PASTERNACK
THE ENGINEER'S RF SOURCE

7 Watt P1dB, 8.5 GHz to 10.5 GHz, High Power Amplifier, 36 dB Gain, 47 dBm IP3, SMA

TECHNICAL DATA SHEET PE15A5044

The PE15A5044 is a power coaxial amplifier operating in the 8.5 to 10.5 GHz frequency range. The amplifier offers 38.5 dBm typ of P1dB power and a high 36 dB typical small signal gain with the gain flatness of ±1.5 dB typ. Input/output ports are matched for 50 ohms and are AC coupled. The amplifier requires typically a +12V DC power supply. The connectorized SMA module is unconditionally stable and operates over the temperature range of -40°C and +70°C.

Features

- 8.5 to 10.5 GHz Frequency Range
- P1dB +38.5 dBm typ
- Small Signal Gain: 36 dB typ
- Gain Flatness ±1.5 dB typ
- 50 Ohms Input and Output Matched
- Unconditionally Stable
- Regulated Supply

Applications

- Military Radio
- Communication Systems
- High Gain Driver Power Amplifier
- High Gain Output Power Amplifier

Electrical Specifications (TA = +25°C, DC Voltage = 12Volts, DC Current = 4,000mA)

Description	Minimum	Typical	Maximum	Units
Frequency Range	8.5		10.5	GHz
Small Signal Gain	33	36		dB
Gain Flatness		±1.5	±1.8	dB
Output Power at 1 dB Compression Point	+37.5	+38.5		dBm
Output 3rd Order Intercept Point		+47		dBm
Input VSWR			2:1	
Output VSWR			2:1	
Operating DC Voltage	11	12	13	Volts
Operating DC Current		4,000		mA
Operating Temperature Range	-40		+70	°C

Absolute Maximum Rating

Parameter	Rating	Units
Source Voltage	+15	Volts
RF input Power	+17	dBm
Operating Temperature (base-plate)	-30 to +70	°C
Storage Temperature	-55 to +85	°C

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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 7 Watt P1dB, 8.5 GHz to 10.5 GHz, High Power Amplifier, 36 dB Gain, 47 dBm IP3, SMA PE15A5044

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

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Mechanical Specifications

Size

Length	2.36 in [59.94 mm]
Width	2.91 in [73.91 mm]
Height	0.63 in [16 mm]
Weight	0.366 lbs [166.01 g]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature

Operating Range	-40 to +70 deg C

Compliance Certifications (see product page for current document)

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.

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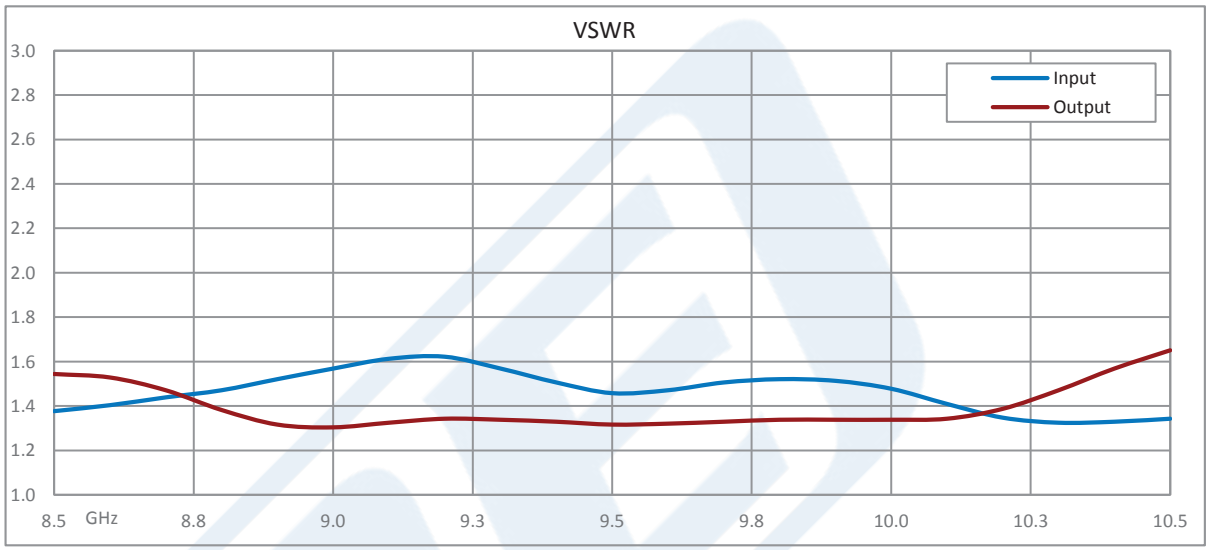
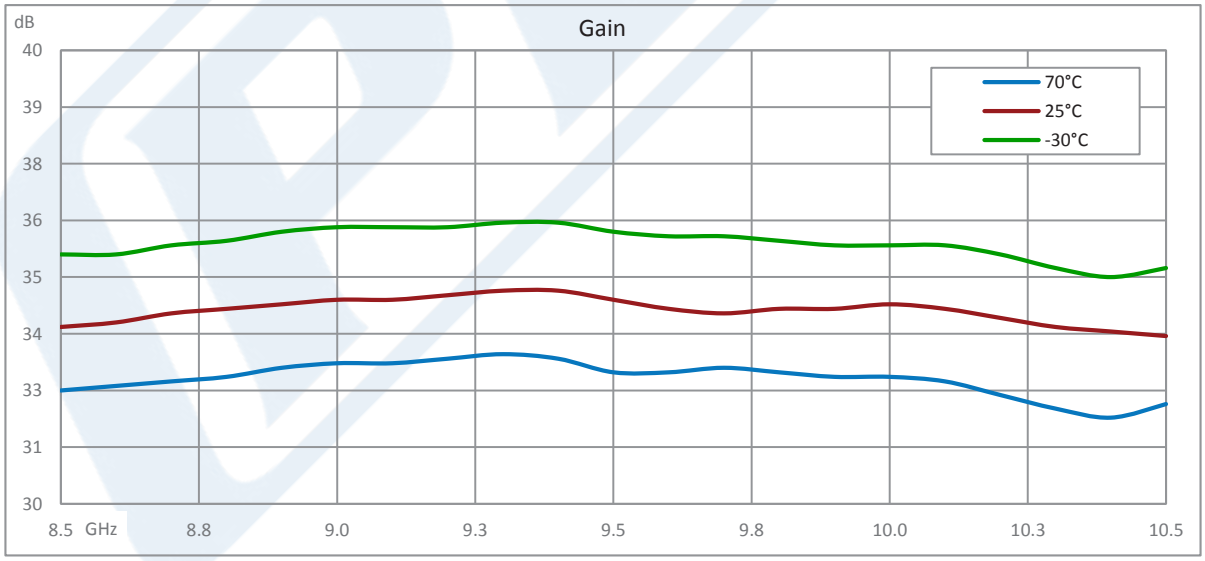
Typical Performance Data





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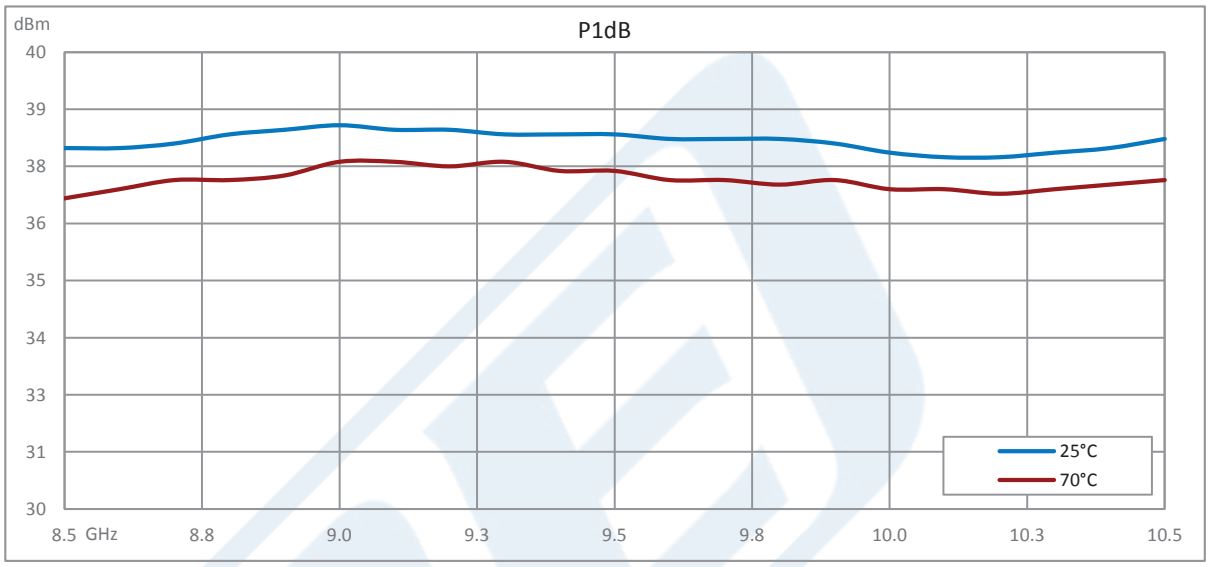

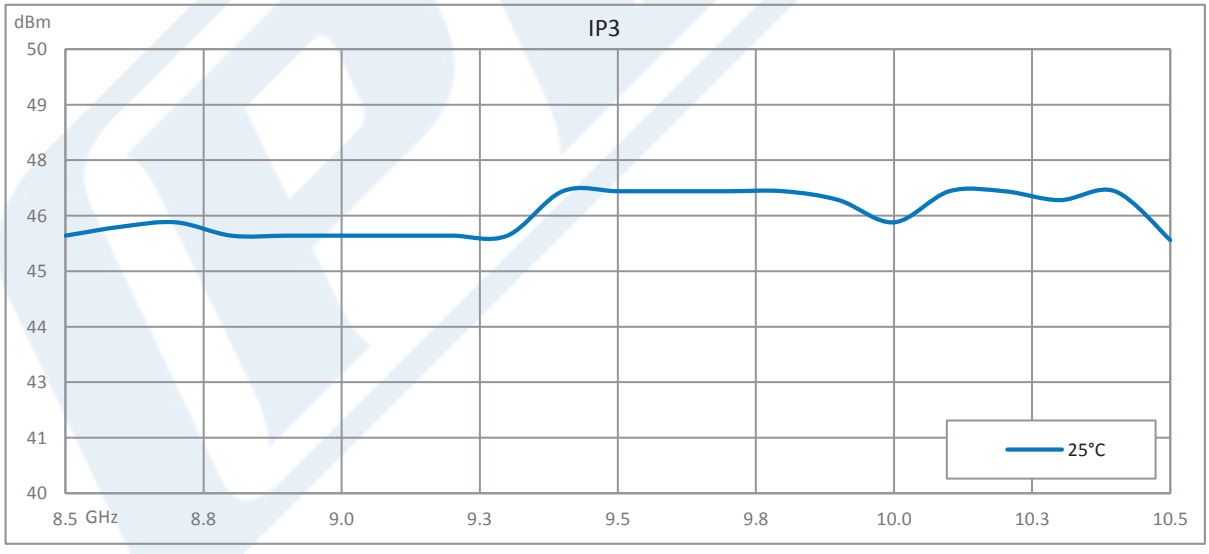

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7 Watt P1dB, 8.5 GHz to 10.5 GHz, High Power Amplifier, 36 dB Gain, 47 dBm IP3, SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: https://www.pasternack.com/10.5-ghz-high-power-amplifier-36-db-gain-ip3-sma-pe15a5044-p.aspx

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PE15A5044 CAD Drawing

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