PASTERNACK®
THE ENGINEER'S RF SOURCE

500 mW P1dB, 6 GHz to 12 GHz, Medium Power Broadband Amplifier, 16 dB Gain, 37 dBm IP3, SMA

TECHNICAL DATA SHEET PE15A4044

The PE15A4044 is a broadband coaxial power amplifier, operating in the 6.0 to 12.0 GHz frequency range. The amplifier offers 27 dBm of P1dB min and 17 dB small signal gain min, with the gain flatness of ±2.0 dB max. This power 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.

Features

- 6.0 to 12.0 GHz Frequency Range
- P1dB: 27 dBm min
- Small Signal Gain: 17 dB min
- Gain Flatness: ±2.0 dB max
- 50 Ohm Input and Output Matched
- -20 to +85°C Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply
- Built-in DC Voltage Regulator

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°C, VDC1 = 12 Vdc)

Description	Minimum	Typical	Maximum	Units
Frequency Range	6		12	GHz
Gain	15	16		dB
Gain Flatness		±0.6		dB
Output at 1 dB Compression Point	+27			dBm
Output 3rd Intercept Point		+37		dBm
Input VSWR			2:1	
Output VSWR			2:1	
Operating DC Voltage 1	11	12	15	Volts
Operating DC Current		400	450	mA
Operating Temperature Range (OTR)	-30		+70	°C

Mechanical Specifications

Size

Length	1.083 in [27.51 mm]
Width	1.093 in [27.76 mm]
Height	0.382 in [9.7 mm]
Weight	0.069 lbs [31.3 g]
Input Connector	SMA Female
Output Connector	SMA Female

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 500 mW P1dB, 6 GHz to 12 GHz, Medium Power Broadband Amplifier, 16 dB Gain, 37 dBm IP3, SMA PE15A4044

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

500 mW P1dB, 6 GHz to 12 GHz, Medium Power Broadband Amplifier, 16 dB Gain, 37 dBm IP3, SMA

Environmental Specifications

Temperature

Operating Range	-30 to +70 deg C

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

Not RoHS Compliant	
REACH Compliant	12/17/2015

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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 500 mW P1dB, 6 GHz to 12 GHz, Medium Power Broadband Amplifier, 16 dB Gain, 37 dBm IP3, SMA PE15A4044

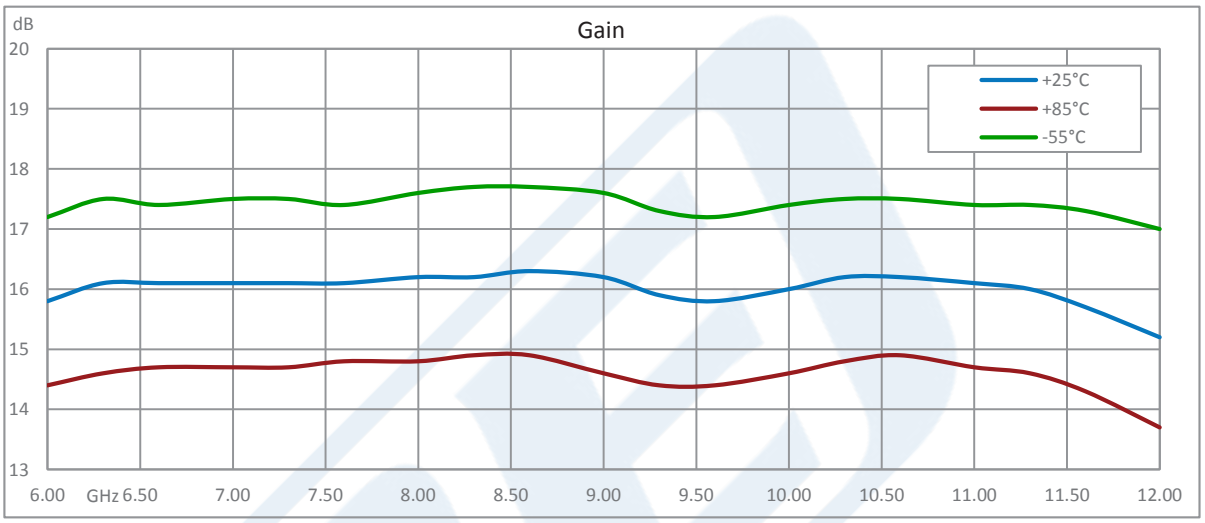
Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

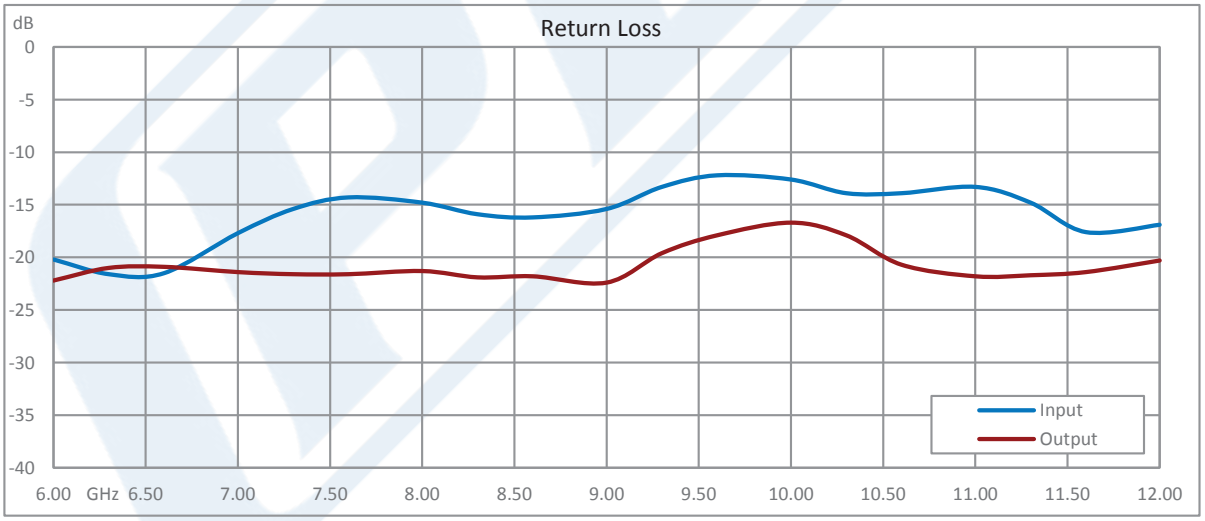
PASTERNACK®
THE ENGINEER'S RF SOURCE

500 mW P1dB, 6 GHz to 12 GHz, Medium Power Broadband Amplifier, 16 dB Gain, 37 dBm IP3, SMA

TECHNICAL DATA SHEET PE15A4044

Typical Performance Data





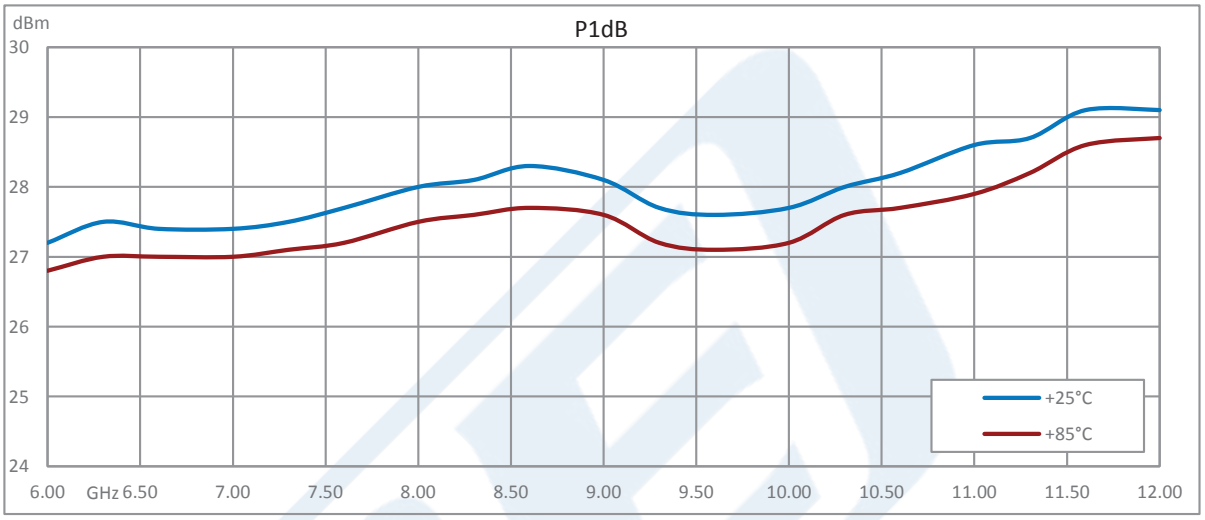
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 500 mW P1dB, 6 GHz to 12 GHz, Medium Power Broadband Amplifier, 16 dB Gain, 37 dBm IP3, SMA PE15A4044

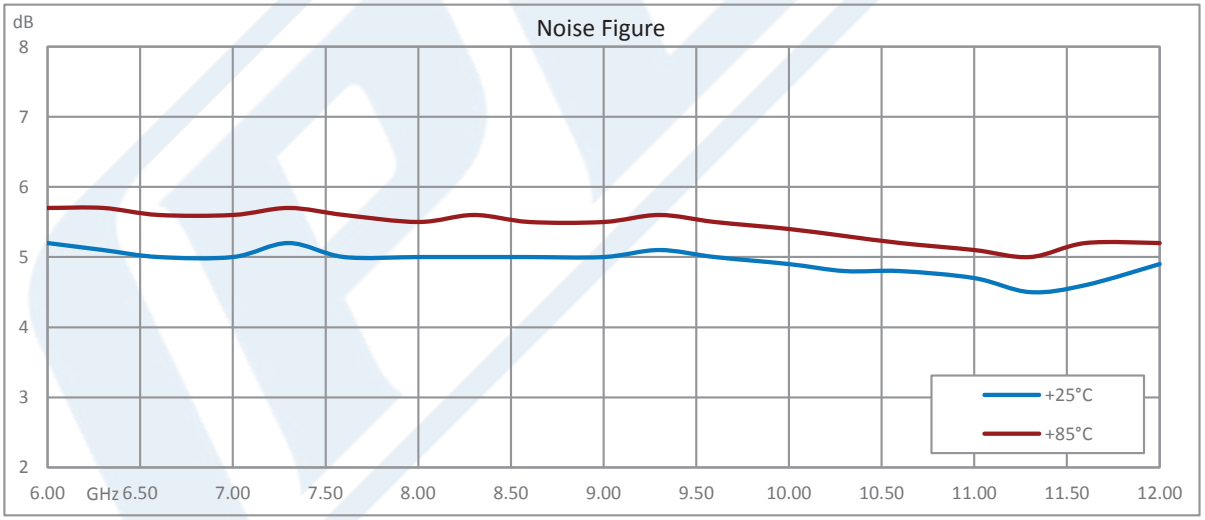
Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

PASTERNACK®
THE ENGINEER'S RF SOURCE

500 mW P1dB, 6 GHz to 12 GHz, Medium Power Broadband Amplifier, 16 dB Gain, 37 dBm IP3, SMA

TECHNICAL DATA SHEET PE15A4044





Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 500 mW P1dB, 6 GHz to 12 GHz, Medium Power Broadband Amplifier, 16 dB Gain, 37 dBm IP3, SMA PE15A4044

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

PASTERNACK®
THE ENGINEER'S RF SOURCE

500 mW P1dB, 6 GHz to 12 GHz, Medium Power Broadband Amplifier, 16 dB Gain, 37 dBm IP3, SMA

TECHNICAL DATA SHEET PE15A4044

500 mW P1dB, 6 GHz to 12 GHz, Medium Power Broadband Amplifier, 16 dB Gain, 37 dBm IP3, SMA 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 500 mW P1dB, 6 GHz to 12 GHz, Medium Power Broadband Amplifier, 16 dB Gain, 37 dBm IP3, SMA PE15A4044

URL: https://www.pasternack.com/12-ghz-16-db-gain-37-dbm-ip3-sma-pe15a4044-p.aspx

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

PE15A4044 CAD Drawing

500 mW P1dB, 6 GHz to 12 GHz, Medium Power Broadband Amplifier, 16 dB Gain, 37 dBm IP3, SMA