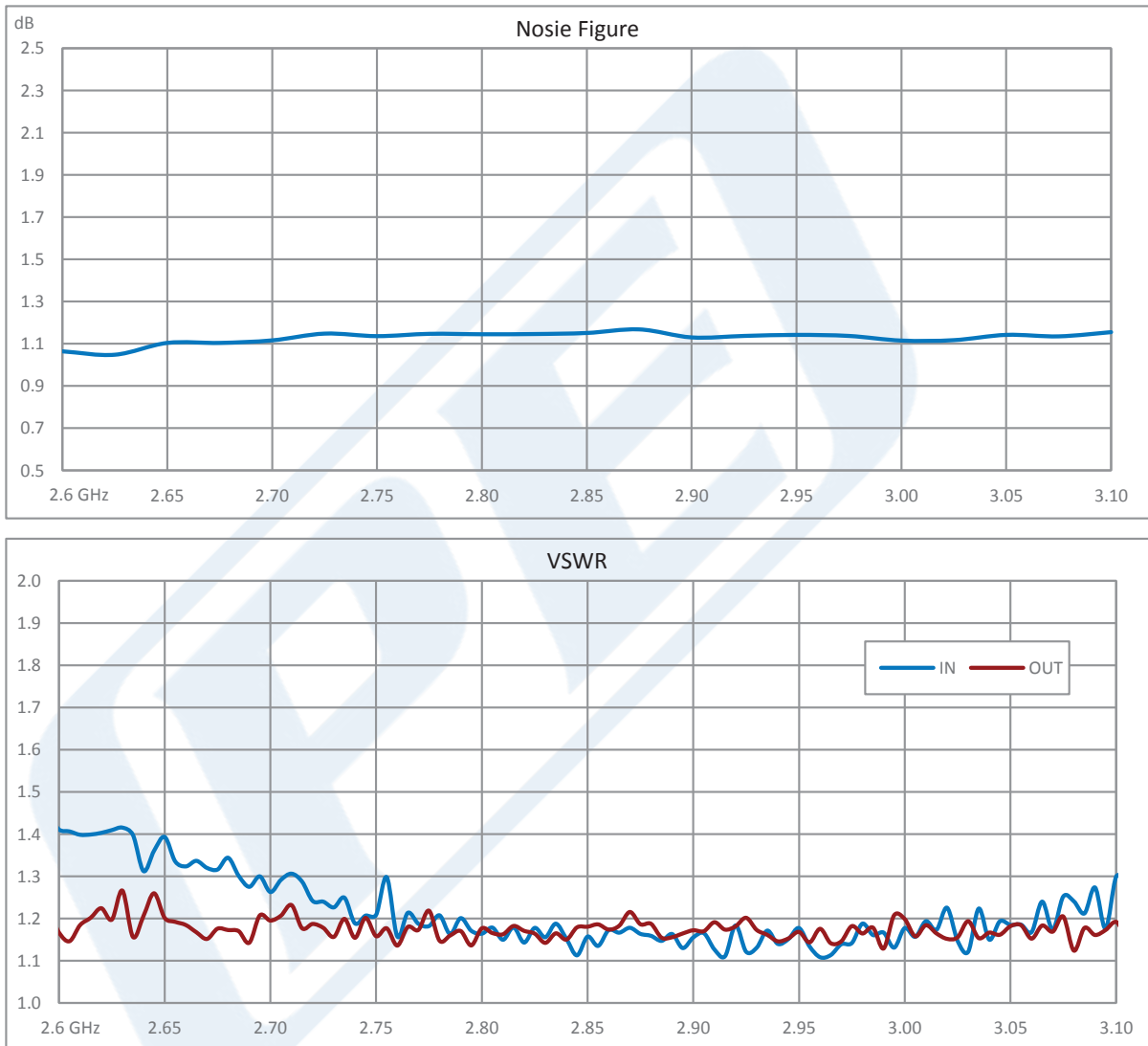
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1.2 dB NF, 10 dBm P1dB, 2.6 GHz to 3.1 GHz, Input Protected Low Noise Amplifier, 30 dB Gain, SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

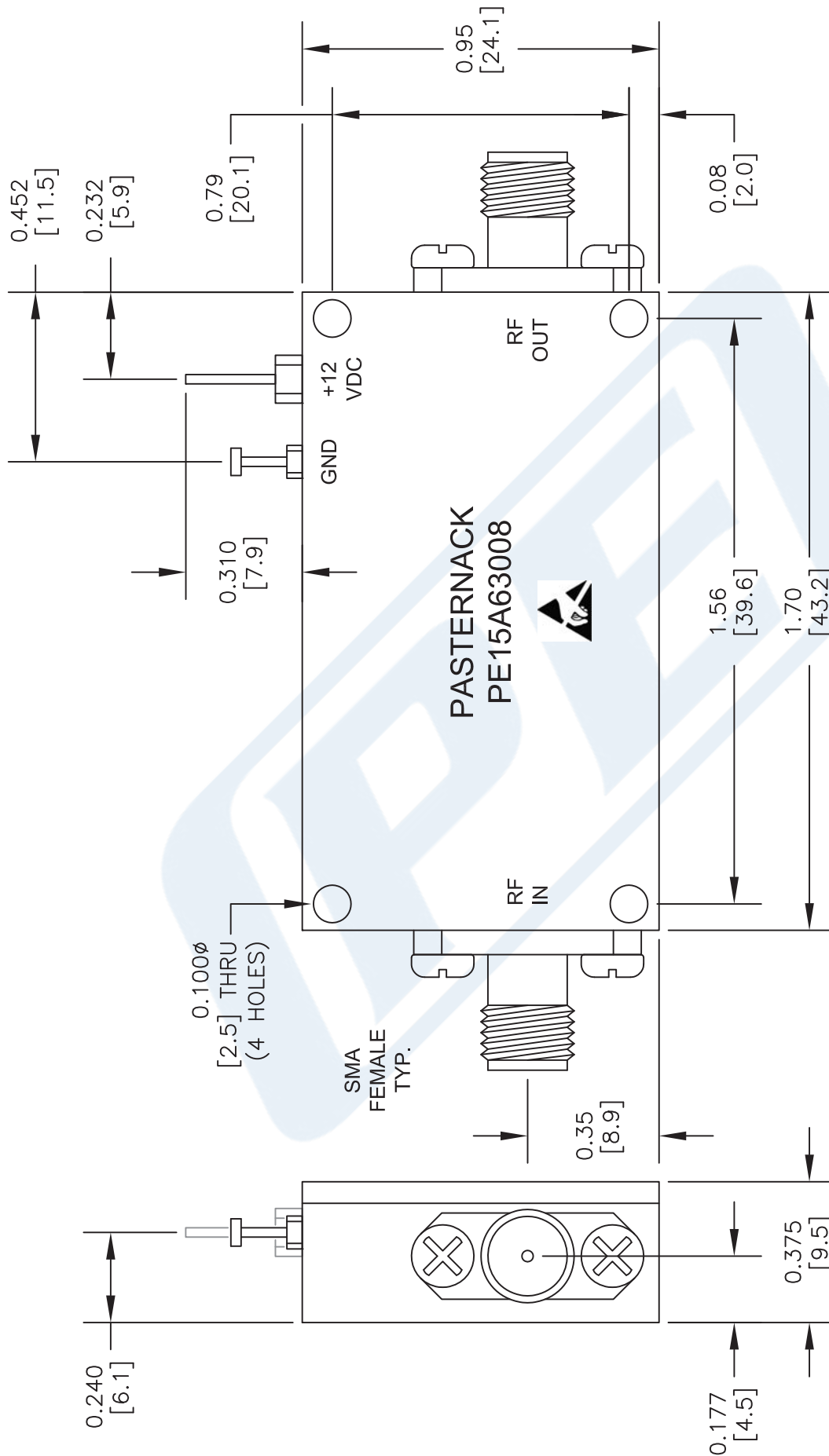
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

PE15A63008 CAD Drawing

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DWG TITLE

PE15A63008

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

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FSCM NO. 53919

CAD FILE 071916

SCALE N/A

SIZE A

2233