PASTERNACK®
THE ENGINEER'S RF SOURCE

SMA Amplified Noise Source Module, Output Pout of 10 dBm, +15 VDC, 0.1 MHz to 500 MHz

Noise Generators Technical Data Sheet PE85N1010

Features

- 0.1 MHz to 500 MHz Bandwidth
- High Crest Factor Design
- Output Power: +10 dBm
- Typical Flatness: +/- 1.5 dB
- Noise Power: -77 dBm/Hz
- SMA Female Output Connector
- Designed to meet MIL-STD-202F environmental test conditions
- Amplified Noise Source
- Internal Voltage Regulation

Applications

- Bit Error Rate (BER) Testing for wireless test applications
- Random Jitter source
- Built-In Test equipment for signal strength calibrators and radar applications
- Dithering for increased dynamic range of A/D converters.

Description

The PE85N1010 is a coaxial packaged Amplified Noise Source module which operates over a wide frequency range from 0.1 MHz to 500 MHz. The high Crest Factor design generates an output power level of +10 dBm with +/- 1.5 dB typical flatness and is ideal for Bit Error Rate (BER) testing for wireless test applications, as well as for Noise Figure measurements and a variety of built-in test applications. Noise power is -77 dBm/Hz and the temperature coefficient is 0.025 dB/°C. The input voltage is +15 Vdc which is internally regulated and the operational temperature range is -40°C to +100°C. The rugged package design supports an output Female SMA connector with an EMI/RFI filter voltage pin and ground tab. 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		500	MHz
Impedance		50		Ohms
Flatness		±1.5		dB
Output Variation vs Temperature		0.025		dB/deg C
Output Power		10		dBm
Output Power Spectral Density		-77		dBm/Hz
Bias Voltage 1	14	15	18	Volts
Input Current 1			160	mA

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: SMA Amplified Noise Source Module, Output Pout of 10 dBm, +15 VDC, 0.1 MHz to 500 MHz PE85N1010

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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Mechanical Specifications

Size

Length	3.25 in [82.55 mm]
Width/Dia.	0.98 in [24.89 mm]
Height	0.5 in [12.7 mm]
Weight	0.149 lbs [67.59 g]
Package Type	Connectorized Module

Connectors

DC Connector	Pin
Output Connector	SMA Female

Environmental Specifications

Temperature

Operating Range	-40 to +100 deg C
Storage Range	-55 to +150 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.

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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Typical Performance Data

SMA Amplified Noise Source Module, Output Pout of 10 dBm, +15 VDC, 0.1 MHz to 500 MHz 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/sma-amplified-noise-source-pout-10-dbm-500-mhz-pe85n1010-p.aspx

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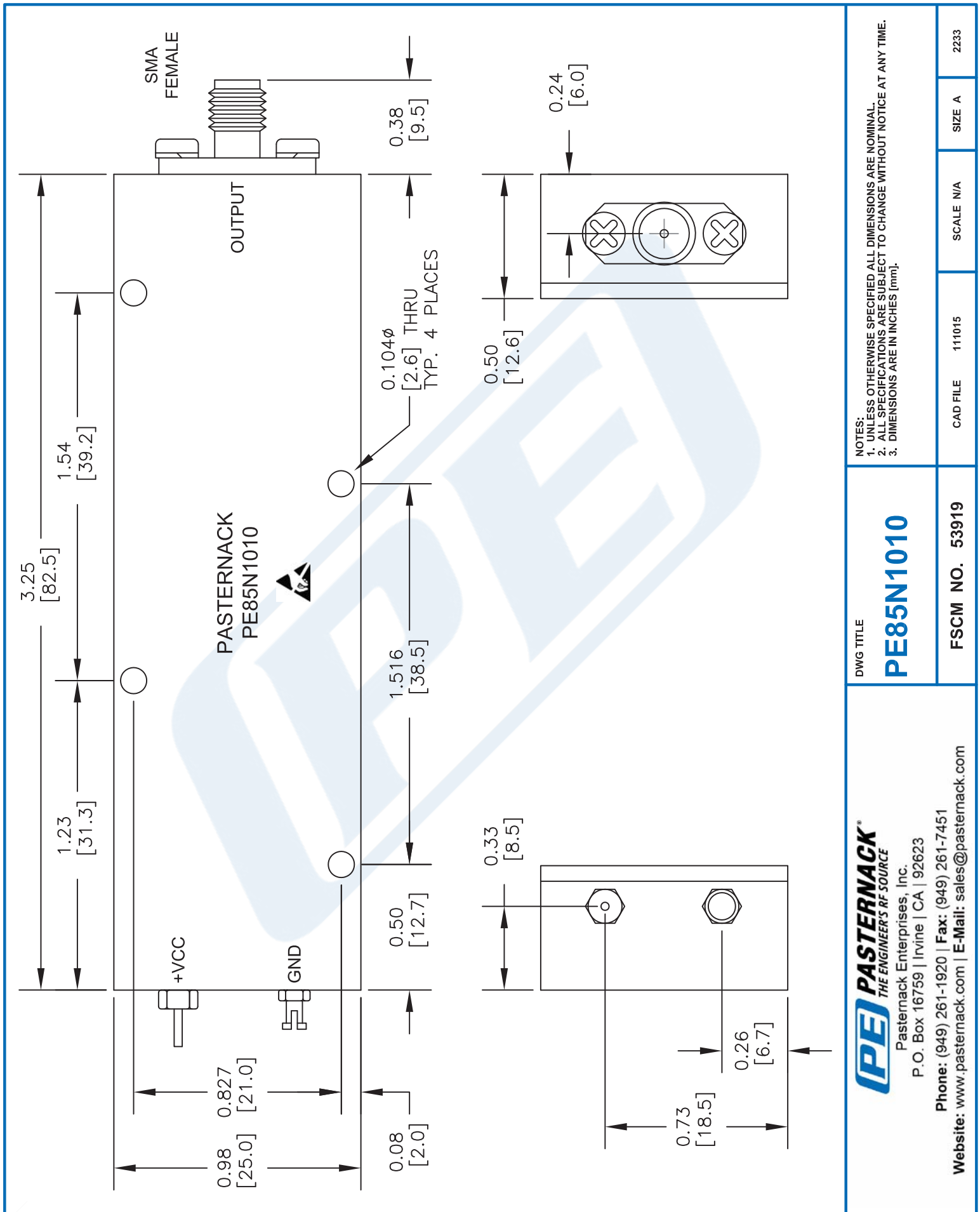
PE85N1010 CAD Drawing

SMA Amplified Noise Source Module, Output Pout of
10 dBm, +15 VDC, 0.1 MHz to 500 MHz



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	111015	SCALE N/A	SIZE A	2233

DWG TITLE: **PE85N1010**

FSCM NO. 53919

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