



20 dBm P1dB, 30 MHz to 40 GHz, Medium Power
Broadband Amplifier, 25 dB Gain, 6 dB NF, 2.92mm

TECHNICAL DATA SHEET

PE15A3023

The PE15A3023 is an ultra wideband general purpose coaxial amplifier, operating from 30 MHz to 40 GHz. The amplifier covers nearly from DC to L, S, C, X, Ku, K, and Ka band. Exceptional typical performance includes 25 dB gain, 6 dB noise figure, and +20 dBm P1dB. This low noise amplifier requires only a single positive DC supply, is unconditionally stable, and operates over the temperature range of -40°C to 70°C.

Features

- .03 to 40 GHz Frequency Range
- P1dB: +20 dBm typ
- Small Signal Gain: 25 dB typ
- Noise Figure: 6 dB typ
- 50 Ohm Input and Output Matched
- -40 to +70°C Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply
- Built-in DC Voltage Regulator
- Female 2.92mm Connectors

Applications

- Laboratory Applications
- R&D Labs
- Test Instrumentation
- Telecommunication
- EW Systems
- Fiber Optics
- Military and Space

Electrical Specifications (TA= 25°C, VDC = 10 Vdc)

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.03		40	GHz
Gain		25		dB
Gain Flatness		±2.5		dB
Output at 1 dB Compression Point	+12	+20		dBm
Noise Figure (> 200 MHz)		6	11	dB
Input Return Loss		10		dB
Output Return Loss		10		dB
Operating DC Voltage	8	10	12	Vdc
Operating DC Current		400		mA
Operating Temperature Range (OTR)	-40		+70	°C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [20 dBm P1dB, 30 MHz to 40 GHz, Medium Power Broadband Amplifier, 25 dB Gain, 6 dB NF, 2.92mm PE15A3023](#)



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Mechanical Specifications

Size

Length	2 in [50.8 mm]
Width	1.3 in [33.02 mm]
Height	0.6 in [15.24 mm]
Weight	0.115 lbs [52.16 g]
Input Connector	2.92mm Female
Output Connector	2.92mm Female

Environmental Specifications

Temperature

Operating Range	-40 to +70 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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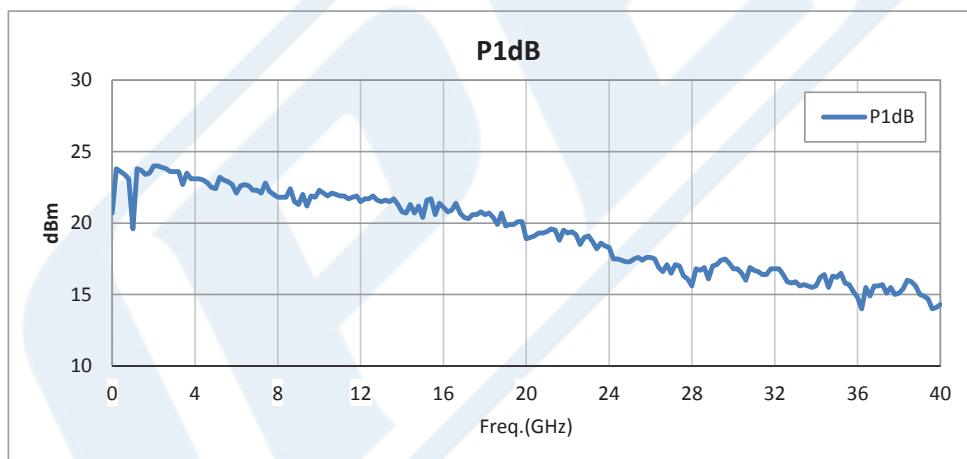
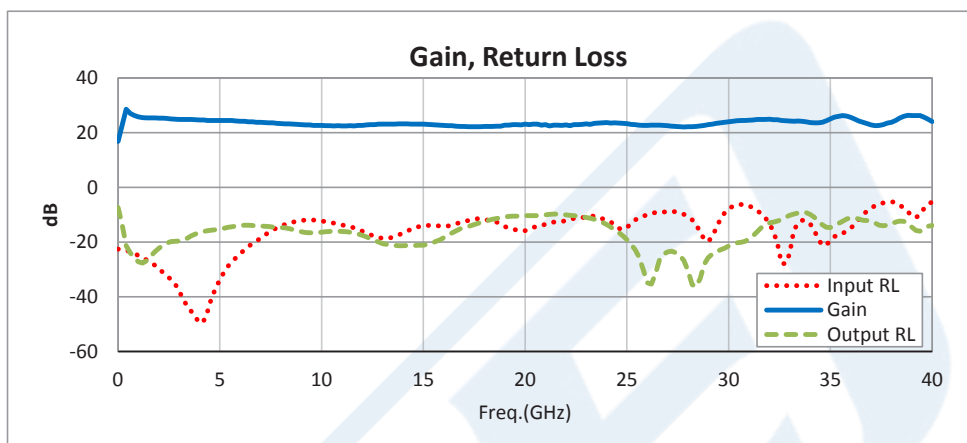


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Typical Performance Data



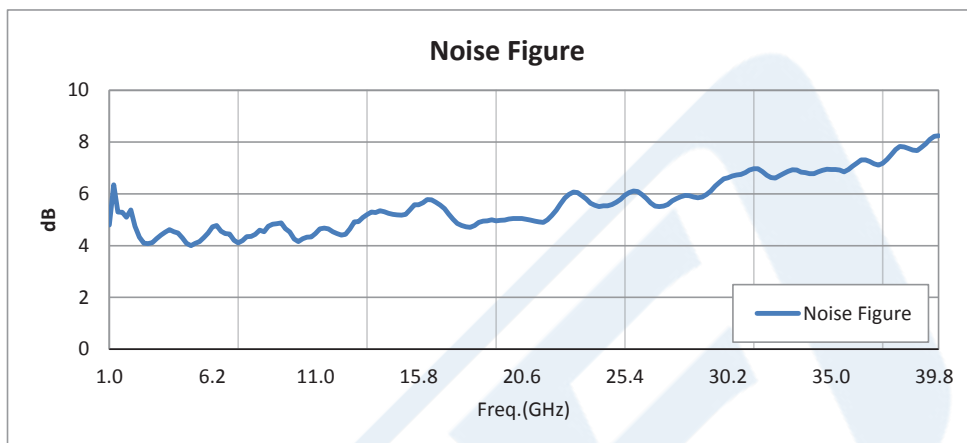
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20 dBm P1dB, 30 MHz to 40 GHz, Medium Power Broadband Amplifier, 25 dB Gain, 6 dB NF, 2.92mm from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [20 dBm P1dB, 30 MHz to 40 GHz, Medium Power Broadband Amplifier, 25 dB Gain, 6 dB NF, 2.92mm PE15A3023](https://www.pasternack.com/40-ghz-medium-power-broadband-amplifier-25-db-gain-6-db-2.92mm-pe15a3023-p.aspx)

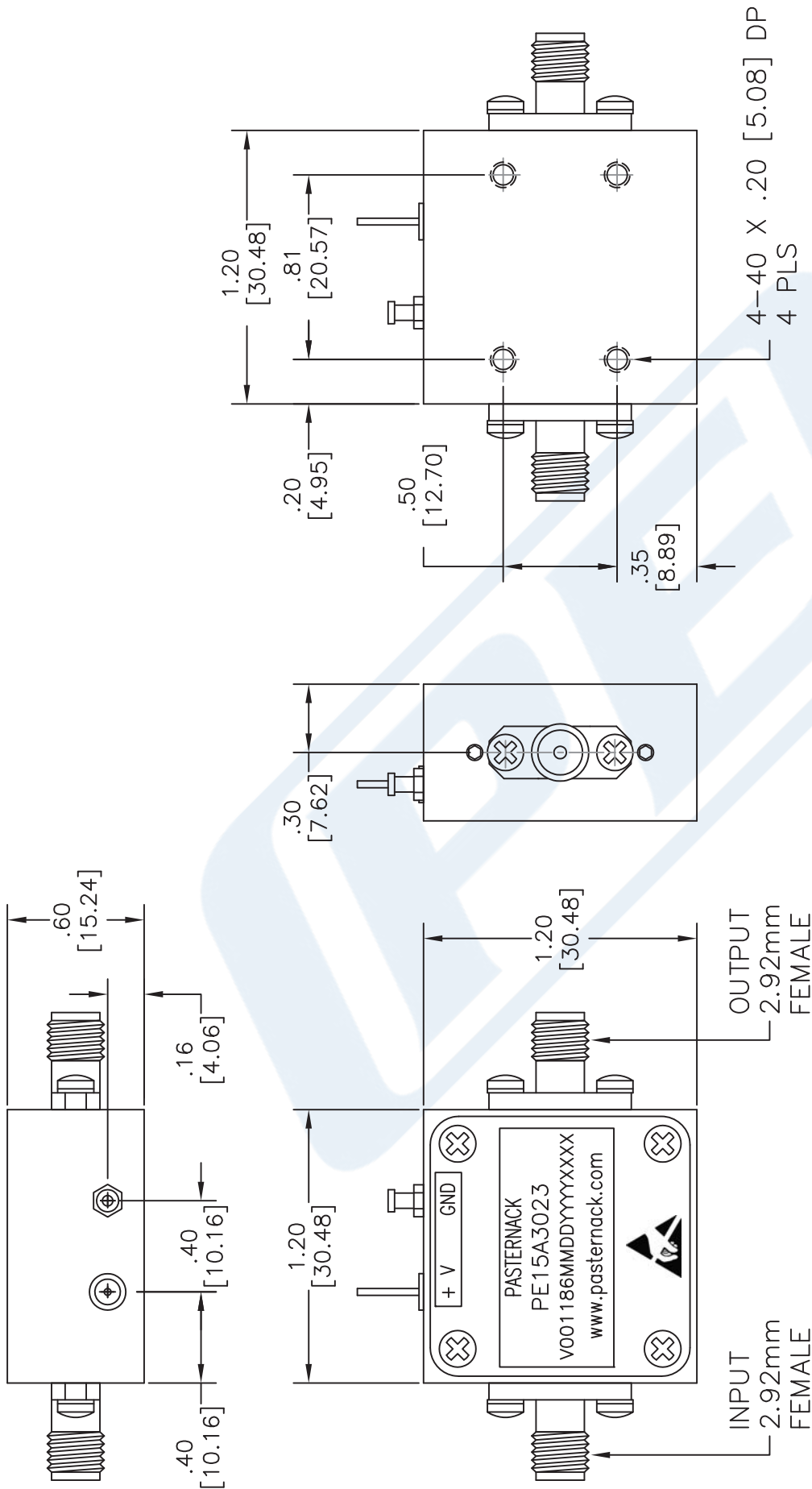
URL: <https://www.pasternack.com/40-ghz-medium-power-broadband-amplifier-25-db-gain-6-db-2.92mm-pe15a3023-p.aspx>

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.

PE15A3023 CAD Drawing

20 dBm P1dB, 30 MHz to 40 GHz, Medium Power Broadband

Amplifier, 25 dB Gain, 6 dB NF, 2.92mm



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN: inches [mm]

TOLERANCES ARE: .XX ± .01 [±.25]

.XX ± .001 [±.025]

* THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.

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

DWG TITLE

PE15A3023

PE PASTERNAK®
THE ENGINEER'S RF SOURCE

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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].
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

FSCM NO. 53919

CAD FILE 091515

SCALE N/A

SIZE A

2233