



5.5 dB NF, 10 dBm P1dB, 18 GHz to 40 GHz, Low Noise Broadband Amplifier, 18 dB Gain, 2.4mm

TECHNICAL DATA SHEET

PE15A3268

The PE15A3268 is a broadband coaxial low noise amplifier, operating in the 18 to 40 GHz frequency range. The amplifier offers +10 dBm of P1dB minimum and 18-21 dB small signal gain, and ± 2.0 dB maximum gain flatness. This low noise amplifier requires only a single positive DC supply, in unconditionally stable, operates over the temperature range of -20°C to 85°C , and is Hermetically sealed. The Input/Output Connectors are 2.4mm Female.

Features

- 18 to 40 GHz Frequency Range
- P1dB: 10 dBm min
- Small Signal Gain: 18 dB min
- Gain Flatness: ± 2.0 dB max
- P1dB: 10 dBm min
- Noise Figure: 5.5 dB max
- 50 Ohm Input and Output Matched
- -20 to $+85^{\circ}\text{C}$ Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply
- Built-in DC Voltage Regulator
- Input/Output 2.4mm Female Connectors

Applications

- Laboratory Applications
- R&D Labs
- Test Instrumentation
- Military & Space
- Communication Systems
- Satellite Communications
- Wireless Communications
- Unmanned Systems
- Microwave Radio Systems
- Low Noise Amplifier
- General Purpose Amplification
- RF Front Ends

Electrical Specifications (TA = $+25^{\circ}\text{C}$, DC Voltage = 15Volts, DC Current = 250mA)

Description	Minimum	Typical	Maximum	Units
Frequency Range	18		40	GHz
Gain	18		21	dB
Gain Flatness			± 2	dB
Output at 1 dB Compression Point	+10			dBm
Noise Figure			5.5	dB
Input VSWR		2.5:1		
Output VSWR		2.5:1		
Operating DC Voltage	12		15	Volts
Operating DC Current			250	mA
Operating Temperature Range (OTR)	-20		+85	$^{\circ}\text{C}$

Mechanical Specifications

Size

Length	1 in [25.4 mm]
Width	1.75 in [44.45 mm]
Height	0.41 in [10.41 mm]
Input Connector	2.4mm
Output Connector	2.4mm

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [5.5 dB NF, 10 dBm P1dB, 18 GHz to 40 GHz, Low Noise Broadband Amplifier, 18 dB Gain, 2.4mm PE15A3268](#)



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Environmental Specifications

Temperature

Operating Range

-20 to +85 deg C

Storage Range

-55 to +85 deg C

Humidity

MIL-STD-810F, Up to 95%

Shock

MIL-STD-202G, Method 204 COND. C

Altitude

30,000 Feet

Compliance Certifications (visit www.Pasternack.com for current document)

Not RoHS Compliant

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.
- Heat Sink Required for Proper Operation, Unit is cooled by conduction to heat sink.



5.5 dB NF, 10 dBm P1dB, 18 GHz to 40 GHz, Low Noise Broadband Amplifier, 18 dB Gain, 2.4mm from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

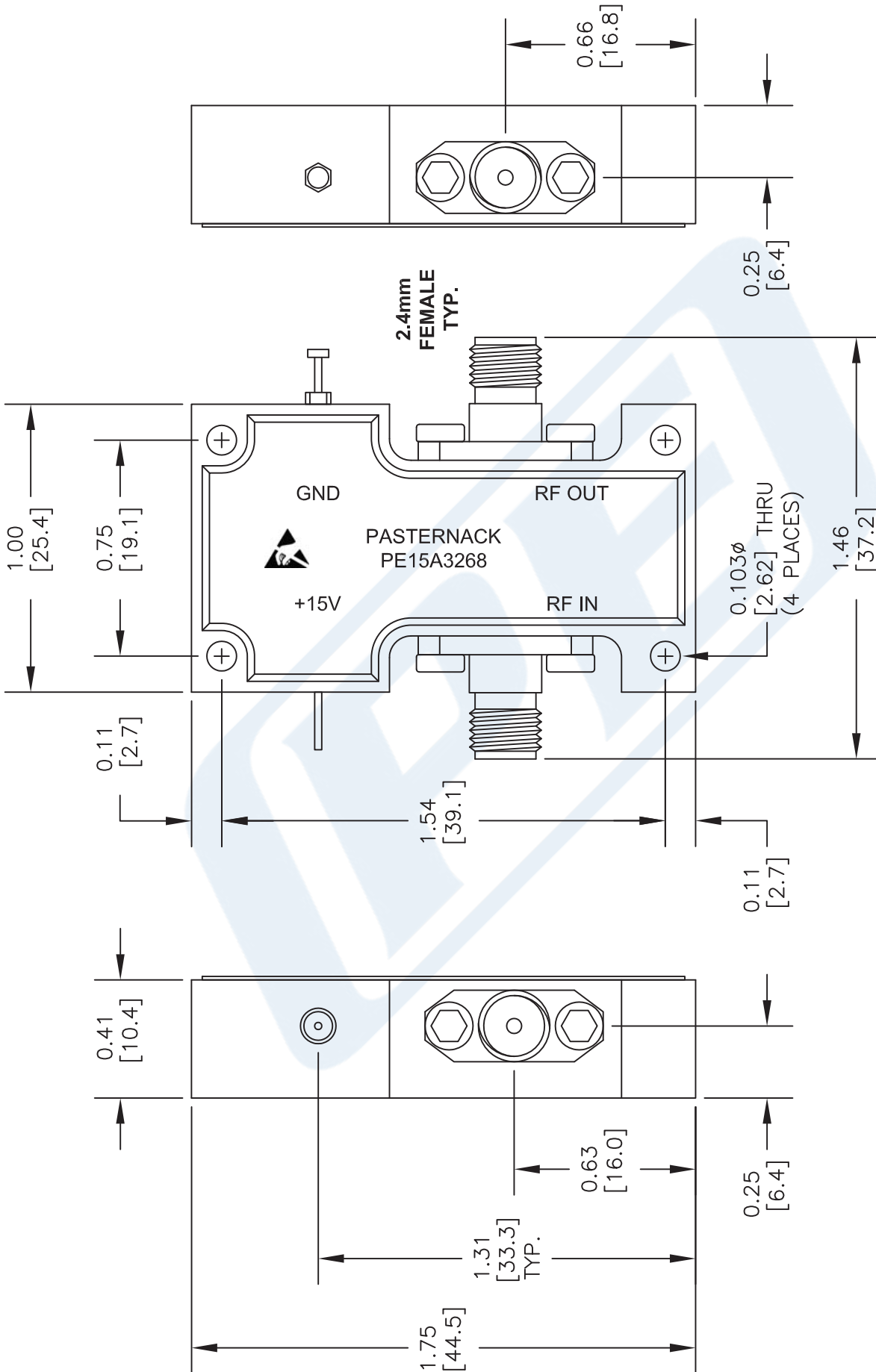
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements.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

PE15A3268 CAD Drawing

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Broadband Amplifier, 18 dB Gain, 2.4mm



NOTE:
HEAT SINK REQUIRED FOR PROPER OPERATION,
UNIT IS COOLED BY CONDUCTING TO HEAT SINK.

DWG TITLE

PE15A3268

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 080614

SCALE N/A

SIZE A

150