

**SMA Calibrated, Integral Isolator Noise Source  
 Module, Output ENR of 30 dB, +28 VDC, 7.2 GHz to  
 8.4 GHz**

The FNNI1015 is a coaxial packaged calibrated Noise Source with an integral Isolator which operates over the frequency range of 7.2 GHz to 8.4 GHz. The benefit of the integrated isolator results in improved port matching for more accurate measurements as well as protection of the noise diode from incident RF power. This design features a high output ENR of 30 to 35 dB with excellent flatness of +/- 0.75 dB max, with extremely stable performance over temperature. Ideal for applications that require high ENR and resistance to large incident RF power that may be associated with automated test equipment (ATE), radiometer, and radar systems. The input voltage is +28 Vdc which is internally regulated and the operational temperature range is -20°C to +75°C. The rugged package supports a BNC connector for DC bias and an output Female SMA 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**

Description	Min	Typ	Max	Units
Frequency Range	7.2		8.4	GHz
Impedance		50		Ohms
Output ENR	30		35	dB
Flatness		±0.75		dB
VSWR		1.3:1		
Bias Voltage 1	22	28	30	Volts

**Mechanical Specifications**

<b>Size</b>	
Length	2.5 in [63.5 mm]
Width/Dia.	1.25 in [31.75 mm]
Height	0.81 in [20.57 mm]
Weight	2.25 lbs [1.02 Kg]
Package Type	Connectorized Module
<b>Connectors</b>	
DC Connector	BNC Female
Output Connector	SMA Female

**Environmental Specifications**

<b>Temperature</b>	
Operating Range	-20 to +75 deg C
<b>Environment</b>	
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)
Altitude	MIL-STD-202F, Method 105, Condition B (50,000 ft)

**Features:**

- 7.2 to 8.4 GHz Bandwidth
- Integral Isolator for improved port matching
- Very High ENR 30 to 35 dB
- Excellent flatness +/- 0.75 dB max
- Low VSWR 1.3:1 typical
- Extremely Stable Performance
- BNC Voltage Bias and Output Female SMA connectors
- Designed to meet MIL-STD-202F environmental test conditions
- Internal Voltage Regulation

**Applications:**

- High Noise Figure Measurements
- Built-In Test equipment for signal strength calibrators and radar applications
- Automatic Test Equipment (ATE)
- Baseband Signal Simulation
- 802.11 ac WiFi.

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Temperature Cycle  
Thermal Shock  
ESD Sensitivity

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**

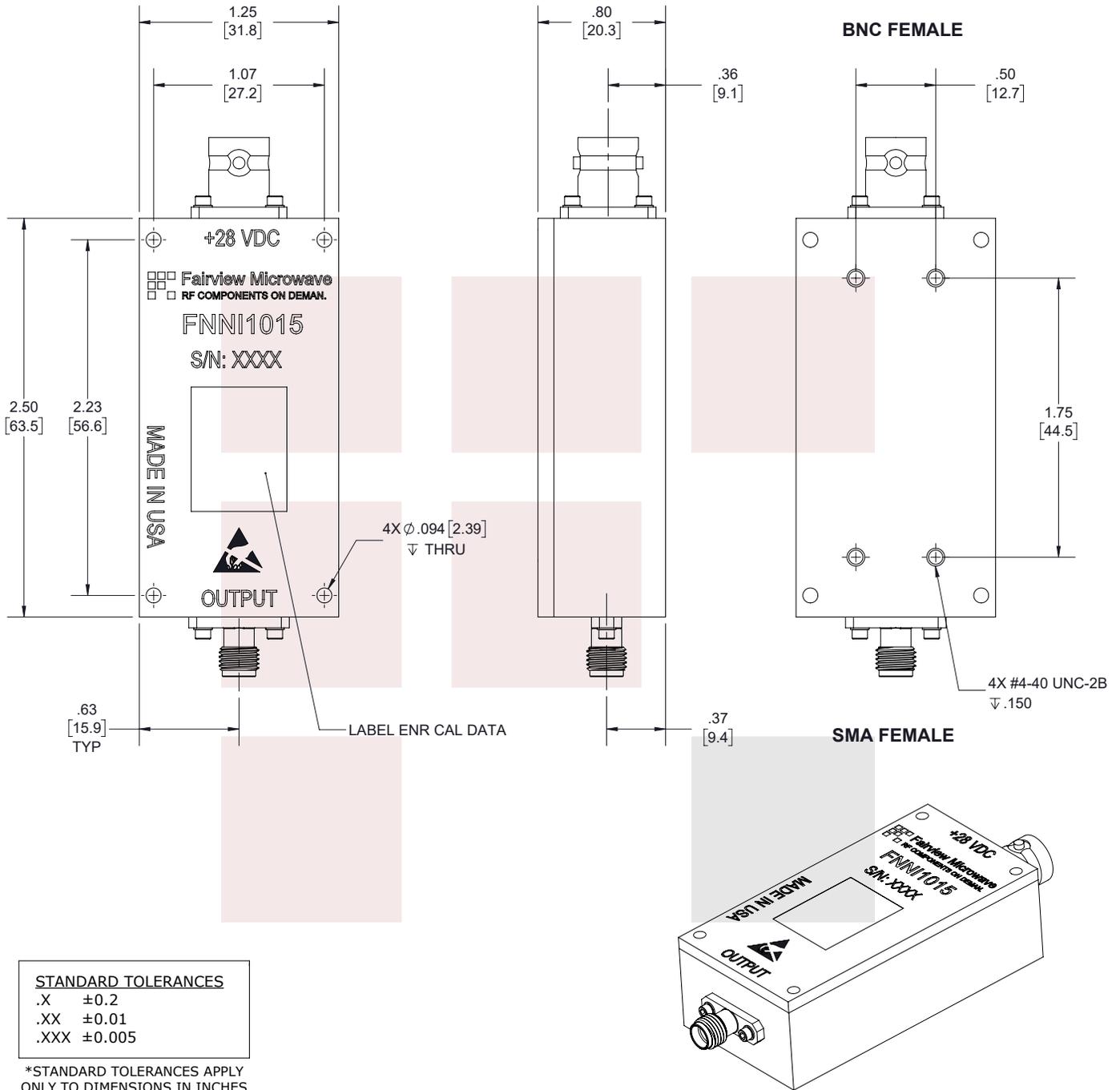
Notes:

SMA Calibrated, Integral Isolator Noise Source Module, Output ENR of 30 dB, +28 VDC, 7.2 GHz to 8.4 GHz 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: [SMA Calibrated, Integral Isolator Noise Source Module, Output ENR of 30 dB, +28 VDC, 7.2 GHz to 8.4 GHz FNNI1015](#)

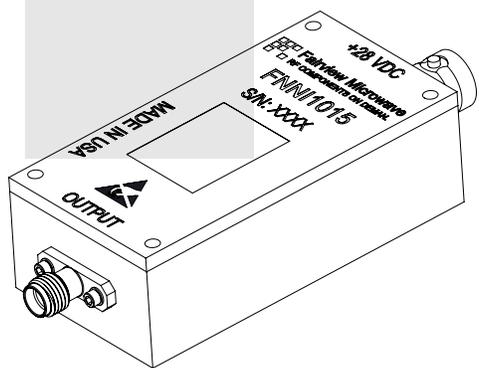
URL: <https://www.fairviewmicrowave.com/calibrated-integral-isolator-noise-source-enr-30-db-8.4-ghz-sma-fnni1015-p.aspx>

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



Fairview Microwave RF COMPONENTS ON DEMAND. <i>Done!</i>		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	
SMA Calibrated, Integral Isolator Noise Source Module, Output ENR of 30 dB, +28 VDC, 7.2 GHz to 8.4 GHz	FNNI1015	3FKR5	
CAD FILE	05/23/18	SHEET	1 OF 1
SCALE	N/A	SIZE	A
			7361