



2.2 dB NF, 20 mW, 8 GHz to 12 GHz, Low Noise Amplifier, 38 dB Gain, SMA

PE151003 is a X-band coaxial low noise amplifier operating noise figure, 13 dBm minimum of saturated power and high 3 of ±1.0dB max. This exceptional technical performance is GaAs PHEMT devices. The low noise amplifier requires typical is unconditionally stable and includes built-in voltage r reliability. The amplifier operates over the temperature r

**Features**

- 8 GHz to 12 GHz Frequency Range
- Psat: 13 dBm min
- High Small Signal Gain: 38 dB
- Gain Flatness: ±1.0 dB max
- Noise Figure: 2.2 dB
- 50 Ohms Input and Output Matched
- Unconditionally Stable
- Regulated Supply & Bias Sequence
- Hermetically Sealed Module
- Overvoltage External Protection

**Applications**

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

Electrical Specifications: DC Voltage = 12Volts, DC Current

Description	Minimum	Typical	Maximum	Units
Frequency Range	8		12	GHz
Small Signal Gain	38			dB
Minimum Psat	+13			dBm
Noise Figure		2.2		dB
Input VSWR			2:1	
Output VSWR			2:1	
Operating DC Voltage	11	12	13	Volts
Operating DC Current			250	mA
Operating Temperature Range			+85	°C

Click the following link (or enter part number in "SEARCH inventory and 2.2 dB NF at 20 mW, 8 GHz to 12 GHz, PE15A1003



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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:

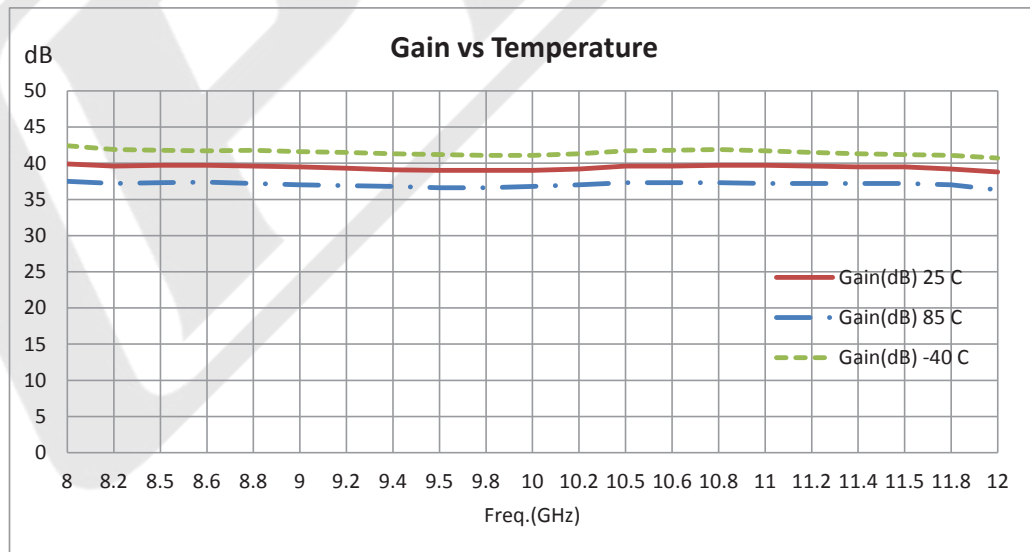
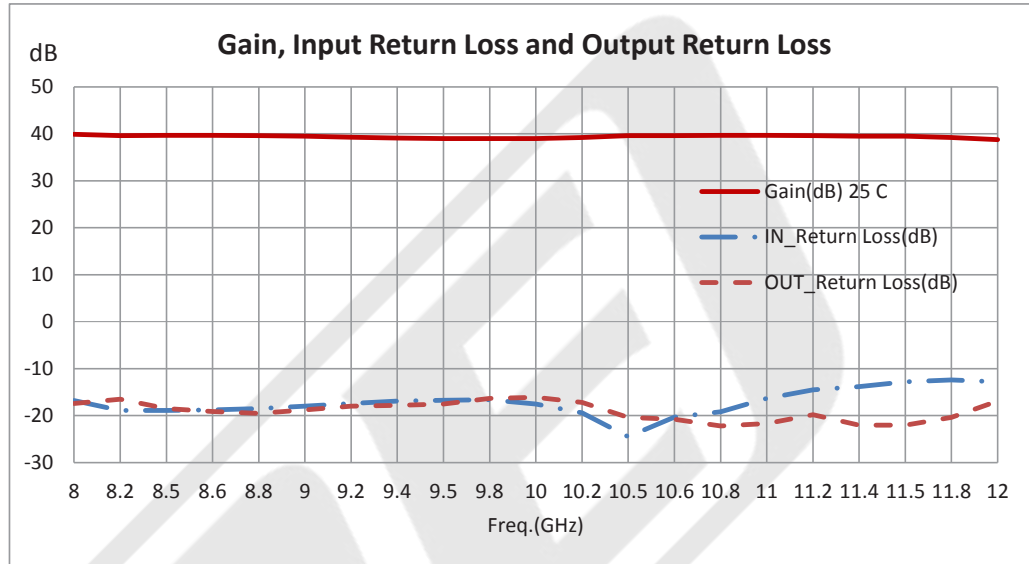
- Values at +25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags.

Click the following link (or enter part number in "SEARCH" field) to view the product page and check inventory and pricing: [www.pasternack.com/Products/RF-Amplifiers/2.2-dB-NF-at-20-mW-8-GHz-to-12-GHz-PE15A1003.aspx](http://www.pasternack.com/Products/RF-Amplifiers/2.2-dB-NF-at-20-mW-8-GHz-to-12-GHz-PE15A1003.aspx)



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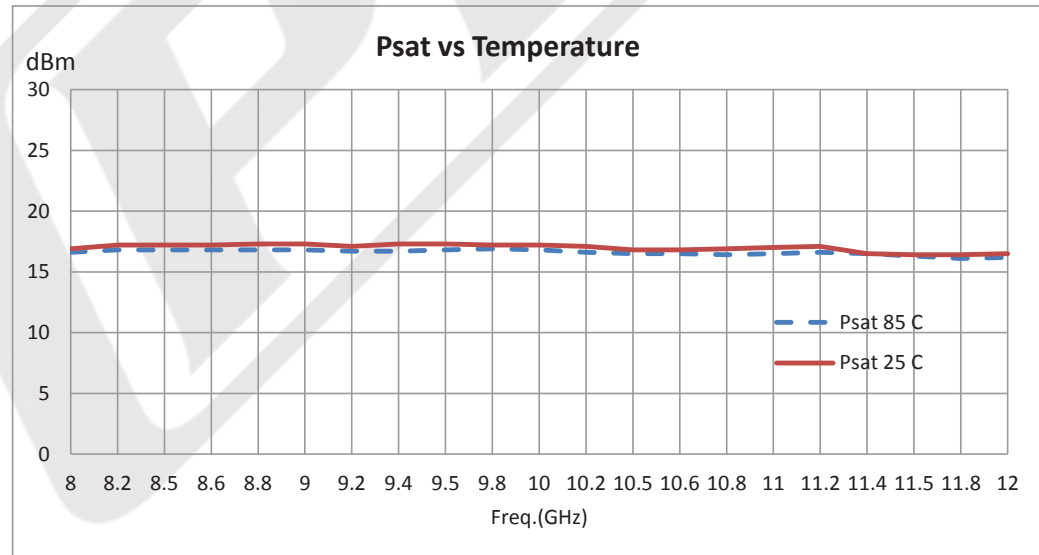
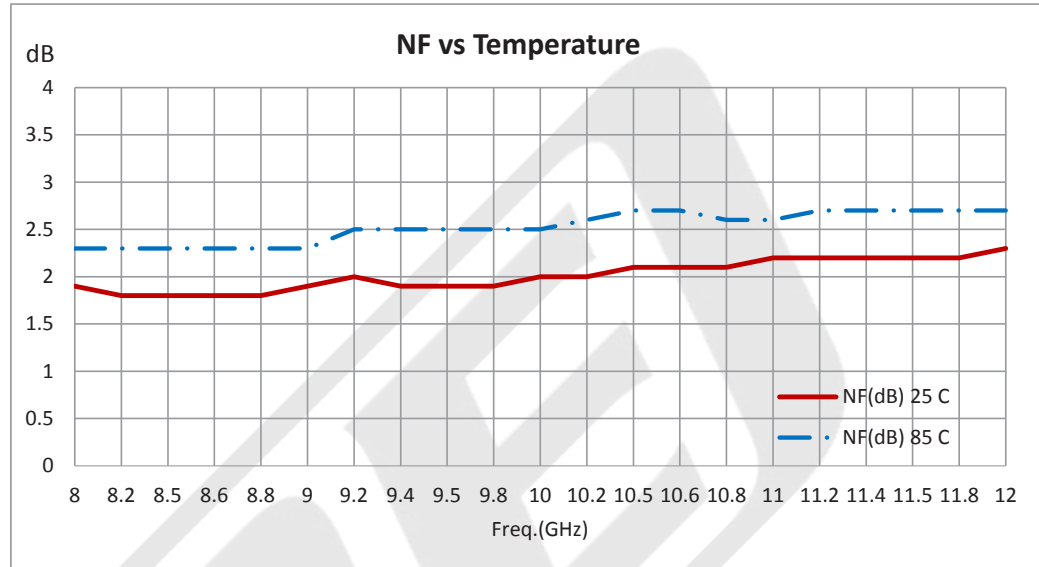
**Power Data**



Click the following link (or enter part number in "SEARCH inventory" and "2.2 dB NF at 20 mW, 8 GHz to 12 GHz, PE15A1003")



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Click the following link (or enter part number in "SEARCH inventory" and "Order") for more information: [PE15A1003](#)



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2.2 dB NF, 20 mW, 8 GHz to 12 GHz, Low Noise Amplifier, 38 dB Gain, SMA, 1000 pieces per shipment for domestic and International orders. Our RF, microwave, and are part of the broadest selection in the industry.

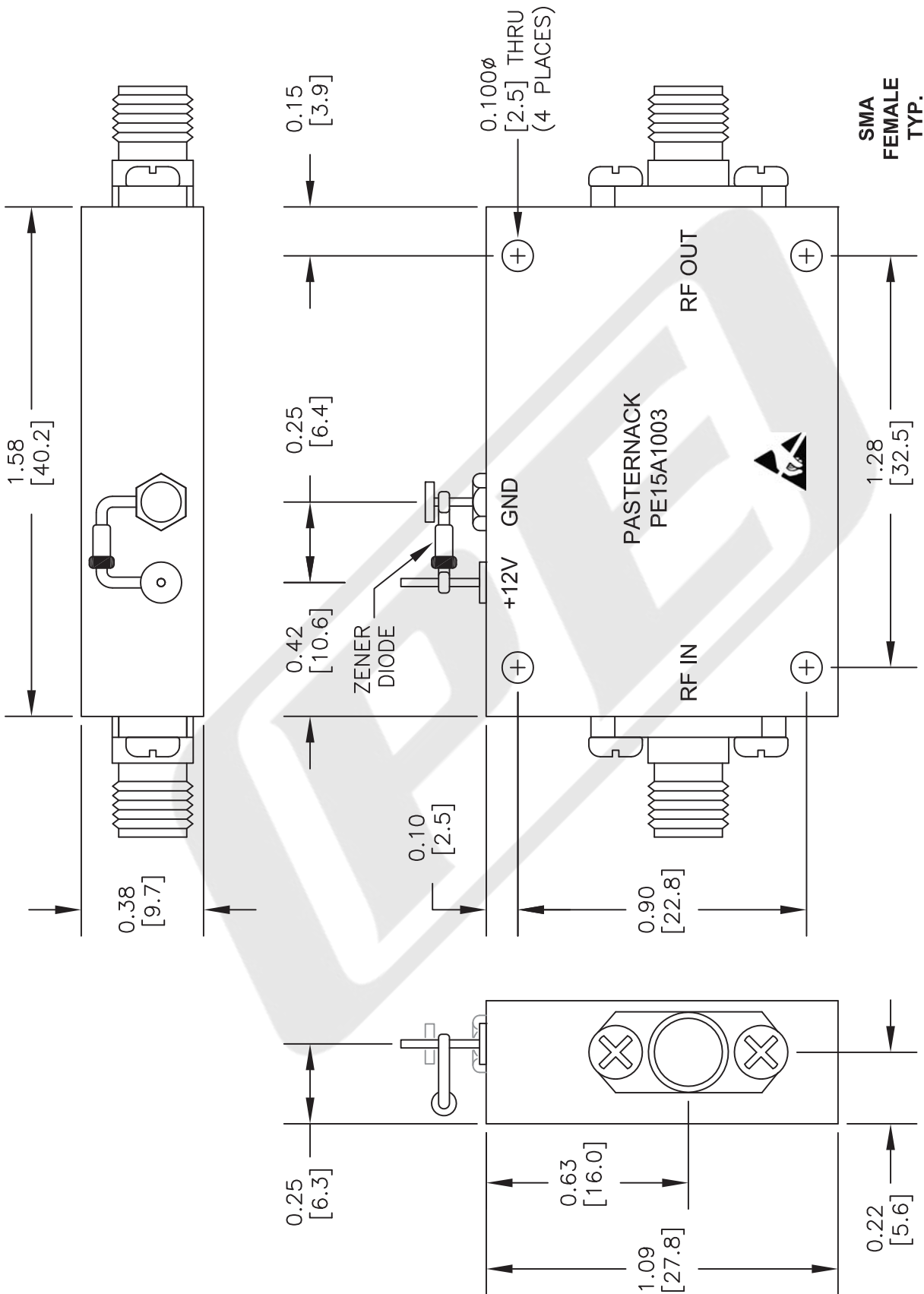
Click the following link (or enter part number in "SEARCH" field) to view product information and inventory and <http://www.pasternack.com/2.2-dB-12-GHz-PE15A1003-Low-Noise-Amplifier>

URL: <http://www.pasternack.com/2.2-dB-12-GHz-PE15A1003-Low-Noise-Amplifier>

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.

# PE15A1003 CAD Drawing

2.2 dB NF, 20 mW, 8 GHz to 12 GHz, Low Noise



DWG TITLE

**PE15A1003**

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 041414

SCALE N/A

SIZE A

2233



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