



3 dB NF, 13 dBm, 12 GHz to 18 GHz Low Noise Amplifier, 38 dB Gain, SMA

PE15A1004 is a Ku-band coaxial low noise amplifier operating noise figure, 13 dBm minimum of saturated power and high 3 of  $\pm 1.0$  dB max. This technical performance is achieved through devices. The low noise amplifier requires typically a +12V DC stable and includes built-in voltage regulation, bias sequence operates over the temperature range of  $-40^{\circ}\text{C}$  and  $+85^{\circ}\text{C}$ .

**Features**

- 12 GHz to 18 GHz Frequency Range to  $85^{\circ}\text{C}$  Operating
- Psat: 13 dBm min
- High Small Signal Gain: 38 dB
- Gain Flatness:  $\pm 1.0$  dB max
- Noise Figure: 3 dB
- 50 Ohm Input and Output Matched
- Unconditionally Stable
- Regulated Supply & Bias Sequence
- Hermetically Sealed Module
- Overvoltage External Protection

**Applications**

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

Electrical Specifications: DC Voltage = 12 Volts, DC Current

Description	Minimum	Typical	Maximum	Units
Frequency Range	12		18	GHz
Small Signal Gain	38			dB
Gain Flatness			$\pm 1$	dB
Minimum Psat	+13			dBm
Noise Figure		3		dB
Input VSWR			2:1	
Output VSWR			2:1	
Operating DC Voltage	11	12	13	Volts
Operating DC Current			300	mA
Operating Temperature Range			+85	$^{\circ}\text{C}$

Click the following link (or enter part number in "SEARCH" inventory and [3 dB NF, 13 dBm, 12 GHz to 18 GHz, PE15A1004](#) noise



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**Absolute Maximum Rating**

Parameter	Rating	Units
Source Voltage	+15	Volts
RF input Power	+17	dBm
Operating Temperature (base-plate)	-40 to +85	°C
Storage Temperature	-55 to +85	°C



ESD Sensitive Material,  
Transport material in  
Approved ESD bags.  
Handle only in approved  
ESD Workstation.

Compliance Certificate available on [www.pasternack.com](http://www.pasternack.com) for current documents  
RoHS Compliant

**Plotted and Other Data**

Notes:

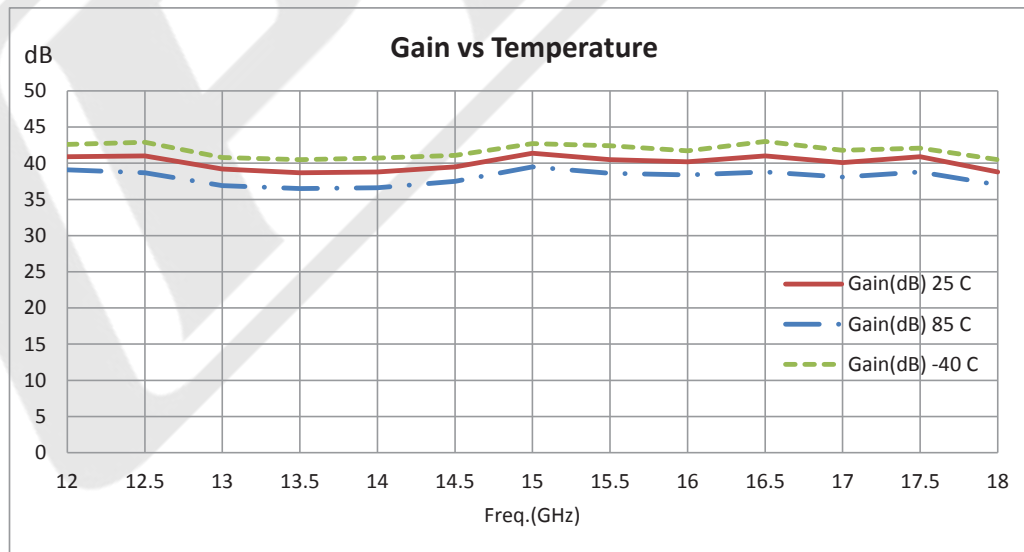
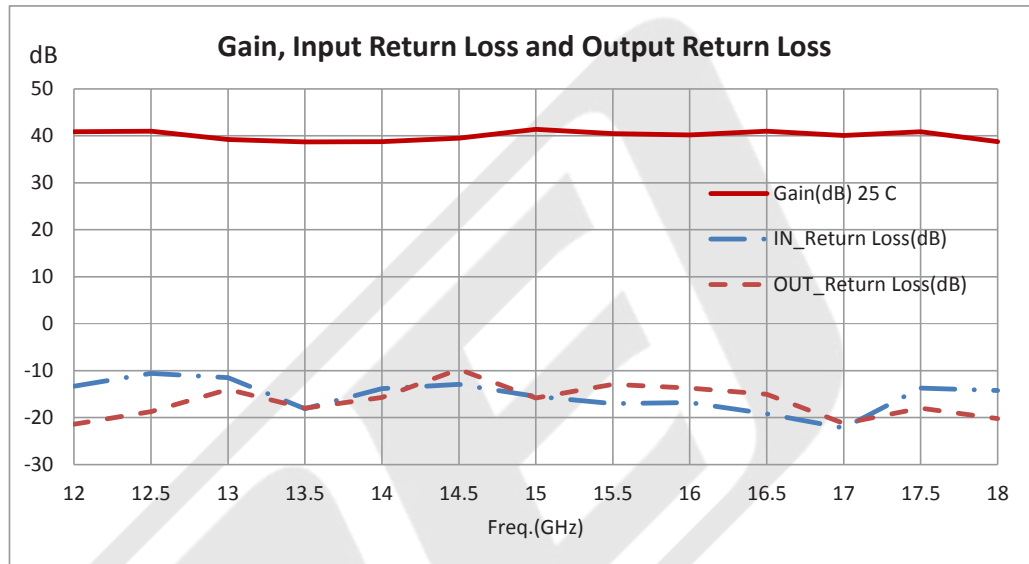
- Values at +25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags.

Click the following link (or enter part number in "SEARCH" field) to view product details and inventory and [3 dB NF, 13 dBm, 12 GHz to 18 GHz, PE15A1004 Low Noise Amplifier](#)



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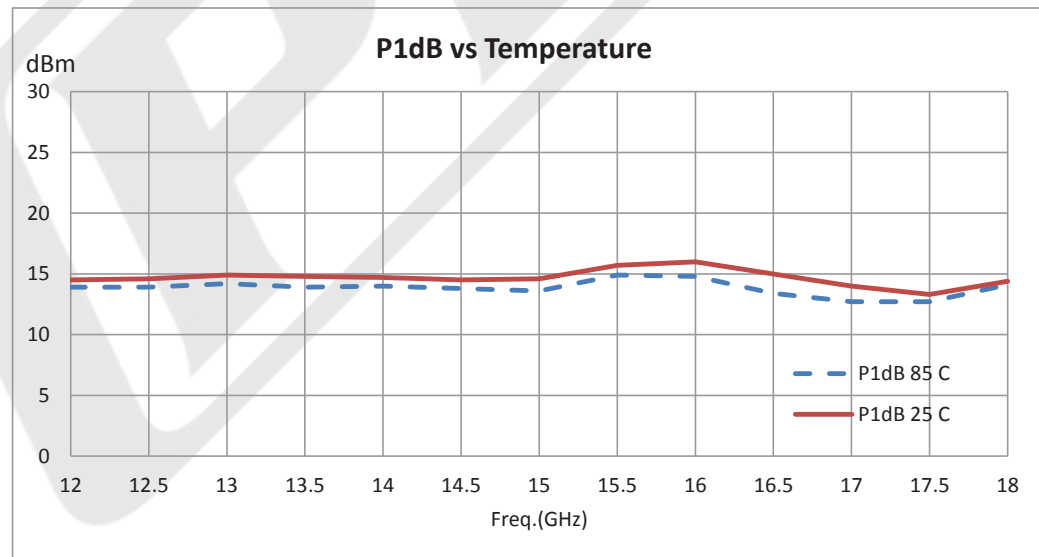
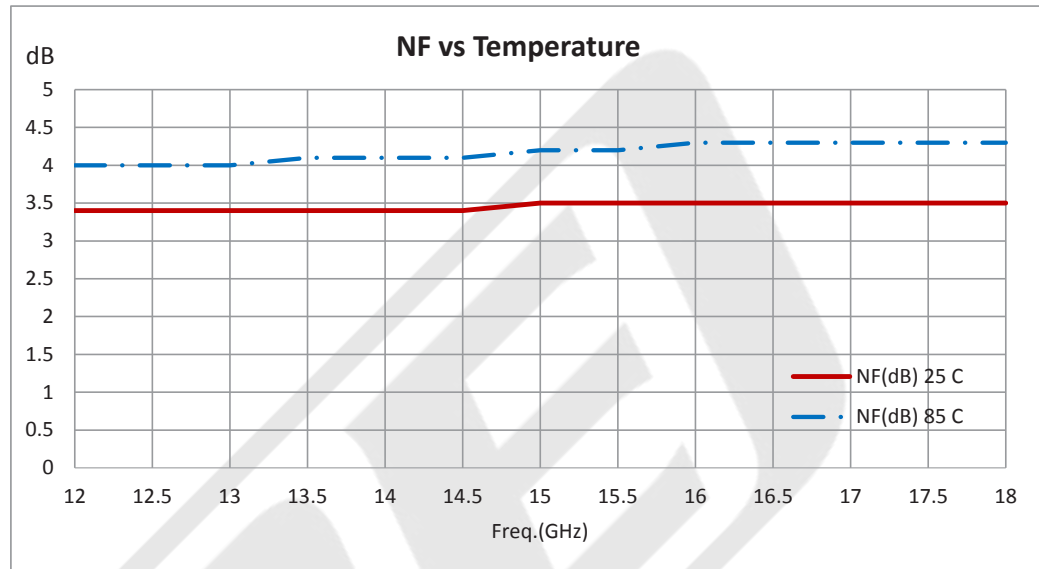
**Power Data**



Click the following link (or enter part number in "SEARCH" field) to view product details, inventory and pricing: [3 dB NF, 13 dBm, 12 GHz to 18 GHz, PE15A1004 Low Noise Amplifier](#)



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Click the following link (or enter part number in "SEARCH" field) to view product details, specifications, and pricing: [PE15A1004](#)



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3 dB NF, 13 dBm, 12 GHz to 18 GHz, Low Noise Amplifier, 38 dB Gain, SMA connectors, 12 GHz to 18 GHz, PE15A1004. Shipping for domestic and international orders. Our RF, microwave, and are part of the broadest selection in the industry.

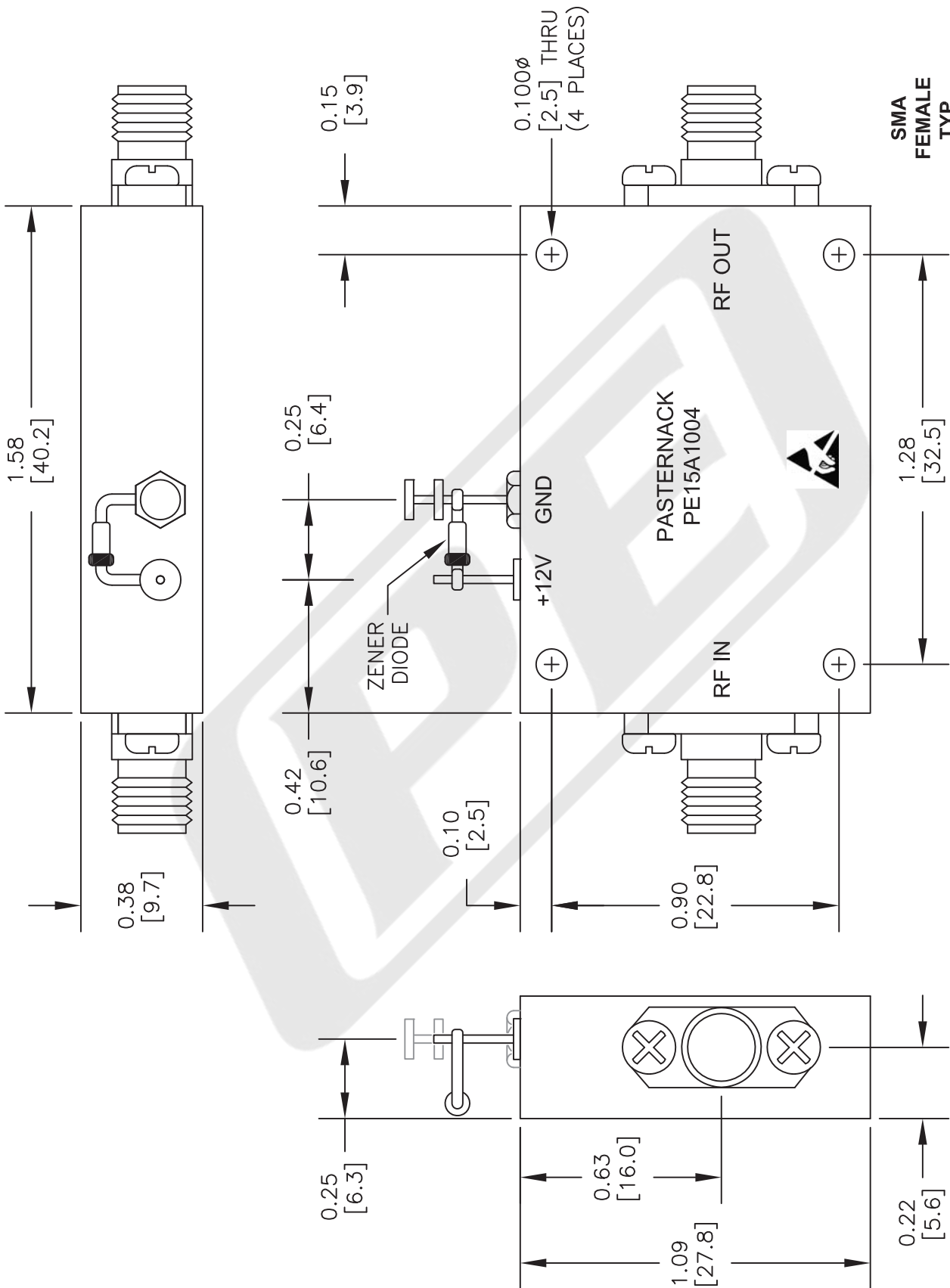
Click the following link (or enter part number in "SEARCH" field) to view the product page in our inventory and <http://www.pasternack.com/3-dB-12-GHz-to-18-GHz-Low-Noise-Amplifier>

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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.

# PE15A1004 CAD Drawing

3 dB NF, 13 dBm, 12 GHz to 18 GHz, Low Noise



DWG TITLE

**PE15A1004**

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].

FSCM NO. 53919

CAD FILE 042514

SCALE N/A

SIZE A

2233



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