



SMA Calibrated Noise Source Module, Output
ENR of 15 dB, +28 VDC, 10 MHz to 6 GHz

Noise Generators Technical Data Sheet

PE85N1021

Features

- 10 MHz to 6 GHz Frequency Range
- Output Noise ENR 15 dB min
- Flatness 2.0 dB typ
- 28 VDC Operation
- Small Size 1.25" by 0.75" by 0.50"
- Internal Voltage Regulation

Applications

- Measure Noise Figure
- Signal Strength Calibrators
- Radar
- Jamming
- SATCOM for BER and NF
- Source of Jitter

Description

The PE85N1021 is a coaxial packaged Noise Source module which operates over a wide frequency range from 10 MHz to 6 GHz. The design is calibrated in 1 GHz steps and is ideal for Noise Figure measurements and a variety of built-in test applications. This model operates at +28 Vdc and features an output ENR level of 15 dB min, typical flatness across the entire frequency band is ± 2.0 dB, and excellent stability. Performance is specified over -20°C to $+75^{\circ}\text{C}$ with Noise Output Temperature Variation <0.01 dB/ $^{\circ}\text{C}$, Noise Output Variation <0.1 dB/%V. The rugged package design supports an input Female BNC connector for DC biasing and an output Female SMA connector. Additionally, the model is designed to meet a variety of demanding MIL-STD-202F environmental test conditions including Humidity, Thermal Shock, and Vibration for added confidence for highly reliable operation.

Electrical Specifications

RF Characteristics

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.01		6	GHz
Impedance		50		Ohms
Output ENR	15			dB
Flatness		± 1.5		dB
VSWR			1.35:1	
Output Variation vs Input Voltage			0.1	dB/%V
Output Variation vs Temperature			0.01	dB/deg C
Bias Voltage 1	22	28	30	Volts
Input Current 1			25	mA
Calibration Points		1 GHz Step		

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Calibrated Noise Source Module, Output ENR of 15 dB, +28 VDC, 10 MHz to 6 GHz PE85N1021](#)



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Mechanical Specifications

Size

Length	1.25 in [31.75 mm]
Width/Dia.	0.75 in [19.05 mm]
Height	0.5 in [12.7 mm]
Weight	0.104 lbs [47.17 g]
Package Type	Connectorized Module

Connectors

DC Connector	BNC Female
Output Connector	SMA Female

Environmental Specifications

Temperature

Operating Range	-20 to +75 deg C
ESD Sensitivity	ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in ESD Workstation.



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

Plotted and Other Data

Notes:

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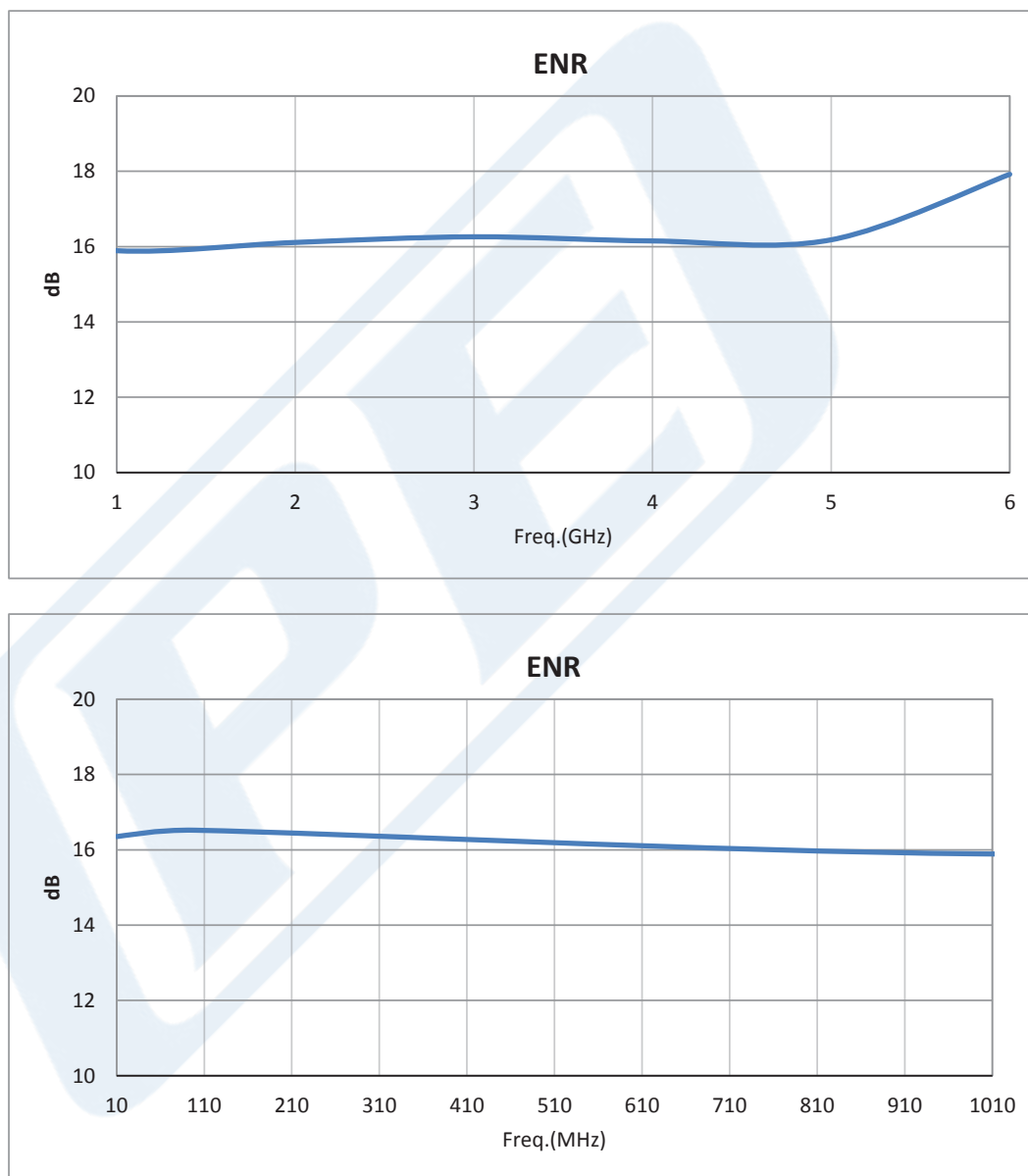


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Typical Performance Data



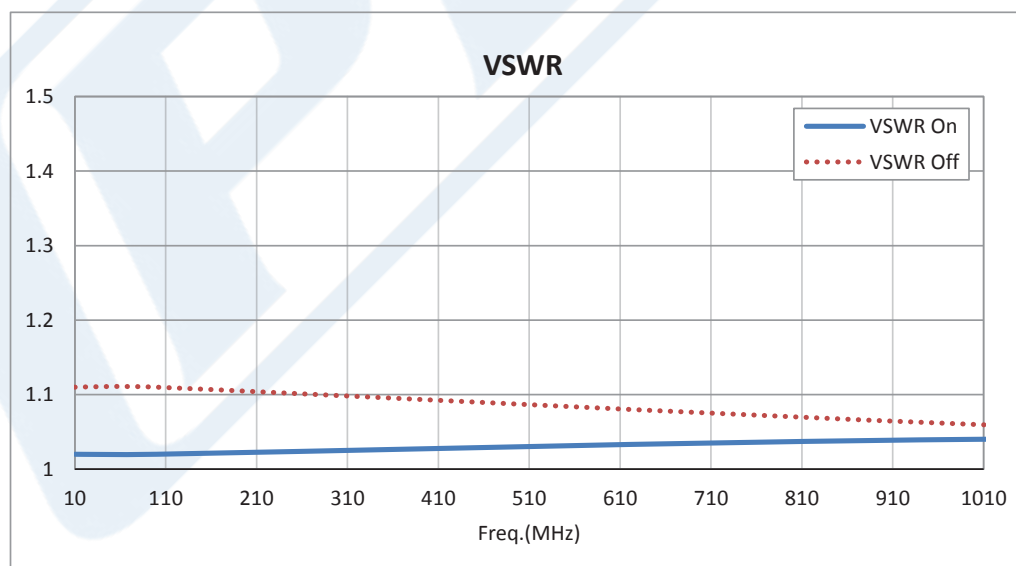
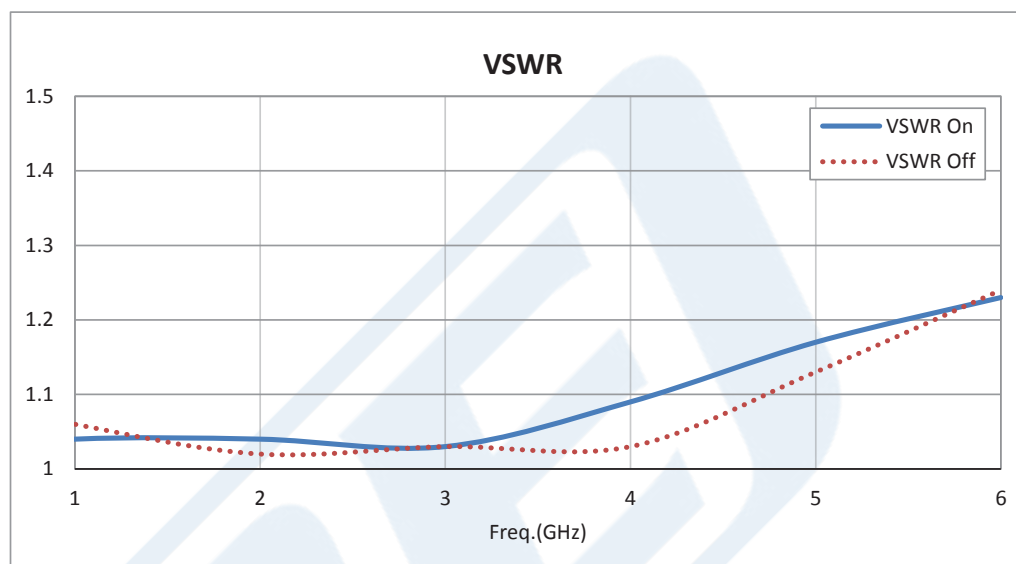
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SMA Calibrated Noise Source Module, Output ENR of 15 dB, +28 VDC, 10 MHz to 6 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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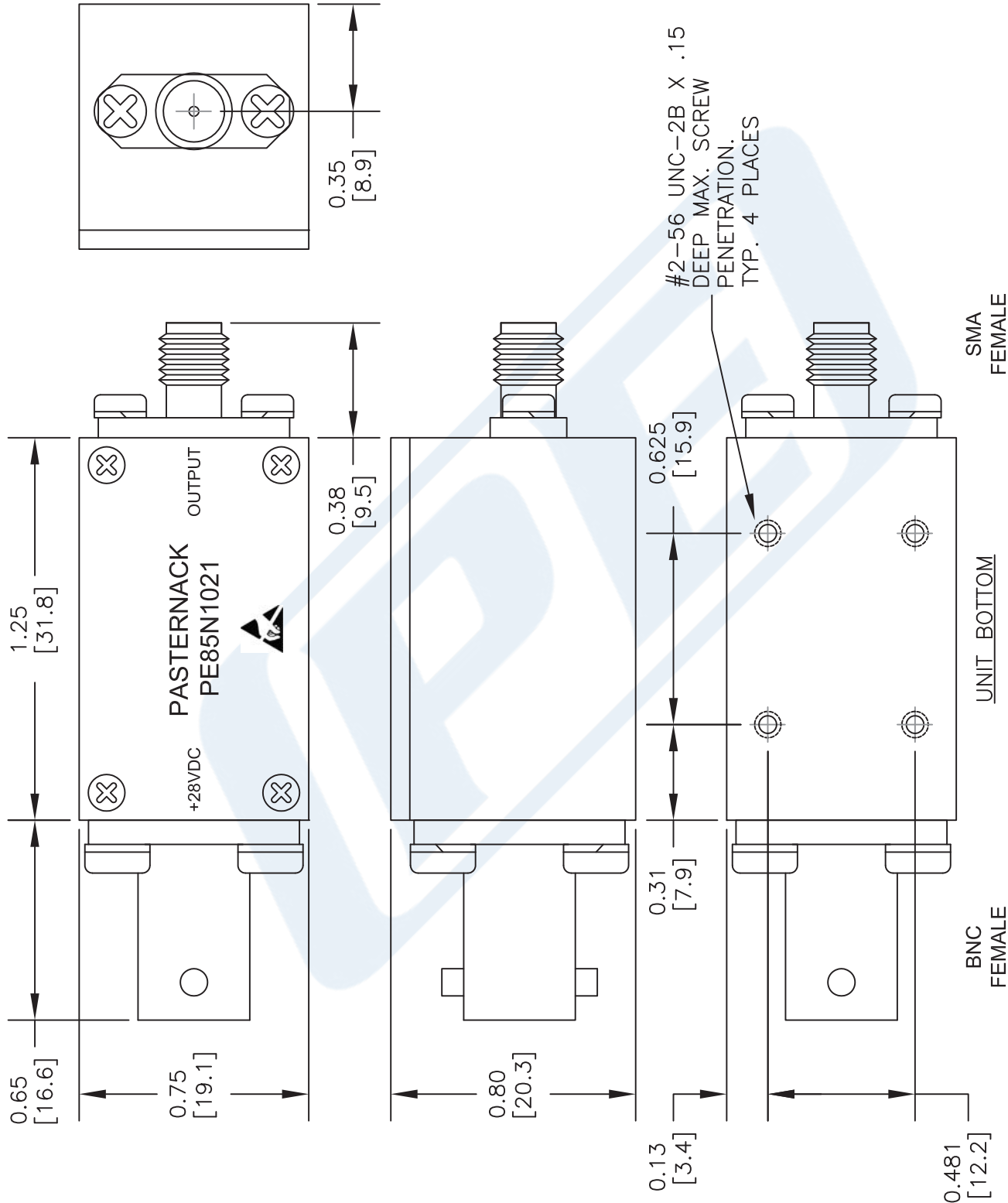
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

PE85N1021 CAD Drawing

SMA Calibrated Noise Source Module, Output ENR of 15 dB, +28 VDC, 10 MHz to 6 GHz



DWG TITLE

PE85N1021

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].

PE PASTERNAK
THE ENGINEER'S RF SOURCE

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CAD FILE 110515

SCALE N/A

SIZE A

2233