



## SMA Calibrated Noise Source Module, Output ENR of 15 dB, +28 VDC, 0.01 MHz to 2 GHz

### Noise Generators Technical Data Sheet

PE85N1019

#### Features

- 10 kHz to 2 GHz Frequency Range
- Output Noise ENR 15 dB min
- Flatness 1.5 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 PE85N1019 is a coaxial packaged Noise Source module which operates over a wide frequency range from 10 KHz to 2 GHz. The design is calibrated for 10, 100, 1000, and 2000 MHz frequencies and is ideal for Noise Figure measurements and a variety of built-in test applications. This model operates at +28 Vdc and features an ENR level of 15 dB min, typical flatness across the entire frequency band is +/- 0.5 dB, and excellent stability. Performance is specified over -20°C to +75°C with Noise Output Temperature Variation <0.01 dB/°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	10KHz		2	GHz
Impedance		50		Ohms
Output ENR	15			dB
Flatness		±1.5		dB
VSWR			1.25:1	
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			20	mA
Calibration Points	10, 100, 1000, and 2000 MHz			

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, 0.01 MHz to 2 GHz PE85N1019](#)



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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	0.103 lbs [46.72 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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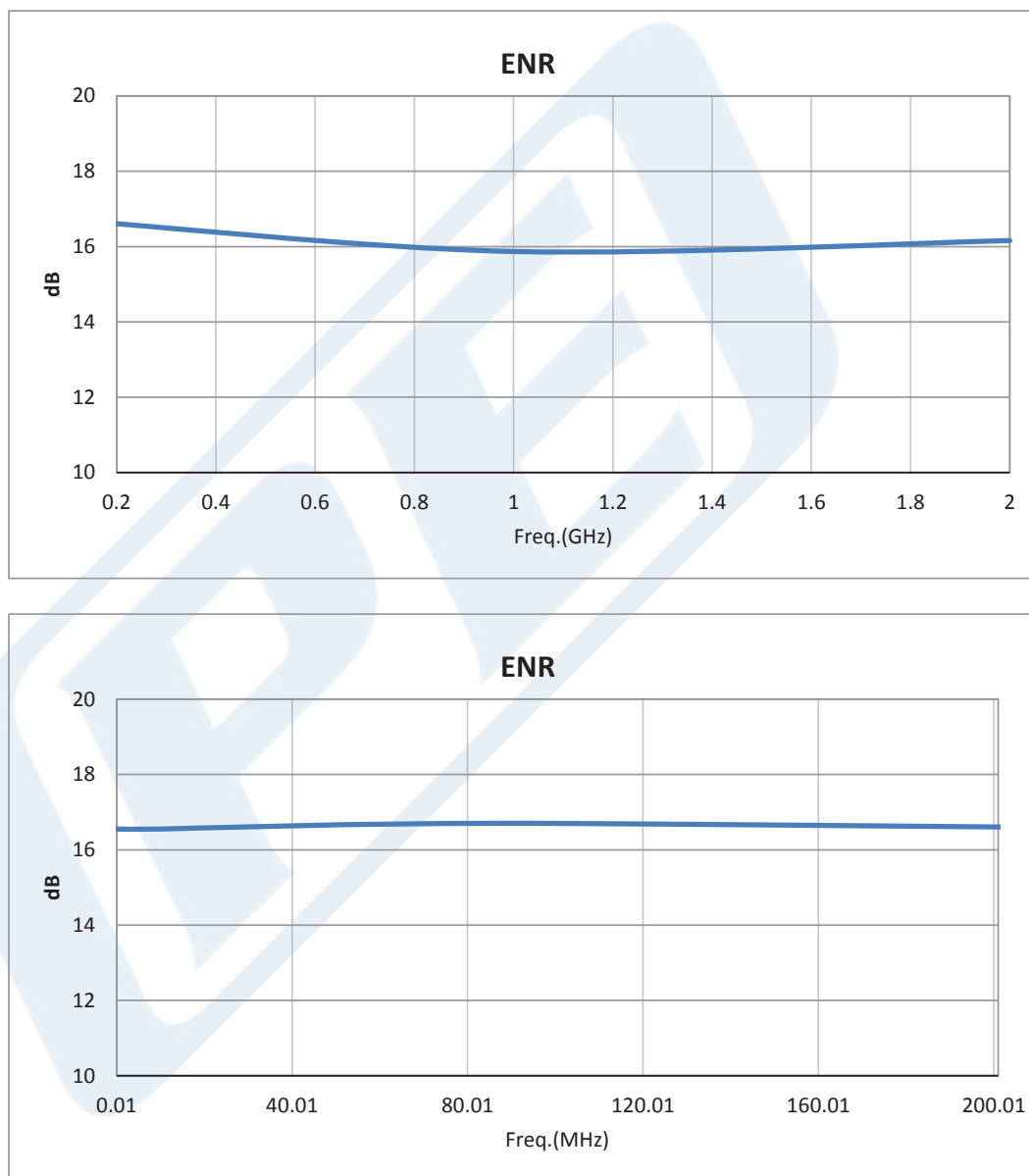


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### Typical Performance Data



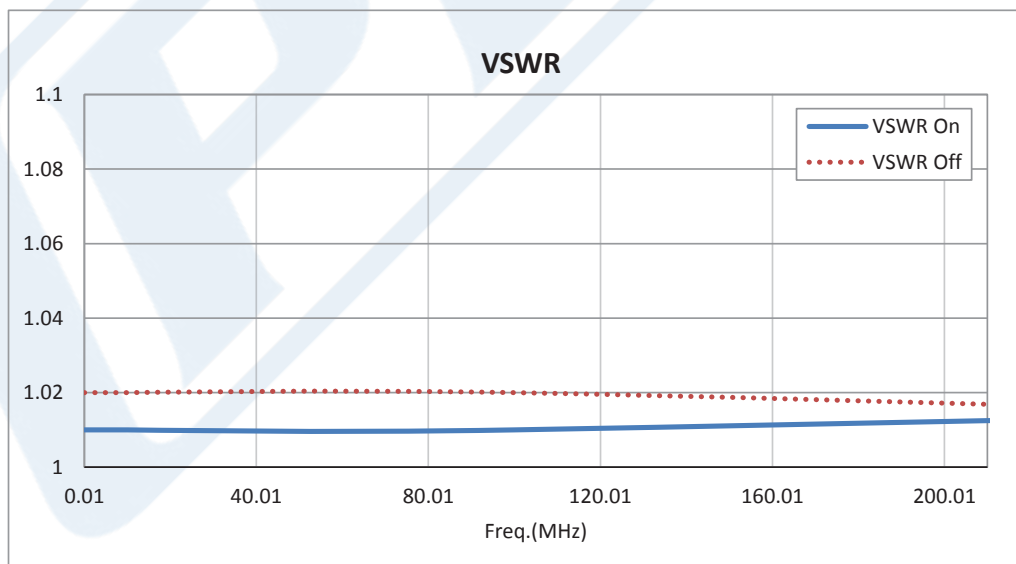
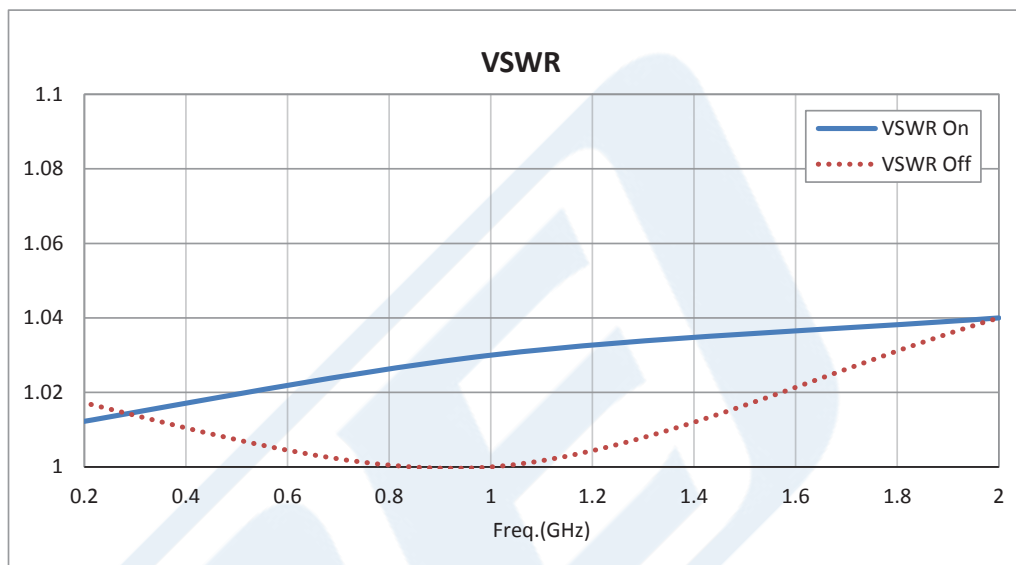
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SMA Calibrated Noise Source Module, Output ENR of 15 dB, +28 VDC, 0.01 MHz to 2 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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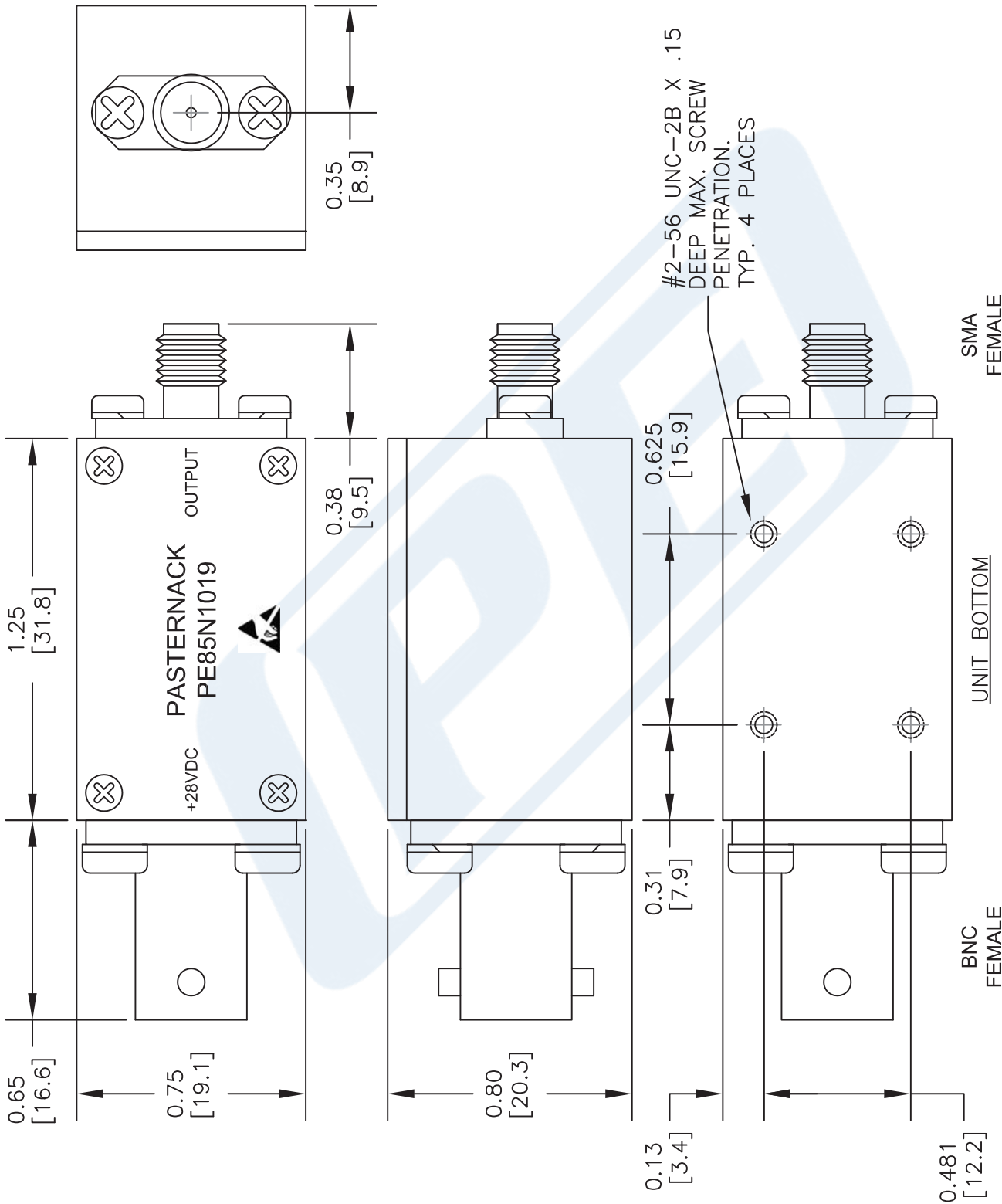
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements.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

# PE85N1019 CAD Drawing

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DWG TITLE

**PE85N1019**

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  
Pasternack Enterprises, Inc.  
P.O. Box 16759 | Irvine | CA | 92623  
Phone: (949) 261-1920 | Fax: (949) 261-7451  
Website: www.pasternack.com | E-Mail: sales@pasternack.com

FSCM NO. 53919

CAD FILE 110515

SCALE N/A

SIZE A

2233