



1.4 dB NF, 11 dBm, 10 MHz to 3 GHz Low Noise Amplifier, 34 dB Gain, SMA

PE15A1009 is a wideband low noise RF coaxial power amplifier. This amplifier offers 1.4 dB noise figure, 11 dBm of P1dB and 34 dB max. This exceptional technical performance is achieved through advanced design techniques. The low noise amplifier requires typically a +12V DC supply, is stable and includes built-in voltage regulation, bias sequencing and overvoltage protection. It operates over the temperature range of -40°C and +85°C.

Features

- 10 MHz to 3 GHz Frequency Range
- P1dB: 11 dBm
- Flat Small Signal Gain: 34 dB
- Gain Flatness: ±0.75 dB
- Gain Variance over OTR: ±1.25 dB
- Noise Figure: 1.4 dB
- Reverse Isolation: 50 dB
- 50 Ohms Input and Output Match
- Operating Temperature Range: -40 to 85°C
- Unconditionally Stable
- Regulated Supply & Bias Sequencing
- Overvoltage Protection

Applications

- Laboratory Applications
- R&D Labs
- Military Radio
- Radar Systems
- Telecom Infrastructure
- Test Instrumentation
- Military & Space
- Communication Systems
- Wireless Communication
- Microwave Radio Systems
- Cellular Base Stations
- Low Noise Amplifier
- General Amplification
- General Purpose Wireless
- Wideband Gain Block
- Amplifier/RF Driver
- RF Front End
- RF Pre-amplification

Electrical Specifications: DC Voltage = 12 Volts, DC Current = 95 mA

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.01		3	GHz
Small Signal Gain	32.5	34	36.5	dB
Gain Flatness		±0.75	±1	dB
Gain Variance at OTR*		±1.25		dB
Output at 1 dB Compression Point		+11		dBm
Noise Figure		1.4	1.65	dB
Input VSWR		1.4:1	1.6:1	
Output VSWR		1.4:1	1.6:1	
Reverse Isolation	40	50		dB
Operating DC Voltage	10	12	15	Volts
Operating DC Current	85	95	105	mA
Operating Temperature Range			+85	°C

* OTR= Base Plate Operating Temperature Range

Click the following link (or enter part number in "SEARCH" field) to view the product page: [Low Noise Amplifier, 10 MHz to 3 GHz, PE15A1009](#)



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Absolute Maximum Rating

Parameter	Rating	Units
Source Voltage	+15	Volts
RF input Power	+10	dBm
Operating Temperature (base-plate)	-40 to +85	°C
Storage Temperature	-55 to +125	°C



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

Compliance Certificate available at www.pasternack.com for current documents
RoHS Compliant

Plotted and Other Data

Notes:

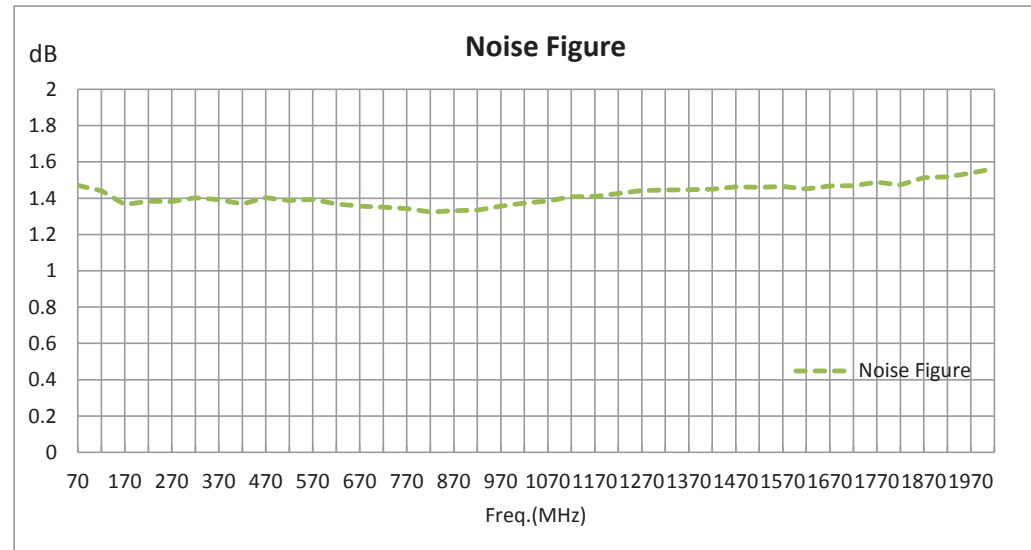
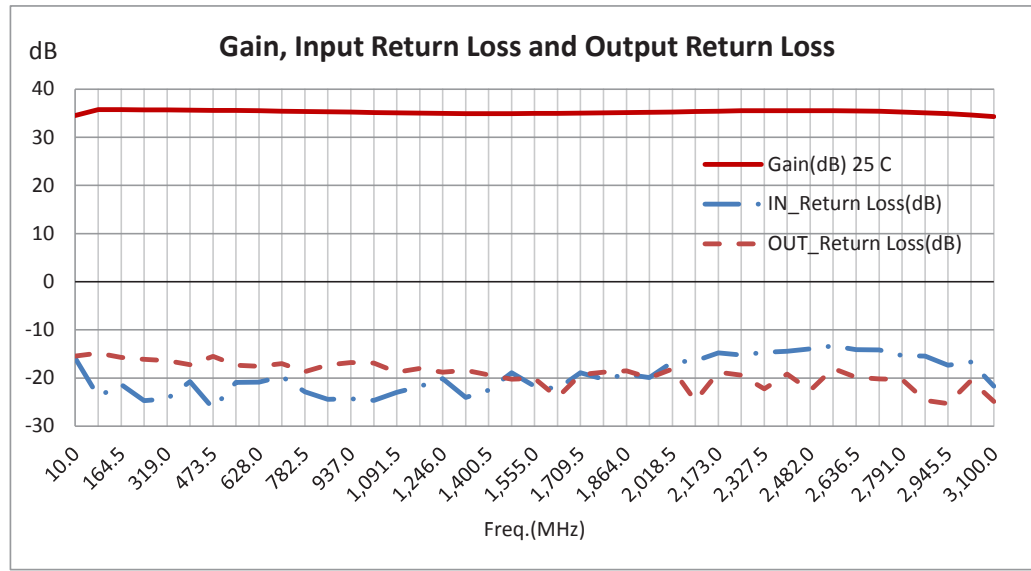
- Values at +25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags.

Click the following link (or enter part number in "SEARCH" field) to view product details and inventory: [1.4 dB NF, 11 dBm, 10 MHz to 3 GHz, PE15A1009 Low Noise Amplifier](#)



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Power Data



Click the following link (or enter part number in "SEARCH inventory" and click on "Part Number") to view the [PE15A1009](#) Low Noise Amplifier, 11 dBm, 10 MHz to 3 GHz, 1.4 dB NF, 34 dB Gain, SMA



1.4 dB NF, 11 dBm, 10 MHz to 3 GHz Low Noise Amplifier, 34 dB Gain, SMA

1.4 dB NF, 11 dBm, 10 MHz to 3 GHz, Low Noise Amplifier, 34 dB Gain, SMA connectors, and are part of the broadest selection in the industry.

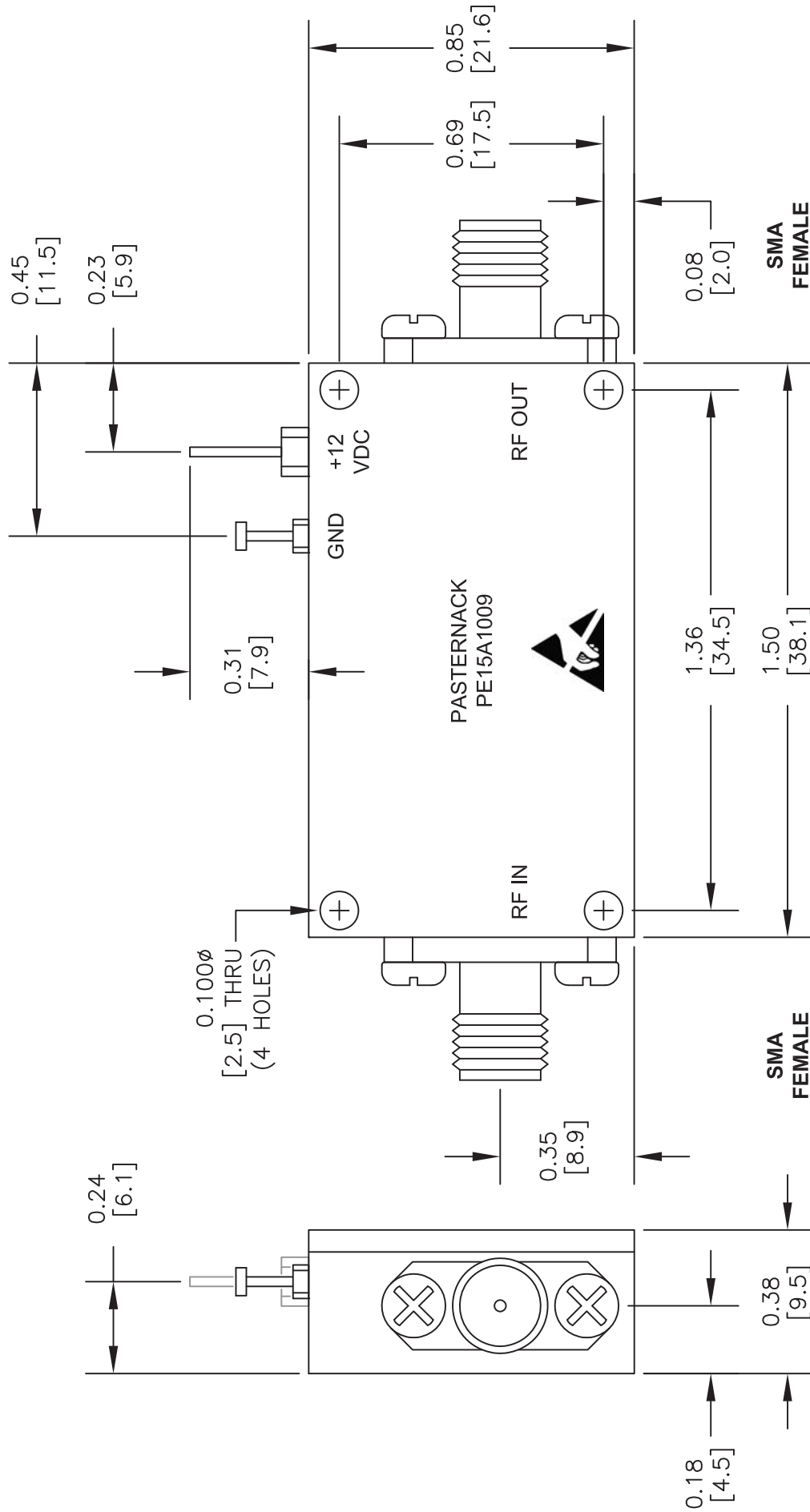
Click the following link (or enter part number in "SEARCH" field) to view product details and availability in our inventory and to place an order: <http://www.pasternack.com/1.4-dB-3-GHz-Low-Noise-Amplifier-34-dB-Gain-SMA>

URL: <http://www.pasternack.com/1.4-dB-3-GHz-Low-Noise-Amplifier-34-dB-Gain-SMA>

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.

PE15A1009 CAD Drawing

1.4 dB NF, 11 dBm, 10 MHz to 3 GHz, Low Noise



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
PE15A1009

FSCM NO. 53919

CAD FILE 021714

SCALE N/A

SIZE A

2233

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