PASTERNACK
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2.92mm Precision Calibrated Noise Source Module, Output ENR of 10 dB, +28 VDC, 100 MHz to 40 GHz, Calibration Standard

Noise Generators Technical Data Sheet PE85N1008

Features

- 100 MHz to 40 GHz Bandwidth
- Calibrated Frequencies: 1 GHz steps
- ENR output: 10 dB min
- Excellent Stability
- Noise Output Temperature Variation: <0.01 dB/°C
- Noise Output Variation <0.1 dB/%V
- Rugged Package Design supports output Female 2.92mm connector
- Designed to meet MIL-STD-202F environmental test conditions
- Calibrated Precision Noise Source
- VSWR < 1.35:1
- Outupt Noise ENR 14 dB typical
- Highly Stable and Accurate Performance
- Maximum Reverse Power 1 Watt
- Internal Voltage Regulation

Applications

- Noise Figure Measurements
- Built-In Test equipment for signal strenth calibrators and radar applications
- Automatic Test Equipment (ATE)
- Jamming
- Baseband Signal Simulation
- Additive White Gausian Noise (AWGN) source for Error Rate Measurements
- Increase dynamic range of A/D Converters
- SATCOM for bit error rate (BER) and noise figure
- Can be used as a Jitter source.

Description

The PE85N1008 is a coaxial packaged calibrated precision Noise Source module which operates over an extremely wide frequency range from 0.1 GHz to 40 GHz. The design features very low VSWR < 1.50:1 that significantly increases mesurement accuracy and is ideal for Noise Figure measurements and built-in applications. This model operates at +28 Vdc and features an output ENR level ranging from 10 to 17 dB with 10 MHz calibration points every GHz. Highly stable and accurate performance is specified over -55°C to +85°C with Noise Output Temperature Variation <0.009 dB/°C and Noise Output Variation < 0.002 dB/%V. Maximum Reverse Power is 1 Watt. The rugged industry standard profile package design supports an input Female BNC connector for DC bias and an output Male 2.92mm 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	0.1		40	GHz
Impedance		50		Ohms
Output ENR	10		17	dB
Output Variation vs Input Voltage			0.002	dB/%V
Output Variation vs Temperature			0.009	dB/deg C
Bias Voltage 1	22	28 ±2	30	Volts
Input Current 1			30	mA
Reverse Power			1	Watt
Calibration Points		Every GHz		

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: 2.92mm Precision Calibrated Noise Source Module, Output ENR of 10 dB, +28 VDC, 100 MHz to 40 GHz, Calibration Standard PE85N1008

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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Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	0.1 to 5	5 to 18	18 to 26	26 to 40		GHz
VSWR, Typ	1.15:1	1.25:1	1.35:1	1.5:1		

Mechanical Specifications

Size

Length	3.86 in [98.04 mm]
Width/Dia.	1.18 in [29.97 mm]
Height	0.8 in [20.32 mm]
Weight	0.326 lbs [147.87 g]
Package Type	Connectorized Module

Connectors

DC Connector	BNC Female
Output Connector	2.92mm Male

Environmental Specifications

Temperature

Operating Range	-55 to +85 deg C
Storage Range	-65 to +125 deg C

Environment

Humidity	MIL-STD-202F, Method 103, Cond B (96 hrs@95% R.H.)
Shock	MIL-STD-202F, Method 213, Cond B (100g, 6 msec)
Vibration	MIL-STD-202F,Method 204,Cond B(0.6” 2x ampl or15g)
Altitude	MIL-STD-202F, Method 105, Condition B (50,000 ft)
Temperature Cycle	MIL-STD-202F, Method 105C, Condition D (5 cycles)
Thermal Shock	MIL-STD-202F, Method 107, Conditon A (5 cycles)
ESD Sensitivity	ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in ESD Workstation.

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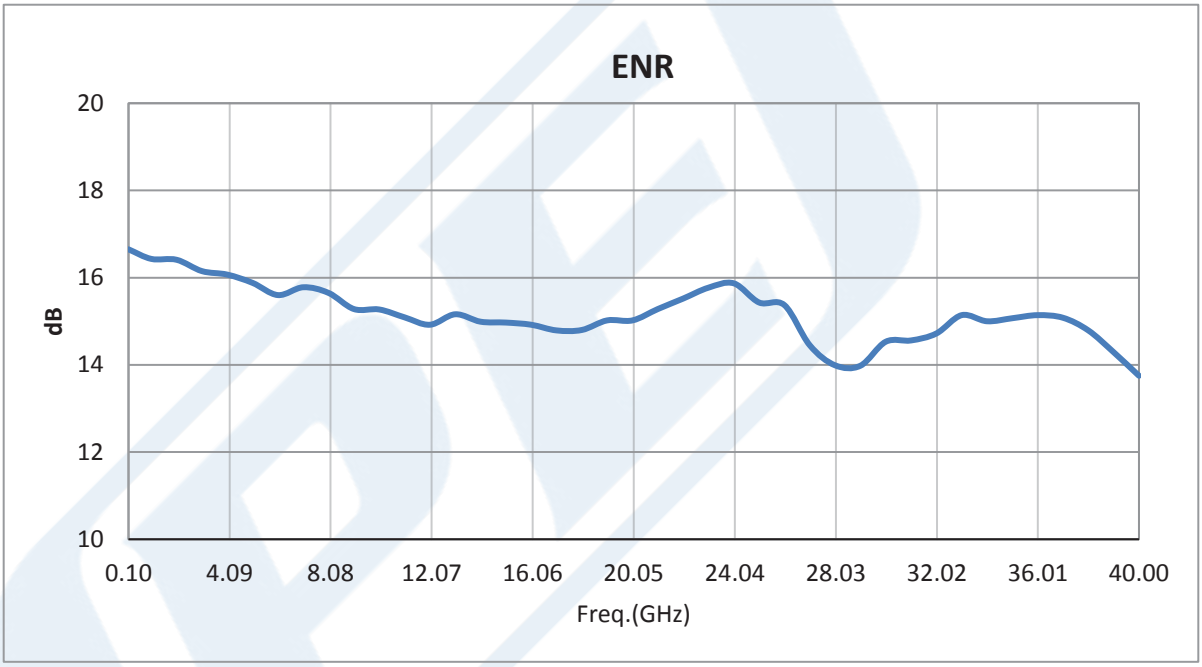
Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Typical Performance Data



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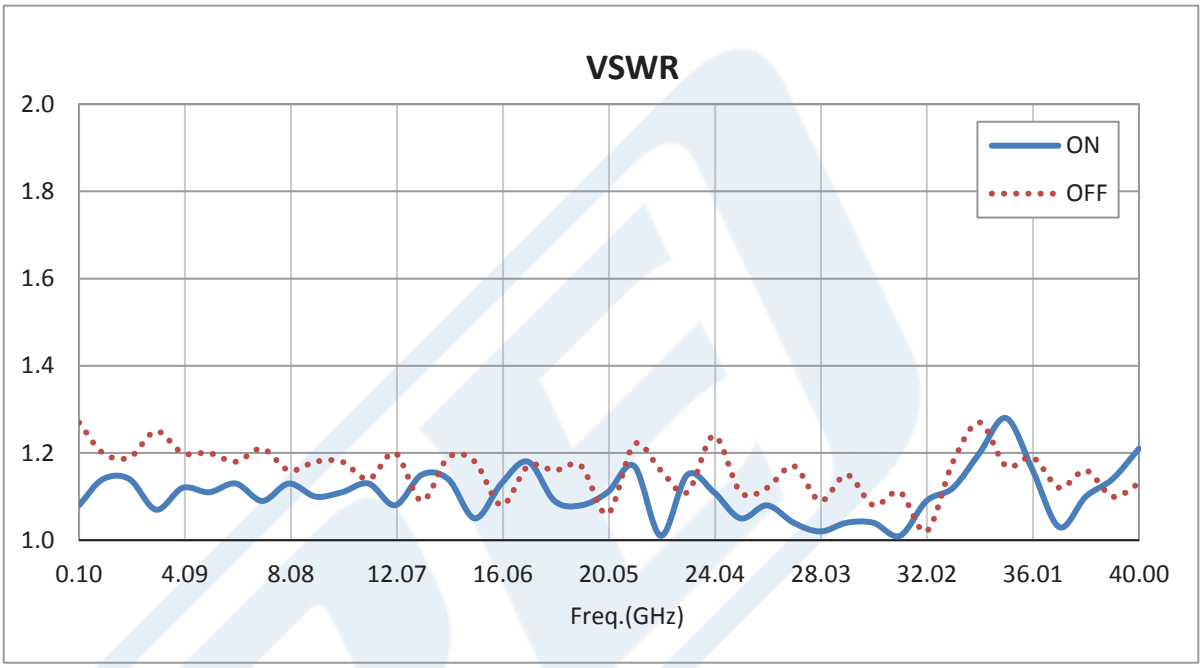

2.92mm Precision Calibrated Noise Source Module, Output ENR of 10 dB, +28 VDC, 100 MHz to 40 GHz, Calibration Standard from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: https://www.pasternack.com/2.92mm-precision-calibrated-noise-source-enr-10-db-40-ghz-pe85n1008-p.aspx

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PE85N1008 CAD Drawing

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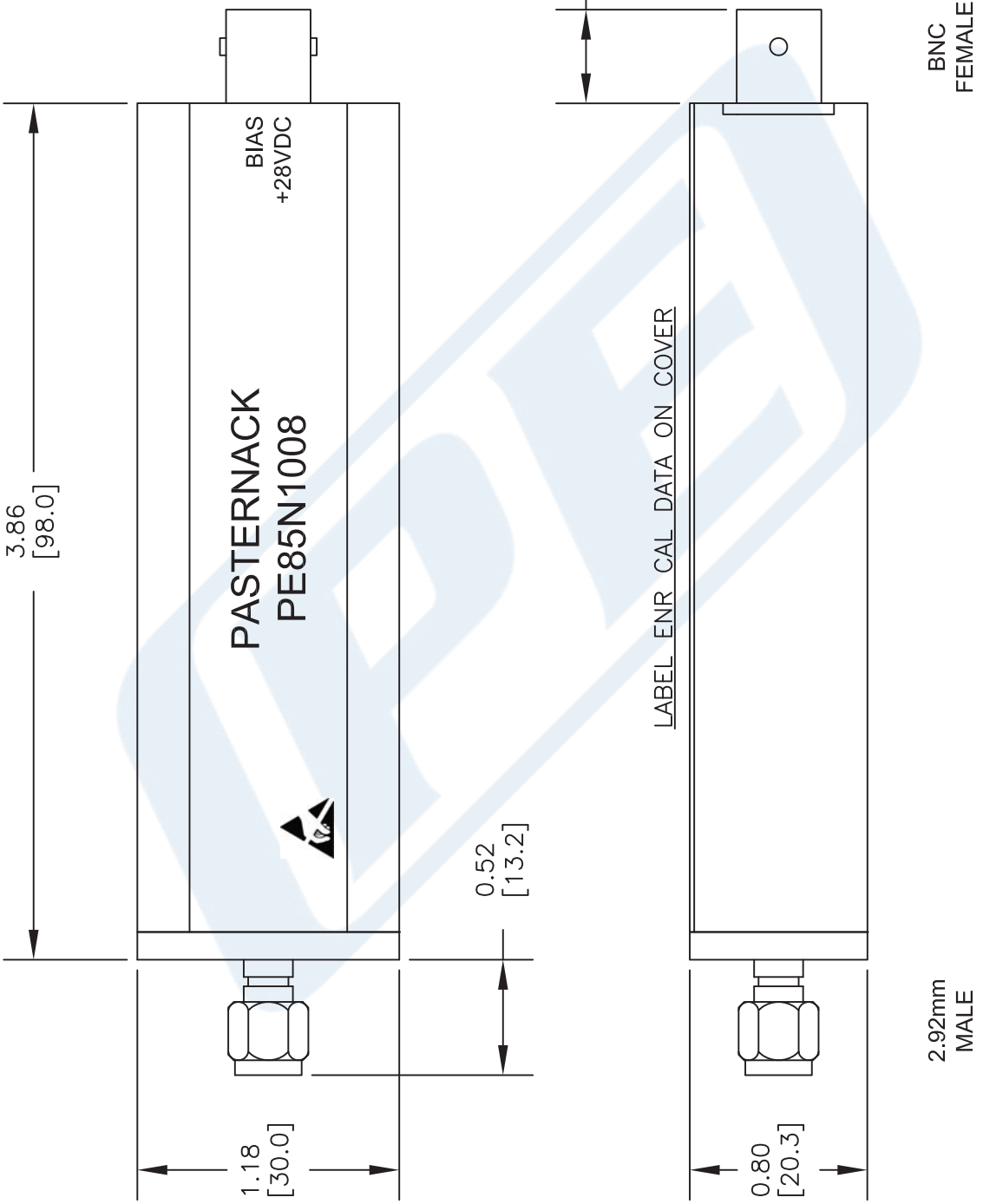

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE: PE85N1008

FSCM NO. 53919 | CAD FILE 110915 | SCALE N/A | SIZE A | 2233

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