PASTERNACK®
THE ENGINEER'S RF SOURCE

10 dBm P1dB, 50 MHz to 40 GHz, USB Controlled Broadband Amplifier, 12 dB Gain, 2.92mm

TECHNICAL DATA SHEET PE15A3901

The PE15A3901 is a broadband amplifier covering 50 MHz to 40 GHz. The amplifier has a 12 dB of typical Gain, +/- 2.5 dB typical flatness and a P1dB of +10 dBm typical. This amplifier is controlled and powered via USB 2.0 with driverless installation, so no external power supply is required.

Features

- 0.05 GHz to 40 GHz Frequency Range
- P1dB: 10 dBm typ
- Small Signal Gain: 12 dB typ
- Gain Flatness: ±2.5 dB typ
- Noise Figure: 4.5 dB typ to 20 GHz, 5.5 dB typ to 40 GHz
- 50 Ohm Input and Output Matched
- Unconditionally Stable
- USB type a plug DC Positive Supply
- Built-in Voltage Regulator
- 2.92 mm female Input/Output Connectors

Applications

- Laboratory Applications
- R&D Labs
- Military Radio
- Radar Systems
- Telecom Infrastructure
- Test Instrumentation
- Military & Space
- Communication Systems
- Wireless Communication
- Microwave Radio Systems
- Cellular Base Stations
- Low Noise Amplifier
- General Purpose Amplification
- General Purpose Wireless
- Wideband Gain Block
- IF Amplifier/RF Driver Amplifier
- RF Wideband Front Ends
- RF Pre-amplification

Electrical Specifications (TA = +25°C)

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.05		40	GHz
Gain		12		dB
Gain Flatness		±2.5		dB
Output at 1 dB Compression Point		+10		dBm
Noise Figure at 0.05 to 20 GHz		4.5		dB
Noise Figure at 20 to 40 GHz		5.5		dB
Input VSWR		2.3:1		
Output VSWR		2.3:1		
Operating Temperature Range (OTR)	-40		+85	°C

Mechanical Specifications

Input Connector	2.92mm
Output Connector	2.92mm

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 10 dBm P1dB, 50 MHz to 40 GHz, USB Controlled Broadband Amplifier, 12 dB Gain, 2.92mm PE15A3901

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	-40 to +85 deg C
Storage Range	-55 to +125 deg C

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

Not RoHS Compliant

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.

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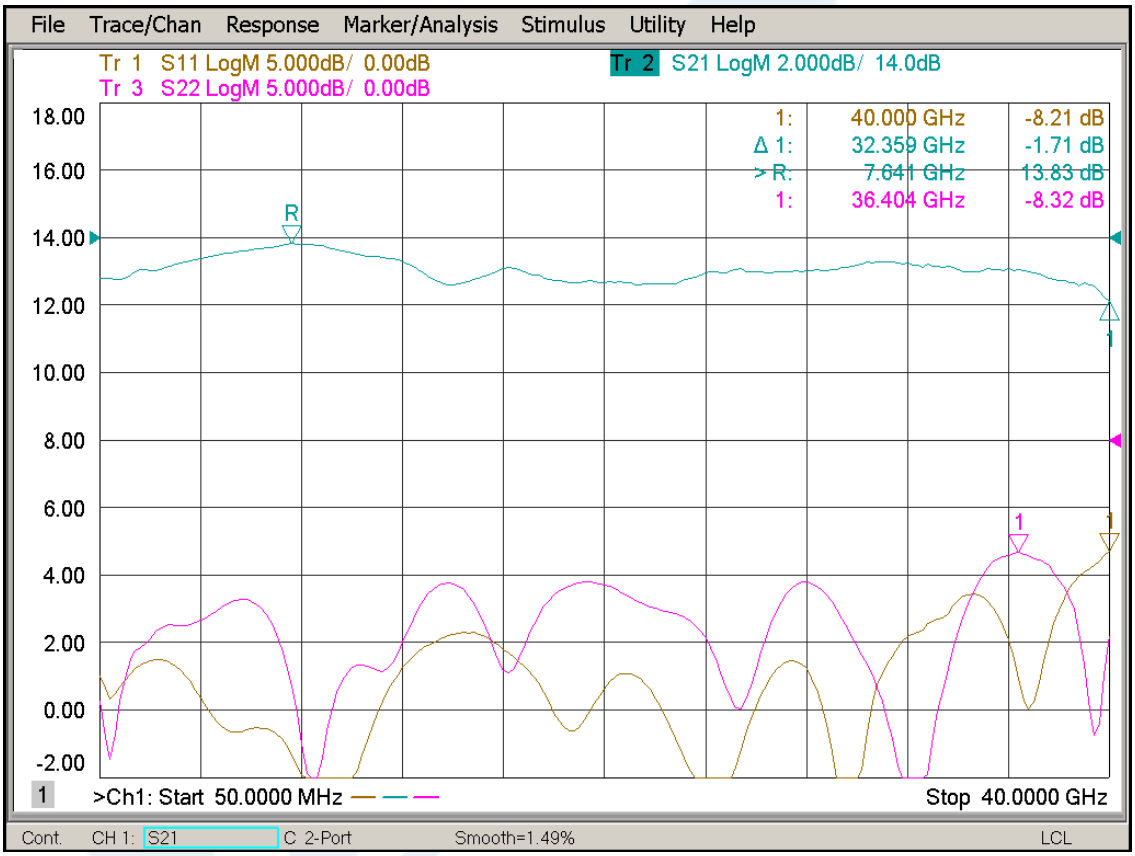
Typical Performance Data

Gain & Return Loss



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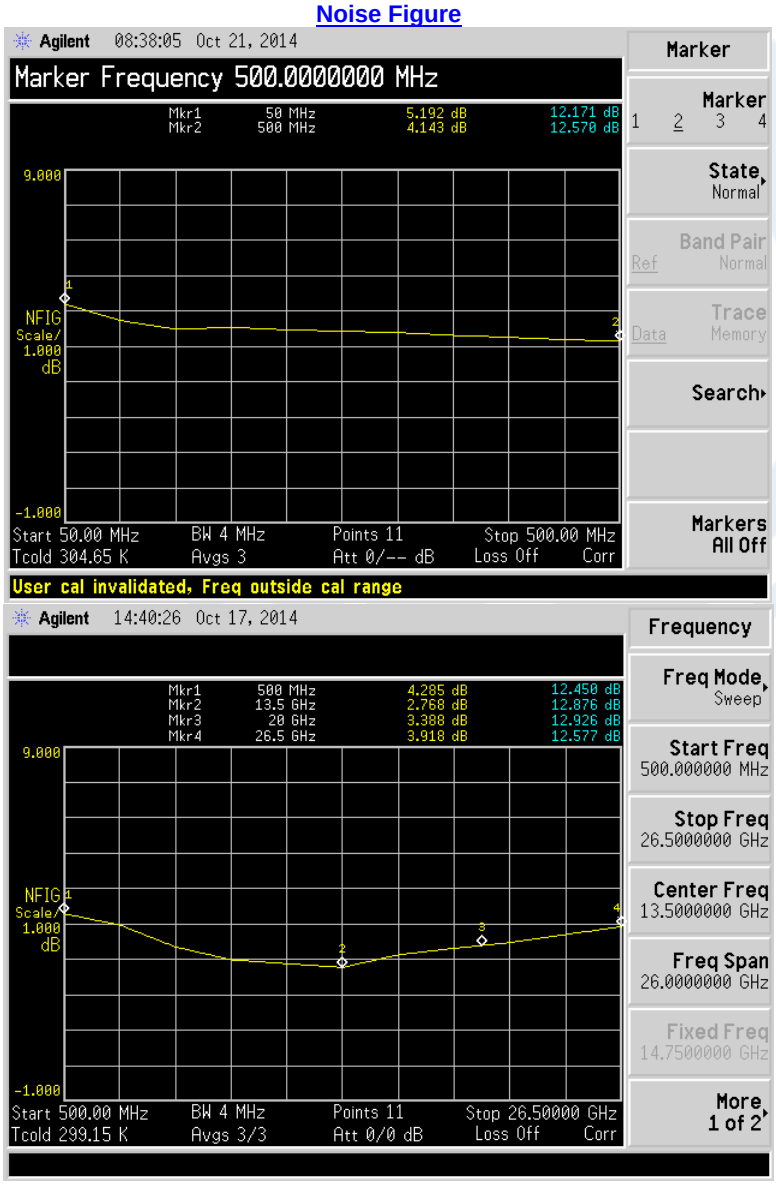
Noise Figure



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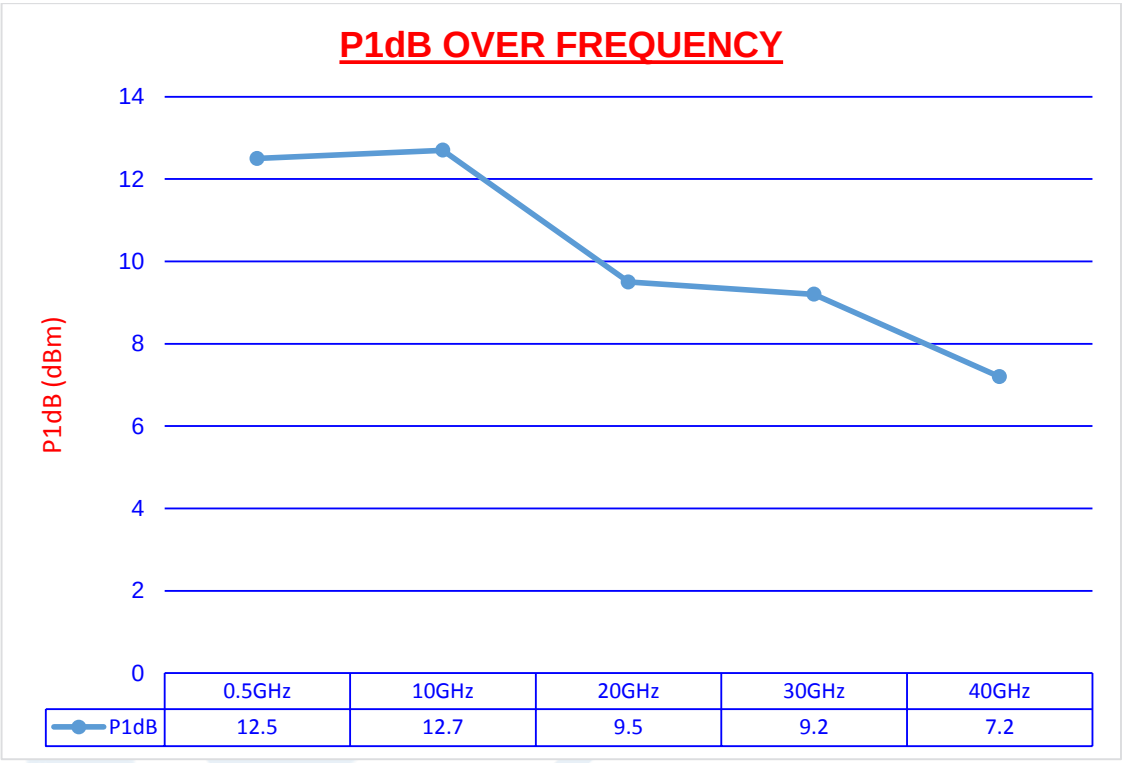

10 dBm P1dB, 50 MHz to 40 GHz, USB Controlled Broadband Amplifier, 12 dB Gain, 2.92mm from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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URL: http://www.pasternack.com/40-ghz-broadband-usb-amplifier-12-db-gain-2.92mm-pe15a3901-p.aspx

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PE15A3901 CAD Drawing

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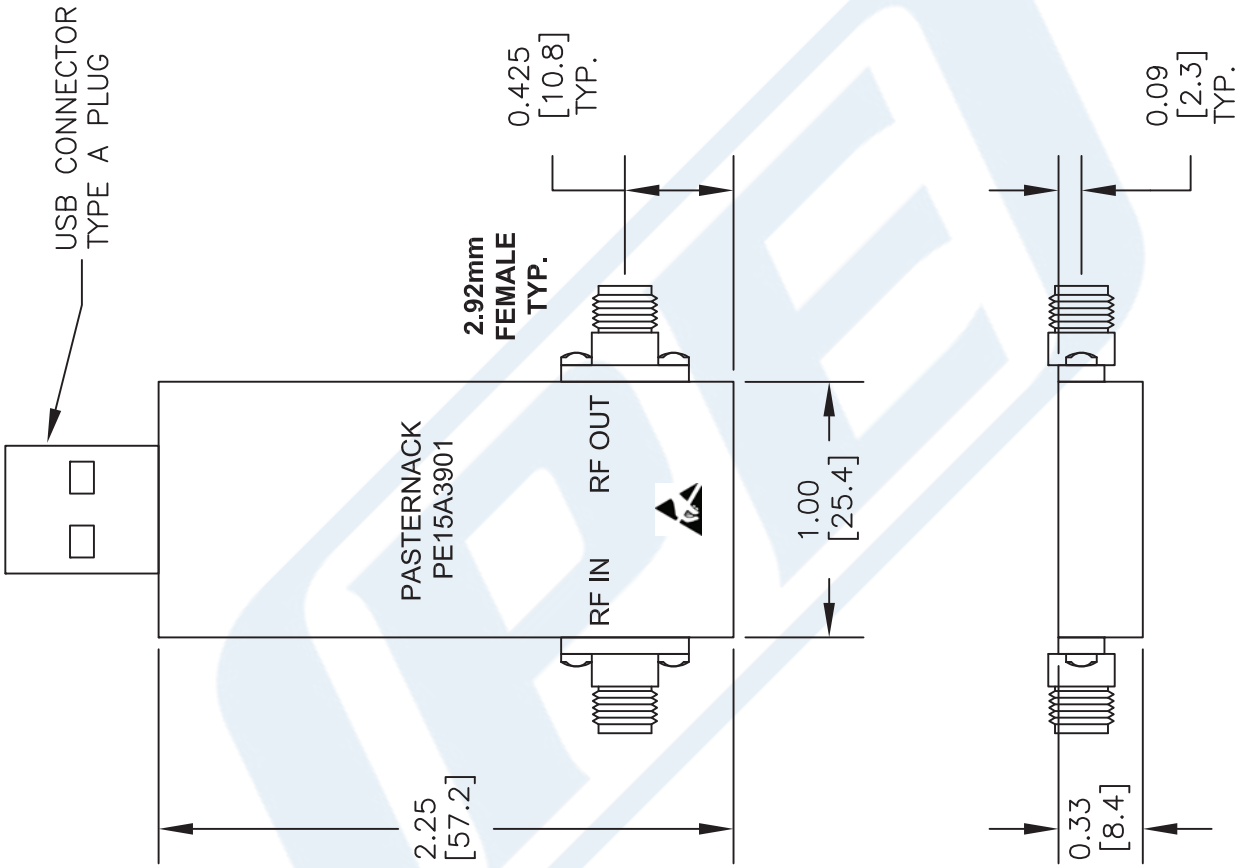

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

CAD FILE	SCALE	SIZE	
031814	N/A	A	2233

DWG TITLE: PE15A3901

FSCM NO. 53919

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