

Amplified Noise Source Module With a Noise Output Pout of 0 dBm, and a Voltage of +15 VDC, Operating From 10 MHz to 2 GHz With SMA

The FNNA1011 is a coaxial packaged Amplified Noise Source module which operates over a wide frequency range from 10 MHz to 2 GHz. The high Crest Factor design generates an output power level of 0 dBm with +/- 2.0 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 -93 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

Description	Min	Typ	Max	Units
Frequency Range	0.01		2	GHz
Impedance		50		Ohms
Flatness		±2		dB
Output Variation vs Temperature		0.025		dB/deg C
Output Power		0		dBm
Output Power Spectral Density		-93		dBm/Hz
Bias Voltage 1	14	15	18	Volts
Input Current 1			90	mA

Features:

- 10 MHz to 2 GHz Bandwidth
- High Crest Factor Design
- Output Power: 0 dBm
- Typical Flatness: +/- 2 dB
- Noise Power: -93 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.

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 or 15g)

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Altitude
Temperature Cycle
Thermal Shock
ESD Sensitivity

MIL-STD-202F, Method 105, Condition B (50,000 ft)
MIL-STD-202F, Method 105C, Condition D (5 cycles)
MIL-STD-202F, Method 107, Condition A (5 cycles)
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

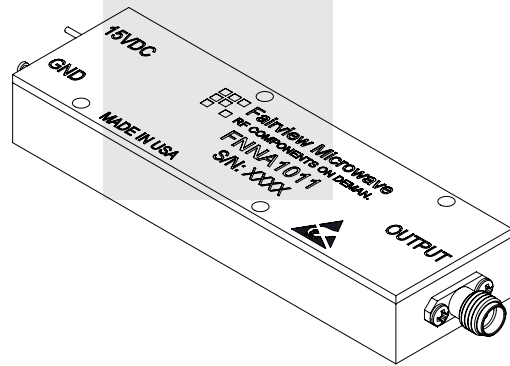
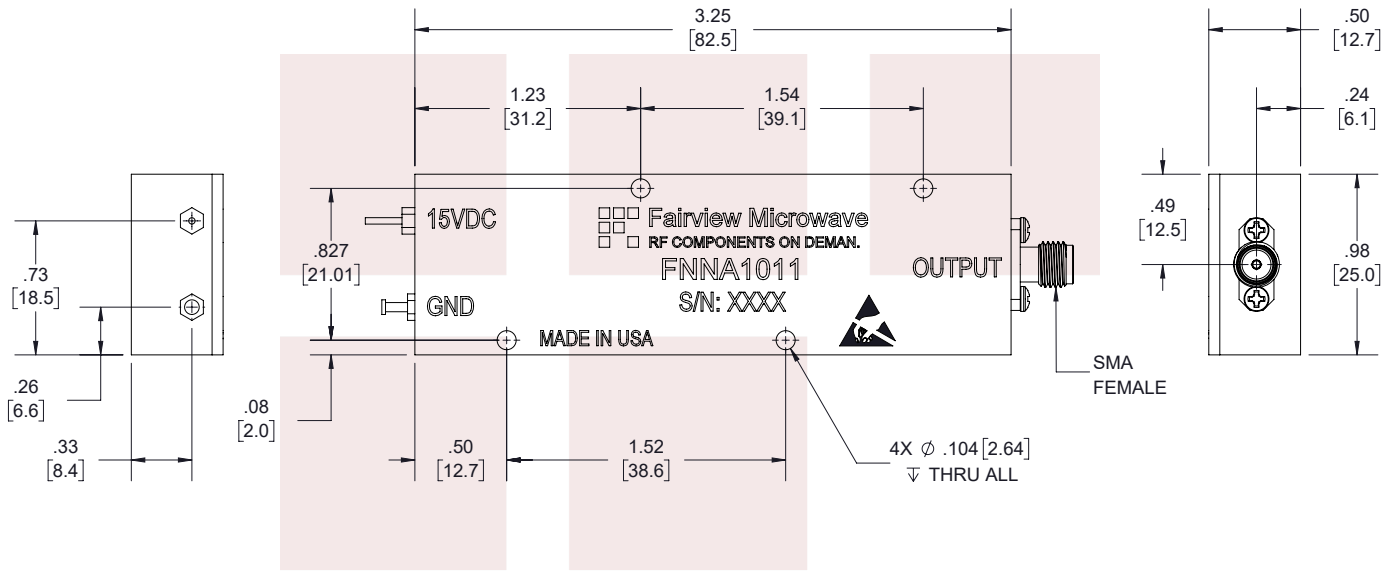
Notes:

Amplified Noise Source Module With a Noise Output Pout of 0 dBm, and a Voltage of +15 VDC, Operating From 10 MHz to 2 GHz 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 0 dBm, and a Voltage of +15 VDC, Operating From 10 MHz to 2 GHz With SMA FNNA1011](#)

URL: <https://www.fairviewmicrowave.com/amplified-noise-source-pout-0-dbm-2-ghz-sma-fnna1011-p.aspx>

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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



STANDARD TOLERANCES

- .X ±0.2
- .XX ±0.01
- .XXX ±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

		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	
Amplified Noise Source Module With a Noise Output of 0 dBm, and a Voltage of +15 VDC, Operating From 10 MHz to 2 GHz With SMA		FNNA1011			3FKR5	
CAD FILE	05/22/18	SHEET	1 OF 1	SCALE	N/A	SIZE A 7361