SMA Calibrated Noise Source Module, Output
ENR of 30 dB, +28 VDC, 1 GHz to 2 GHz

Noise Generators Technical Data Sheet   PE8505

Features

- 1 to 2 GHz Frequency Range
- Calibrated in 0.25 GHz Steps
- High Output ENR 30 to 35 dB
- Flatness ±1 dB
- +28 VDC Operation
- SMA Female Voltage Bias
- SMA Male Output

Applications

- Noise Figure Measurements
- Built-In Test Equipment (BITE)
- Automated Test Equipment (ATE)
- Jamming
- Baseband Signal Simulation
- Additive White Gaussian Noise (AWGN) Source for Error Rate Measurements
- SATCOM Bit Error Rate (BER) and Noise Figure Measurements
- Jitter Source

Description

The PE8505 is a calibrated noise source module (also known as a noise generator) which operates over a frequency range from 1 to 2 GHz. Pasternack's noise source design is calibrated in 0.25 GHz increments and is ideal for noise figure measurements and a variety of built-in test applications. This noise source model operates at +28 Vdc and features a high output excess noise ratio (ENR) level of 30 to 35 dB. Typical flatness across the entire frequency band is ±1 dB. The package design supports an input SMA female connector for DC biasing, and an output SMA male connector.

Electrical Specifications

RF Characteristics

Description	Minimum	Typical	Maximum	Units
Frequency Range	1		2	GHz
Impedance		50		Ohms
Output ENR	30		35	dB
Flatness		±1		dB
Output Variation vs Input Voltage			0.1	dB/%V
Output Variation vs Temperature			0.01	dB/deg C
Bias Voltage 1		28		Volts
Input Current 1		10	25	mA
Rise/Fall Time			1	µs
Calibration Points		0.25 GHz increments		

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 30 dB, +28 VDC, 1 GHz to 2 GHz PE8505

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Mechanical Specifications

Size
Length	2.84 in [72.14 mm]
Width/Dia.	0.5 in [12.7 mm]
Height	0.5 in [12.7 mm]
Weight	0.07 lbs [31.75 g]

Connectors
DC Connector	SMA Female
Output Connector	SMA Male

Environmental Specifications
Temperature
Operating Range	-55 to +85 deg C

Compliance Certifications (visit www.Pasternack.com for current document)
RoHS Compliant	
REACH Compliant	12/17/2015

Plotted and Other Data
Notes:

SMA Calibrated Noise Source Module, Output ENR of 30 dB, +28 VDC, 1 GHz 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% availability and are part of the broadest selection in the industry.
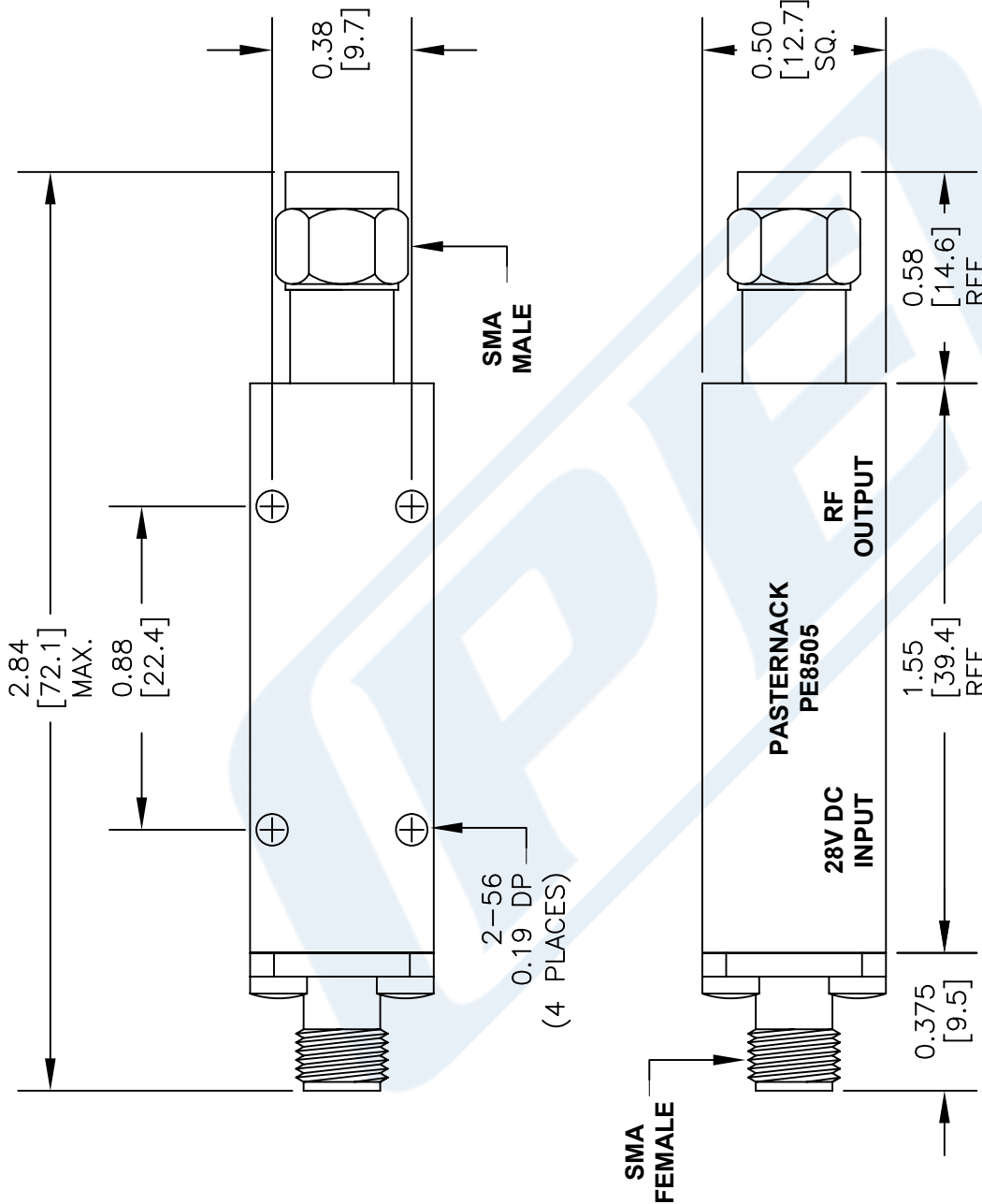
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URL: https://www.pasternack.com/high-output-noise-generators-1-2-ghz-pe8505-p.aspx

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PE8505 CAD Drawing
SMA Calibrated Noise Source Module, Output ENR of 30 dB, +28 VDC, 1 GHz to 2 GHz

0.38 [9.7]

SMA MALE

0.50 [12.7] SQ.

0.58 [14.6] REF.

2.84 [72.1] MAX.

0.88 [22.4]

RF OUTPUT

PASTERNACK PE8505

1.55 [39.4] REF.

28V DC INPUT

2-56 DP
0.19 DP
(4 PLACES)

0.375 [9.5]

SMA FEMALE

Frequency (GHz)	1	1.25	1.5	1.75	2
ENR (dB) @+28Vdc	31.9	30	30.9	31.5	31.2

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].

SIZE A	3045
SCALE N/A	
CAD FILE 072016	
FSCM NO. 53919	

DWG TITLE
PE8505

STANDARD TOLERANCES
DECIMAL
.XX   ±0.01
.XXX   ±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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