

**SMA Calibrated, Integral Isolator Noise Source
 Module, Output ENR of 30 dB, +28 VDC, 10.7 GHz to
 12.7 GHz**

The FNNI1016 is a coaxial packaged calibrated Noise Source with an integral Isolator which operates over the frequency range of 10.7 GHz to 12.7 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.



Features:

- 10.7 to 12.7 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.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	10.7		12.7	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

Size	
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
Connectors	
DC Connector	BNC Female
Output Connector	SMA Female

Environmental Specifications

Temperature	
Operating Range	-20 to +75 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)
Altitude	MIL-STD-202F, Method 105, Condition B (50,000 ft)

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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

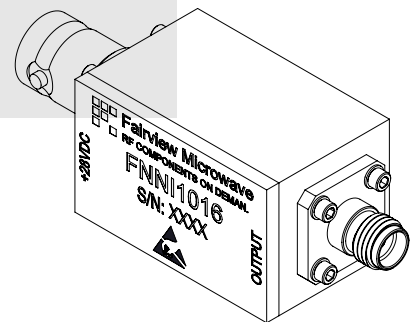
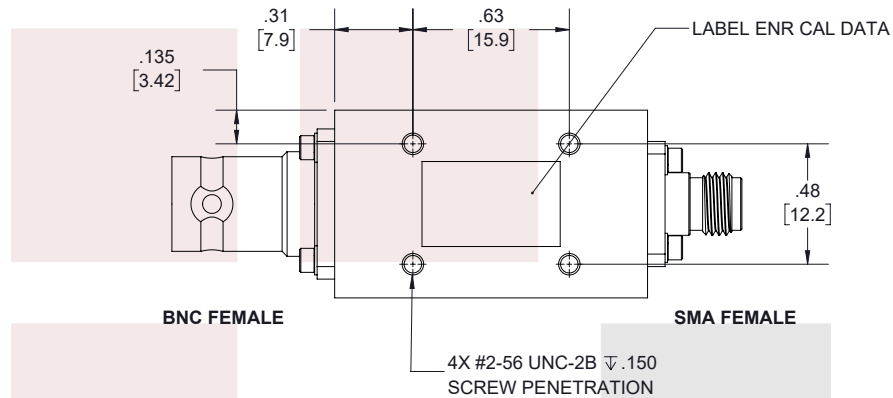
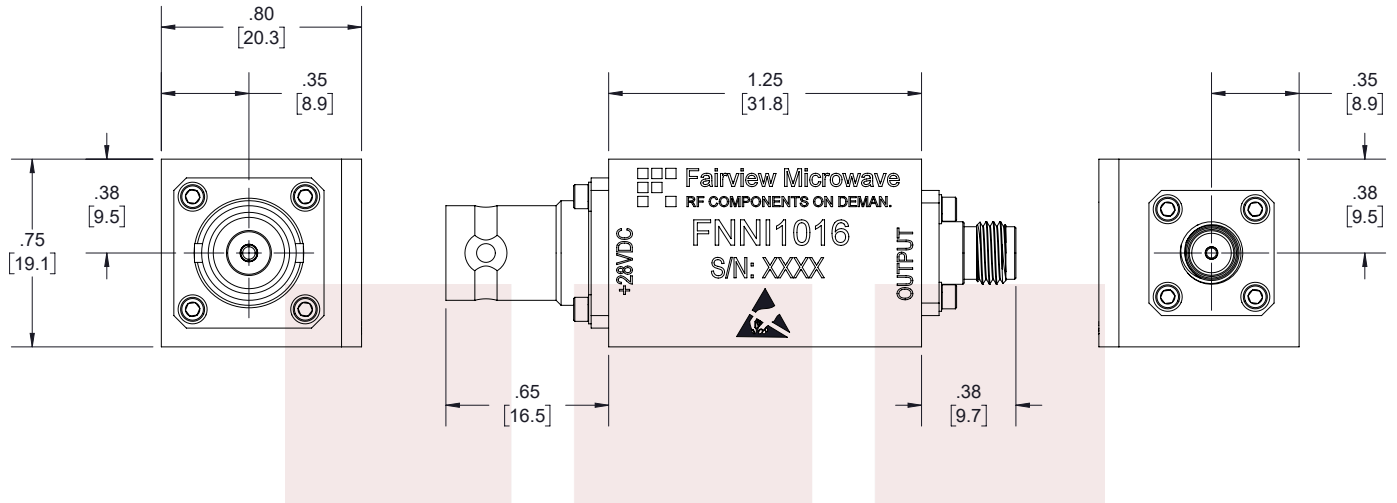
Notes:

SMA Calibrated, Integral Isolator Noise Source Module, Output ENR of 30 dB, +28 VDC, 10.7 GHz to 12.7 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, 10.7 GHz to 12.7 GHz FNNI1016](#)

URL: <https://www.fairviewmicrowave.com/calibrated-integral-isolator-noise-source-enr-30-db-12.7-ghz-sma-fnni1016-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 SMA Calibrated, Integral Isolator Noise Source Module, Output ENR of 30 dB, +28 VDC, 10.7 GHz to 12.7 GHz		DWG NO <p style="text-align: center;">FNNI1016</p>	
		CAGE CODE <p style="text-align: center;">3FKR5</p>	
CAD FILE	05/24/18	SHEET	1 OF 1
SCALE	N/A	SIZE	A
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