



40 dB Gain, 0.7 dB NF, 12 dBm P1dB, 1.2 GHz to 1.6 GHz, Low Noise Amplifier, SMA

TECHNICAL DATA SHEET **PE15A1028**

PE15A1028 is a wideband low noise RF coaxial power amplifier operating in the 1.2 GHz to 1.6 GHz frequency range. The amplifier offers 0.7 dB noise figure typical, 12 dBm of P1dB and 40 dB small signal gain with gain flatness of ± 0.5 dB. The low noise amplifier requires typically a +12V DC power supply and is unconditionally stable. The amplifier operates over the temperature range of -40°C and +85°C.

Features

- 1.2 GHz to 1.6 GHz Frequency Range
- Noise Figure: 0.7 dB typ
- P1dB: 12 dBm
- Flat Small Signal Gain: 40 dB
- Gain Flatness: ± 0.5 dB
- 50 Ohm Input and Output Matched
- -40 to 85°C Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply
- Built-in Voltage Regulator

Applications

- Laboratory Applications
- R&D Labs
- Radar Systems
- Telecom Infrastructure
- Test Instrumentation
- Military & Space
- Communication Systems
- Microwave Radio Systems
- Satellite Communications
- Low Noise Amplifier
- General Purpose Amplification
- Gain Block

Electrical Specifications (TA = +25°C, DC Voltage = 12Vdc, DC Current = 100mA)

Description	Minimum	Typical	Maximum	Units
Frequency Range	1.2		1.6	GHz
Small Signal Gain	38	40	42	dB
Gain Flatness		± 0.5	± 0.75	dB
Gain Variance at OTR*			± 1	dB
Output at 1 dB Compression Point		+12		dBm
Noise Figure			0.8	dB
Input VSWR		1.35:1	1.5:1	
Output VSWR		1.35:1	1.5:1	
Reverse Isolation		60		dB
Spurious			60	dBc
Operating DC Voltage	10	12	15	Volts
Operating DC Current	80	100	120	mA
Operating Temperature Range	-40		+85	°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: [40 dB Gain, 0.7 dB NF, 12 dBm P1dB, 1.2 GHz to 1.6 GHz, Low Noise Amplifier, SMA PE15A1028](#)



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Mechanical Specifications

Size

Length	1.5 in [38.1 mm]
Width	0.85 in [21.59 mm]
Height	0.375 in [9.53 mm]
Weight	0.05 lbs [22.68 g]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Storage Range	-55 to +125 deg C

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

Plotted and Other Data

Notes:

- Values at +25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.

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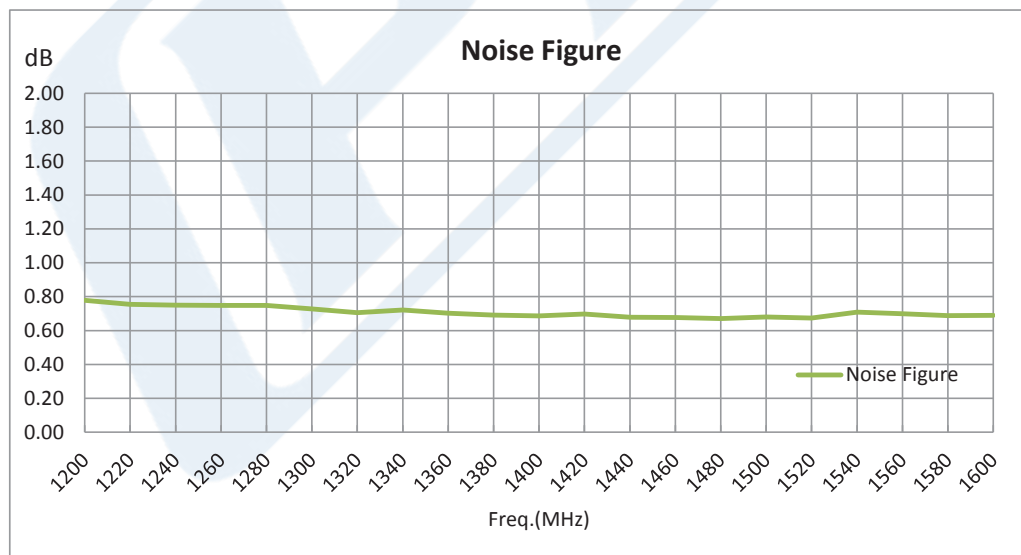
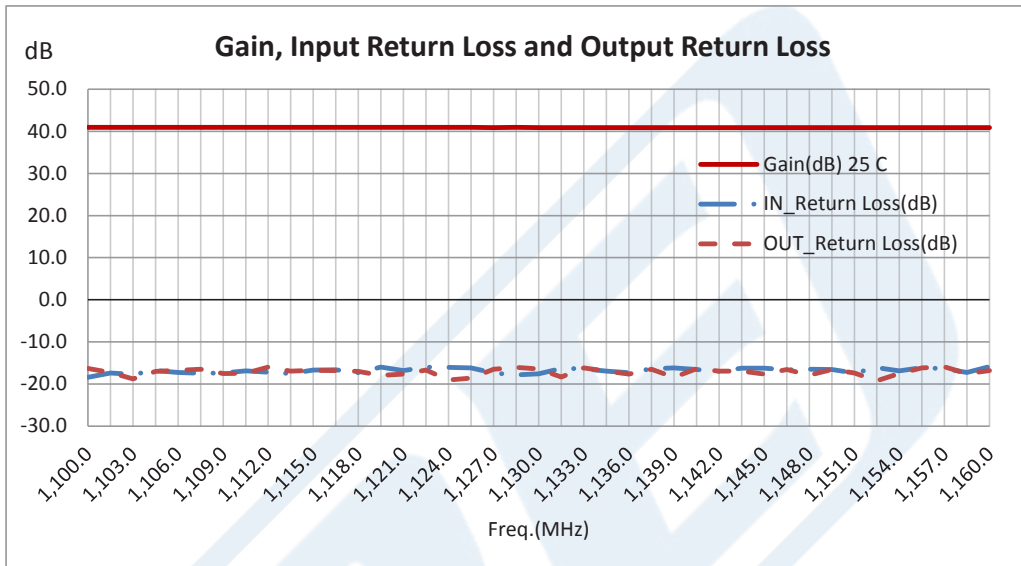


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Typical Performance Data



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40 dB Gain, 0.7 dB NF, 12 dBm P1dB, 1.2 GHz to 1.6 GHz, Low Noise Amplifier, 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.

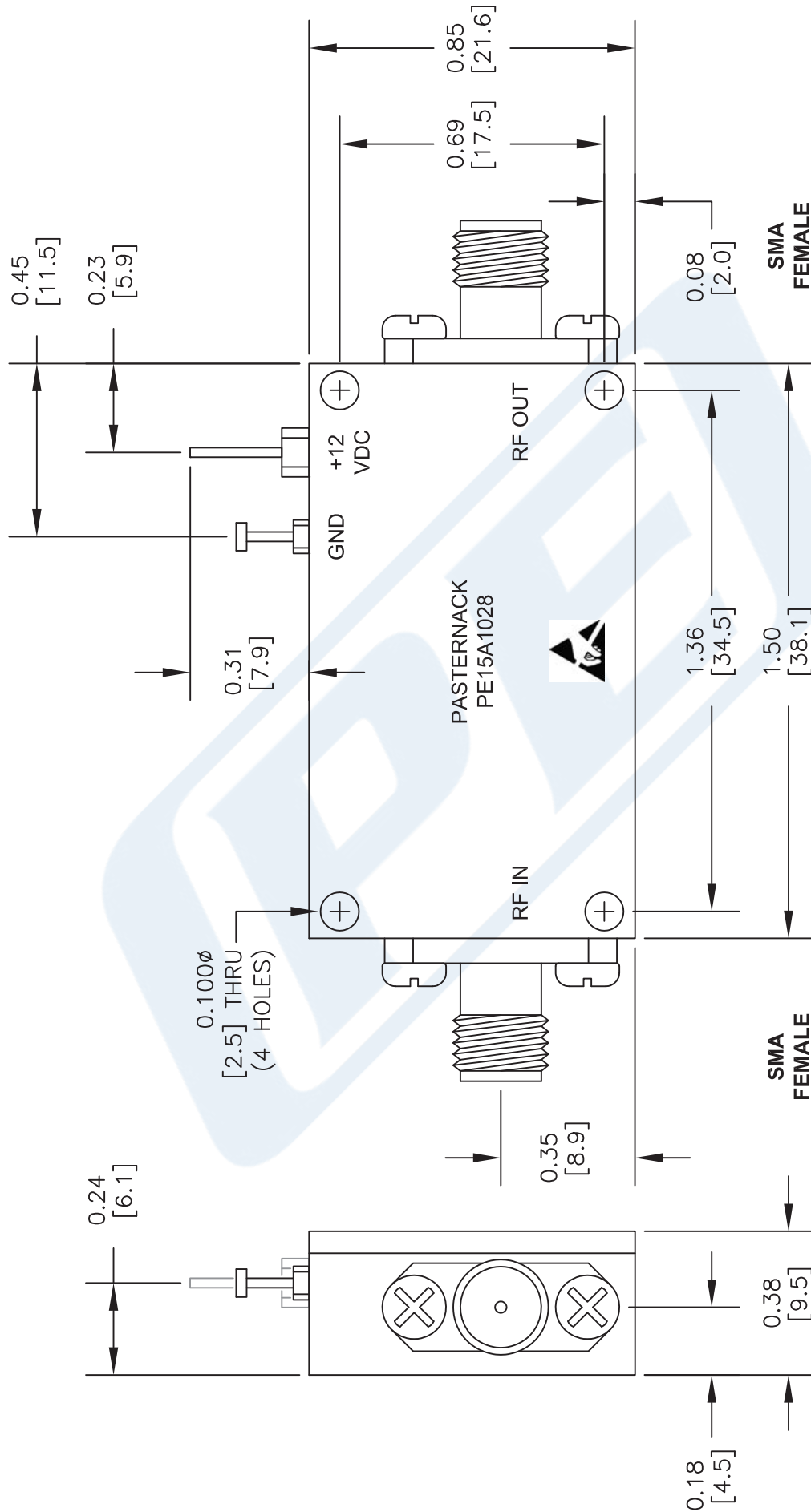
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

PE15A1028 CAD Drawing

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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].

DWG TITLE
PE15A1028

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FSCM NO. 53919

CAD FILE 051515

SCALE N/A

SIZE A

2233