PASTERNACK®
THE ENGINEER'S RF SOURCE

500 mW P1dB, 2 GHz to 6 GHz, 22 dB Gain, 37 dBm IP3, 5.4 dB NF, SMA

TECHNICAL DATA SHEET PE15A4041

The PE15A4041 is a broadband coaxial power amplifier, operating in the 2.0 to 6.0 GHz frequency range. The amplifier offers 27 dBm of P1dB min and 22 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

- 2.0 to 6.0 GHz Frequency Range
- P1dB: 27 dBm min
- Small Signal Gain: 22 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	2		6	GHz
Gain	20	22		dB
Gain Flatness		±0.6		dB
Output at 1 dB Compression Point	+27			dBm
Output 3rd Intercept Point		+37		dBm
Noise Figure		5.4		dB
Input VSWR			2:1	
Output VSWR			2:1	
Operating DC Voltage 1	11	12	15	Volts
Operating DC Current		420		mA
Operating Temperature Range (OTR)	-30		+70	°C

Mechanical Specifications

Weight	0.07 lbs [31.75 g]
Connector Option	Field Replaceable
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, 2 GHz to 6 GHz, 22 dB Gain, 37 dBm IP3, 5.4 dB NF, SMA PE15A4041

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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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.

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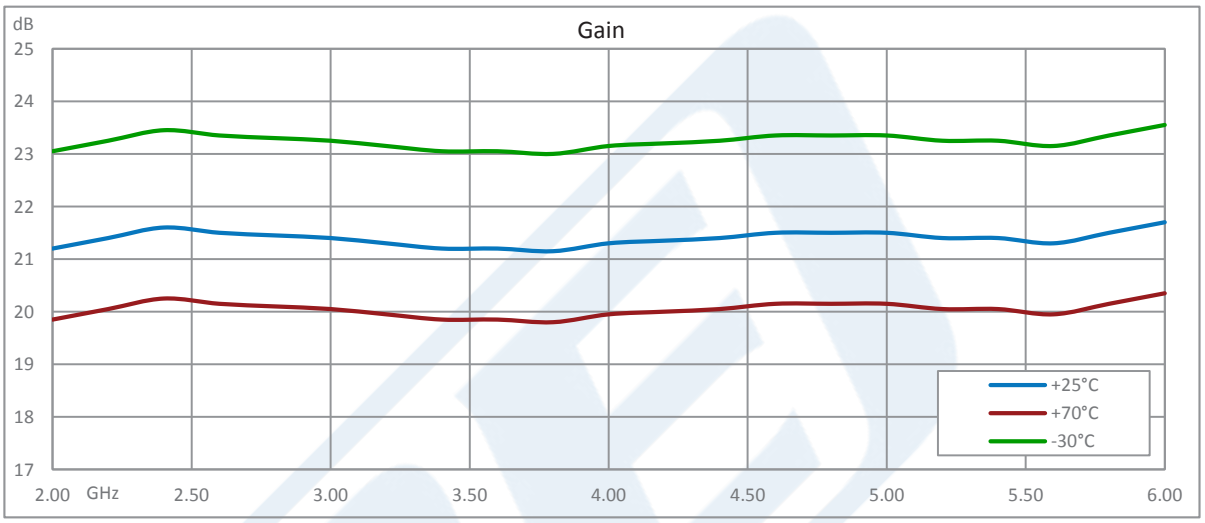
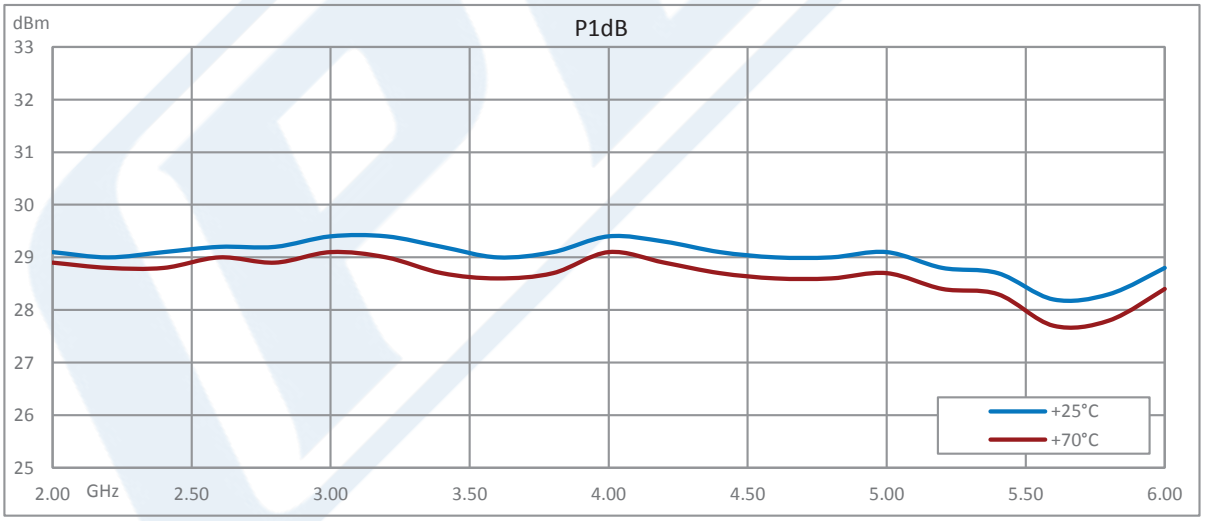
Typical Performance Data





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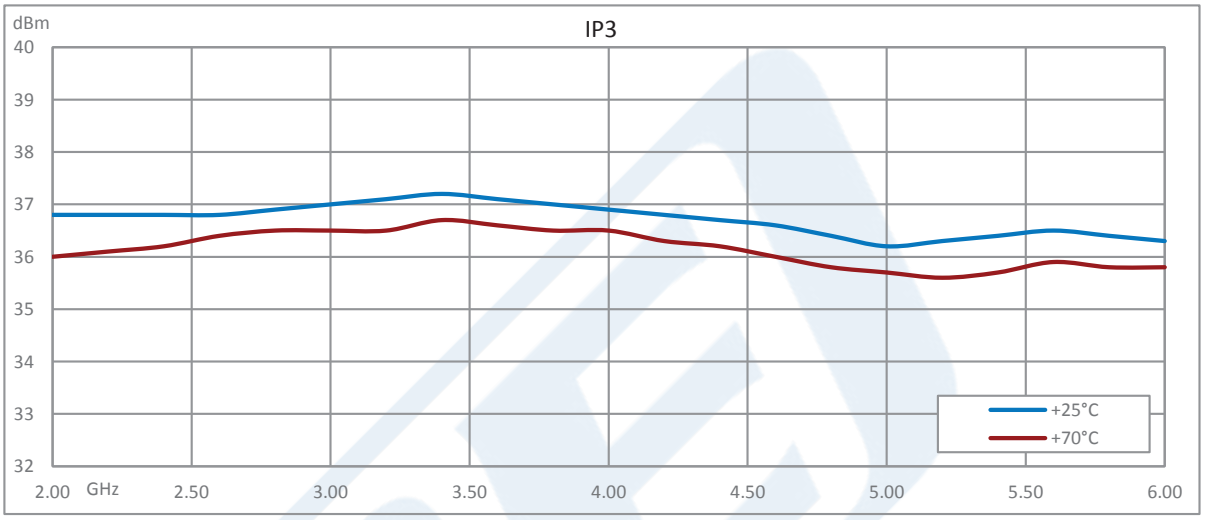

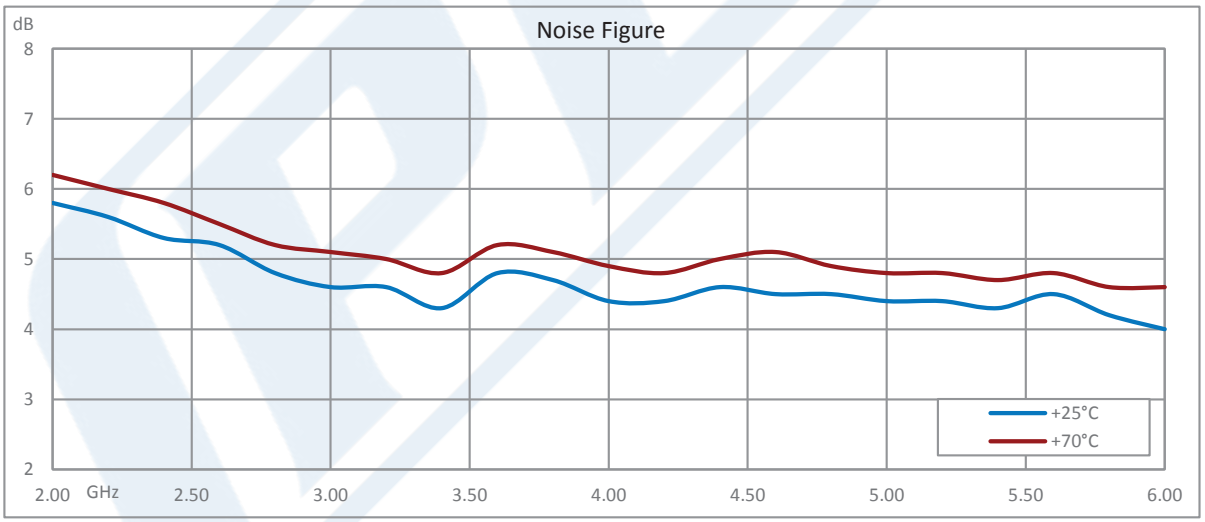

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500 mW P1dB, 2 GHz to 6 GHz, 22 dB Gain, 37 dBm IP3, 5.4 dB NF, SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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URL: https://www.pasternack.com/6-ghz-22-db-gain-5.4-db-sma-pe15a4041-p.aspx

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PE15A4041 CAD Drawing

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