Fairview Microwave
RF COMPONENTS ON DEMAND. Done!

FNNA1010
DATA SHEET

Amplified Noise Source Module With a Noise Output Pout of 10 dBm, and a Voltage of +15 VDC, Operating From 0.1 MHz to 500 MHz With SMA

The FNNA1010 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.

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.

Electrical Specifications

Description	Min	Typ	Max	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

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	2.25 lbs [1.02 Kg]
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)

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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)

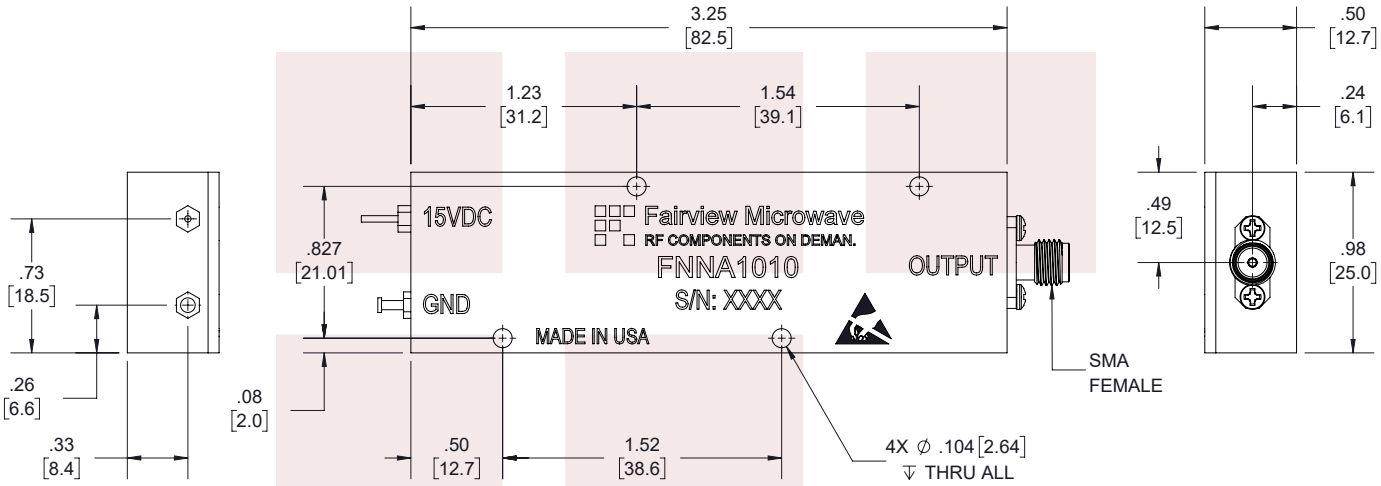
Plotted and Other Data

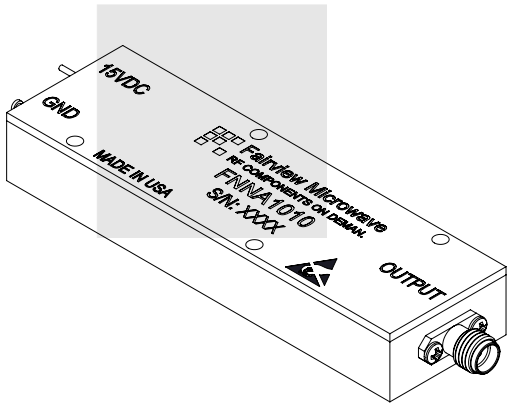
Notes:

Amplified Noise Source Module With a Noise Output Pout of 10 dBm, and a Voltage of +15 VDC, Operating From 0.1 MHz to 500 MHz With SMA from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: Amplified Noise Source Module With a Noise Output Pout of 10 dBm, and a Voltage of +15 VDC, Operating From 0.1 MHz to 500 MHz With SMA FNNA1010

URL: https://www.fairviewmicrowave.com/amplified-noise-source-pout-10-dbm-500-mhz-sma-fnna1010-p.aspx





STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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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].

TITLE	DWG NO	CAGE CODE
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CAD FILE	SHEET	SCALE	SIZE	
05/22/18	1 OF 1	N/A	A	7361