



40 dB Gain, 2.5 dB NF, 13 dBm P1dB, 18 GHz to 26.5 GHz,
Low Noise Broadband Amplifier, 22 dBm IP3, 2.92mm

TECHNICAL DATA SHEET

PE15A3260

PE15A3260 is a Broadband High Gain GaAs PHEMT MMIC-based coaxial Low Noise Amplifier, operating in the 18 to 26.5 GHz frequency range. The amplifier offers 2.5 dB Noise Figure, 13 dBm of P1dB and 40 dB small signal gain, with gain flatness of ± 2.0 dB, along with 22 dBm IP3 performance. This low noise amplifier requires only a single positive DC supply, is unconditionally stable, operates over the temperature range of -40°C to 85°C , and is characterized by light weight (25 g) and small size (1.5"x1.0"x0.4").

Features

- 18 to 26.5 GHz Frequency Range
- Noise Figure: 2.5 dB typ
- Small Signal Gain: 40 dB typ
- Gain Flatness: ± 2.0 dB typ
- Gain Variation Over the Temperature Range: ± 1.5 dB typ
- P1dB: +13 dBm typ
- IP3: +22 dBm typ
- 50 Ohm Input and Output Matched
- -40 to $+85^{\circ}\text{C}$ Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply
- Built-in DC Voltage Regulator
- Small Size & Light Weight

Applications

- Laboratory Applications
- R&D Labs
- Electronic Warfare
- Telecom Infrastructure
- 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°C, VDC1 = 12 Vdc)

Description	Minimum	Typical	Maximum	Units
Frequency Range	18		26.5	GHz
Gain	36	40	44	dB
Gain Flatness		± 2	± 2.5	dB
Gain Variation over OTR*		± 1.5		dB
Output at 1 dB Compression Point	+12	+13		dBm
Output 3 rd Intercept Point	+20	+22		dBm
Reverse Isolation	55	60		dB
Spurious		-60		dBc
Noise Figure		2.5	3.5	dB
Input VSWR		1.8:1	2.5:1	
Output VSWR		1.8:1	2.5:1	
Operating DC Voltage 1	10	12	15	Volts
Operating DC Current	130	150	175	mA

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [40 dB Gain, 2.5 dB NF, 13 dBm P1dB, 18 GHz to 26.5 GHz, Low Noise Broadband Amplifier, 22 dBm IP3, 2.92mm PE15A3260](#)



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Operating Temperature Range (OTR) -40 +85 °C

*OTR= Base Plate Operating Temperature Range

Absolute Maximum Rating

Parameter	Rating	Units
Source Voltage	+18	Volts
RF input Power	-5	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.

Mechanical Specifications

Size

Length	1.5 in [38.1 mm]
Width	1 in [25.4 mm]
Height	0.4 in [10.16 mm]
Weight	0.072 lbs [32.66 g]
Input Connector	2.92mm Female
Output Connector	2.92mm Female

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Storage Range	-45 to +125 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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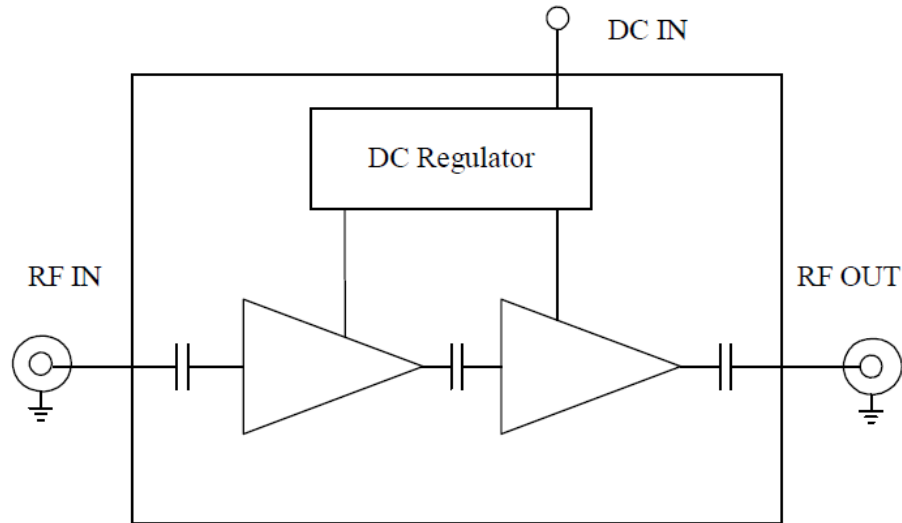


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Functional Block Diagram



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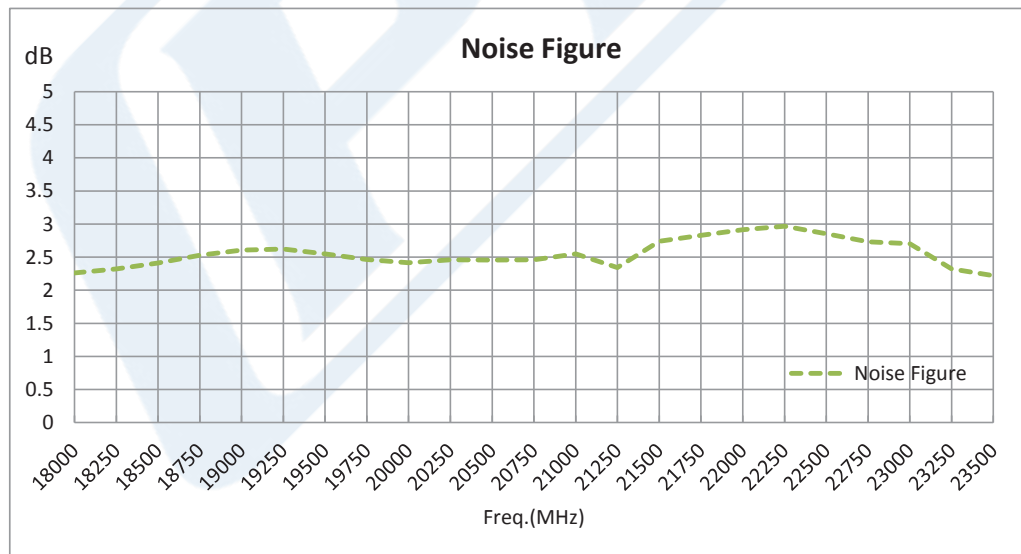
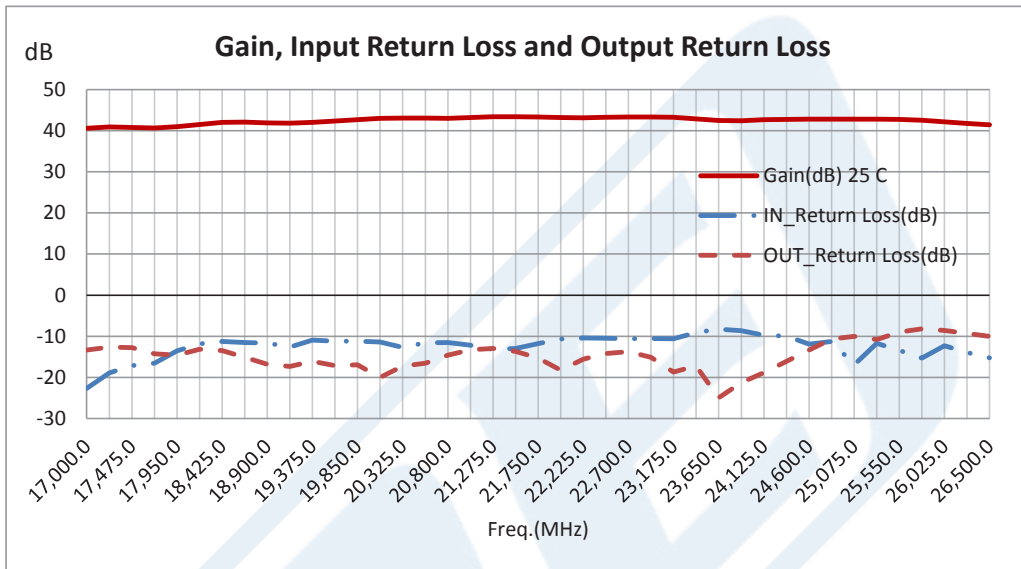


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Typical Performance Data



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40 dB Gain, 2.5 dB NF, 13 dBm P1dB, 18 GHz to 26.5 GHz, Low Noise Broadband Amplifier, 22 dBm IP3, 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.

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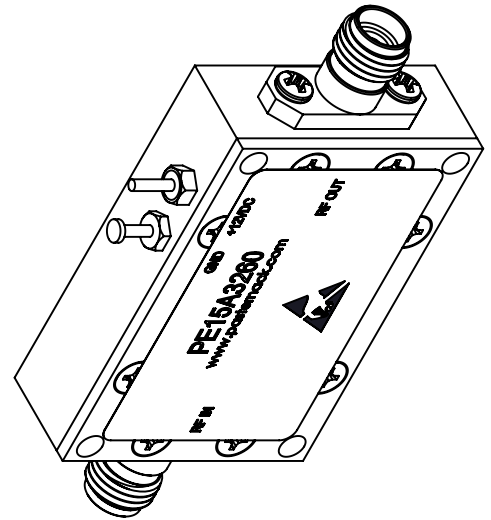
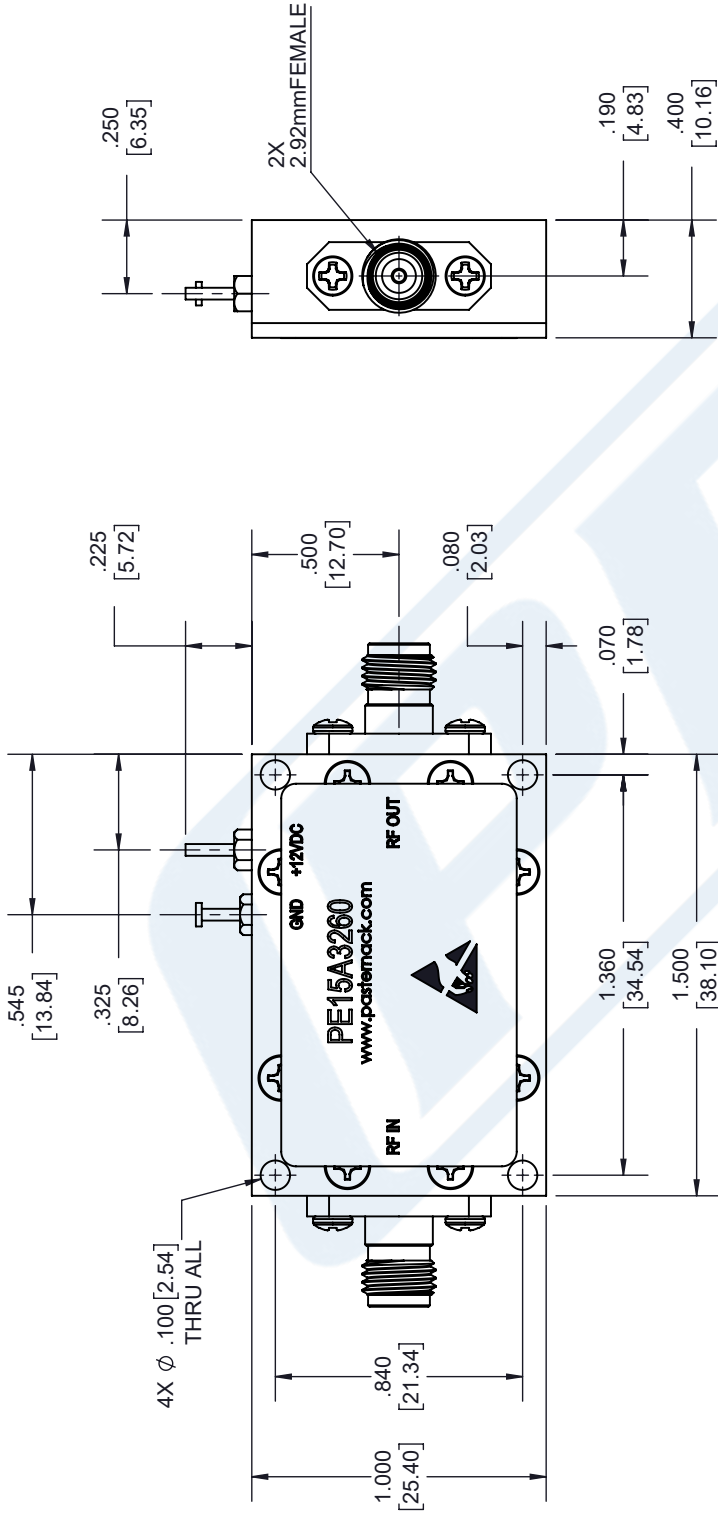
URL: <https://www.pasternack.com/40-db-gain-2-db-26.5-ghz-low-noise-broadband-amplifier-2.92mm-pe15a3260-p.aspx>

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.

PE15A3260 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
B	PCR PE15A3260	9/8/2020	T.GALLA



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
 .X = ±.2 [5.08] FRACTIONS ±.1/32
 .XX = ±.02 [.51] ±.1/32
 .XXX = ±.005 [.13] ANGLES ± 1°
 CABLE LENGTH (L), TOLERANCES:
 L ≤ 12 [305] = +1 [25] / -0
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0
 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
 300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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 an INFINITE brand

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV B

ITEM NO. PE15A3260

DRAWN BY K.Dang

CAGE CODE 53919

SIZE A