

Calibrated Medium Power Noise Source (Generator) With A Noise Output ENR Of 26 dB Operating From 10 MHz to 6 GHz, SMA

FMNG1003 is a coaxial packaged Noise Source module which operates over a wide frequency range from 10 MHz to 6 GHz. The design is calibrated in 1 GHz steps and is ideal for Noise Figure measurements and a variety of built-in test applications. This model operates at +28 Vdc and features an output ENR level of 26 dB min, typical flatness across the entire frequency band is +/- 2.0 dB, and excellent stability. Performance is specified over -55°C to +85°C with Noise Output Temperature Variation <0.01 dB/°C, Noise Output Variation <0.1 dB/%V. 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		6	GHz
Impedance		50		Ohms
Output ENR	26			dB
Flatness		±2		dB
VSWR		1.75:1		
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			25	mA
Calibration Points	1 GHz Steps			

Mechanical Specifications

Size	
Length	1.25 in [31.75 mm]
Width/Dia.	0.75 in [19.05 mm]
Height	0.5 in [12.7 mm]
Weight	0.059 lbs [26.76 g]
Package Type	Connectorized Module
Connectors	
DC Connector	Pin Sexless
Output Connector	SMA Male

Environmental Specifications

Temperature	
Operating Range	-55 to 85 deg C
Storage Range	-65 to 125 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)



Features:

- 10 MHz to 6 GHz Frequency Range
- Output Noise ENR 26 dB min
- Flatness 2.0 dB typ
- 28 VDC Operation
- Small Size 1.25" by 0.75" by 0.50"

Applications:

- Measure Noise Figure
- Signal Strength Calibrators
- Radar
- Jamming
- SATCOM for BER and NF
- Source of Jitter

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Vibration
 Altitude
 Temperature Cycle
 Thermal Shock
 ESD Sensitivity

MIL-STD-202F, Method 204, Cond B (0.6" 2x ampl or 15g)
 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 (visit www.FairviewMicrowave.com for current document)

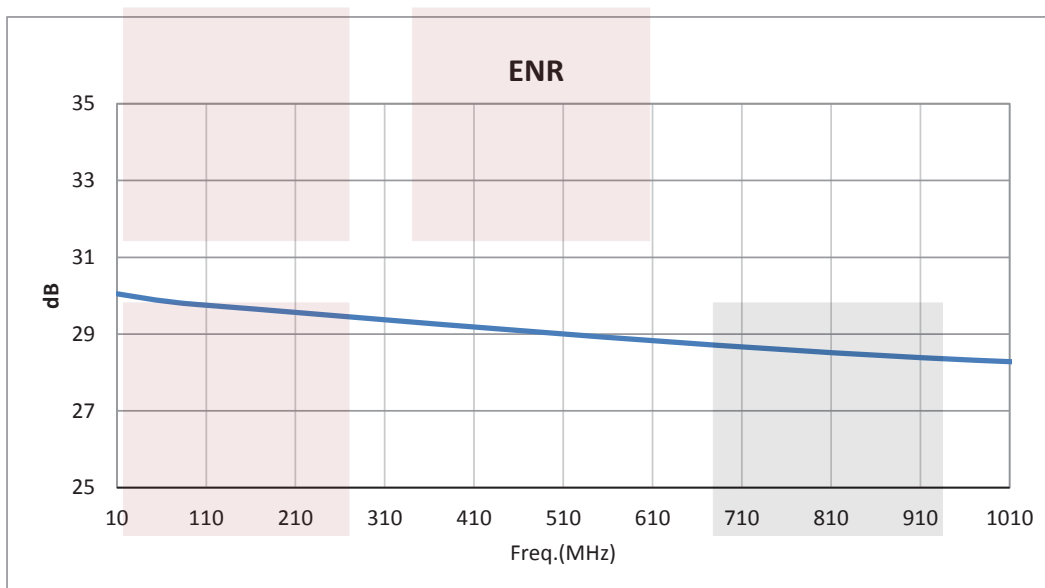
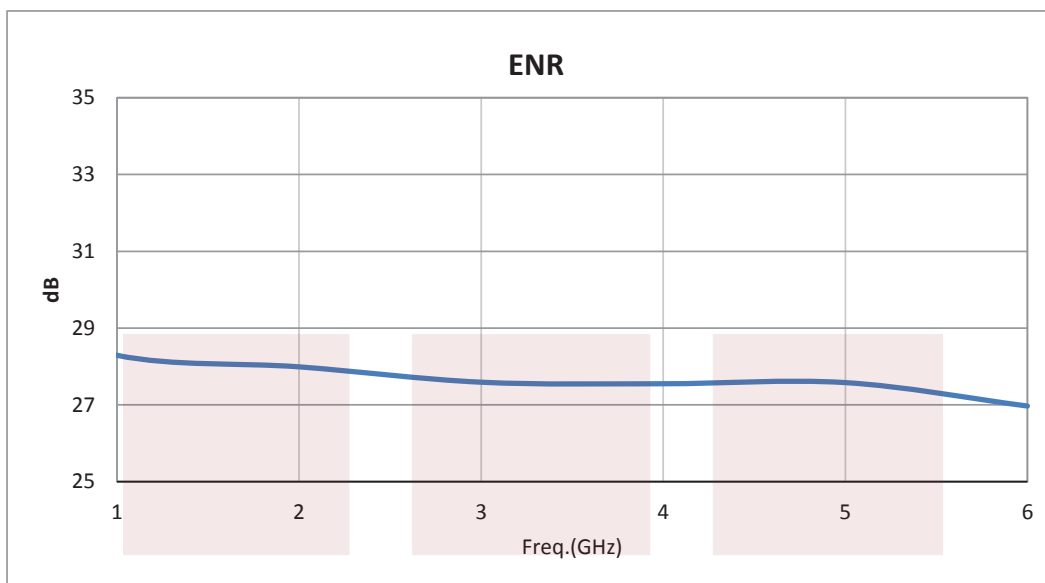
REACH Compliant

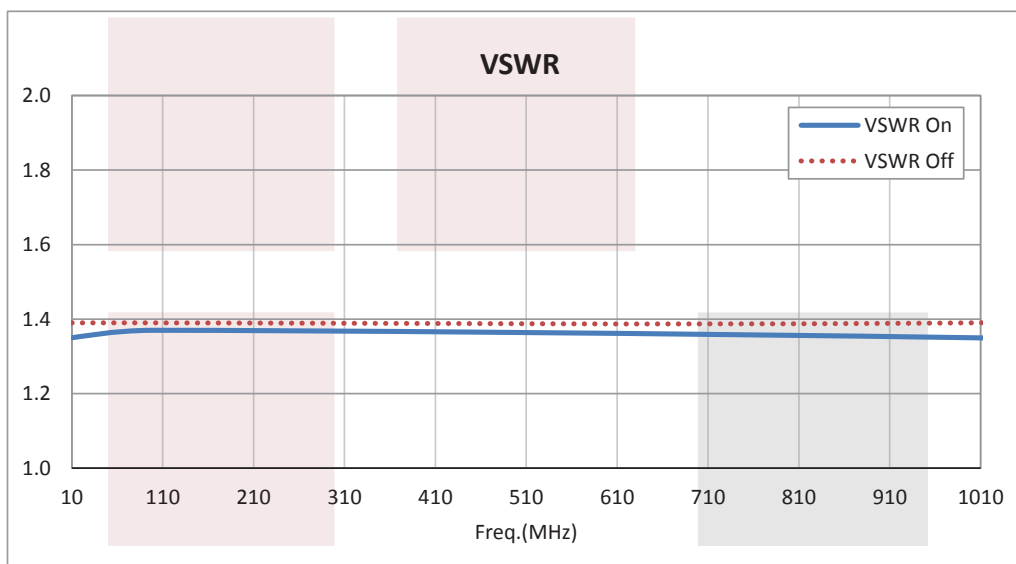
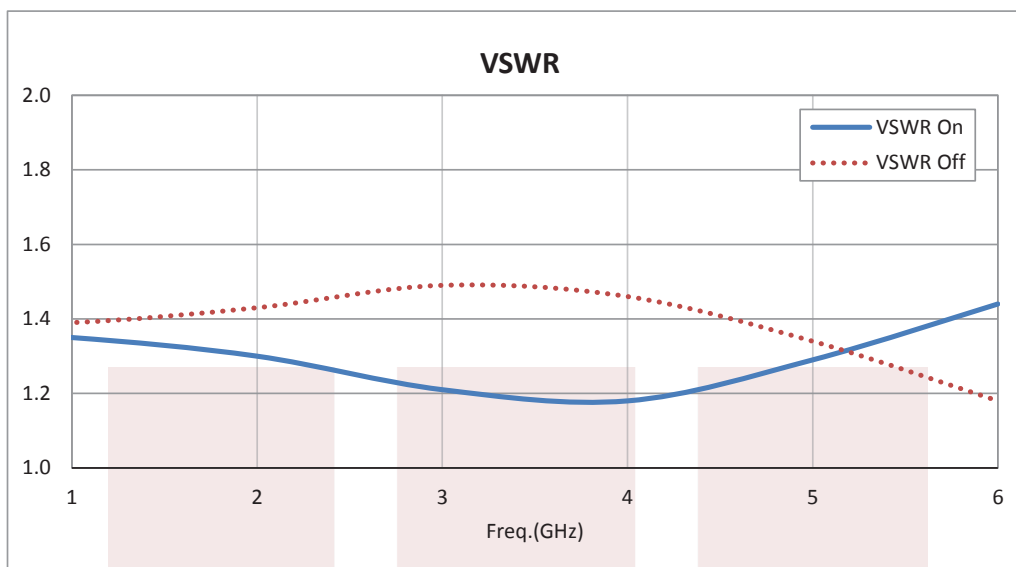
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Plotted and Other Data

Notes:

Typical Performance Data



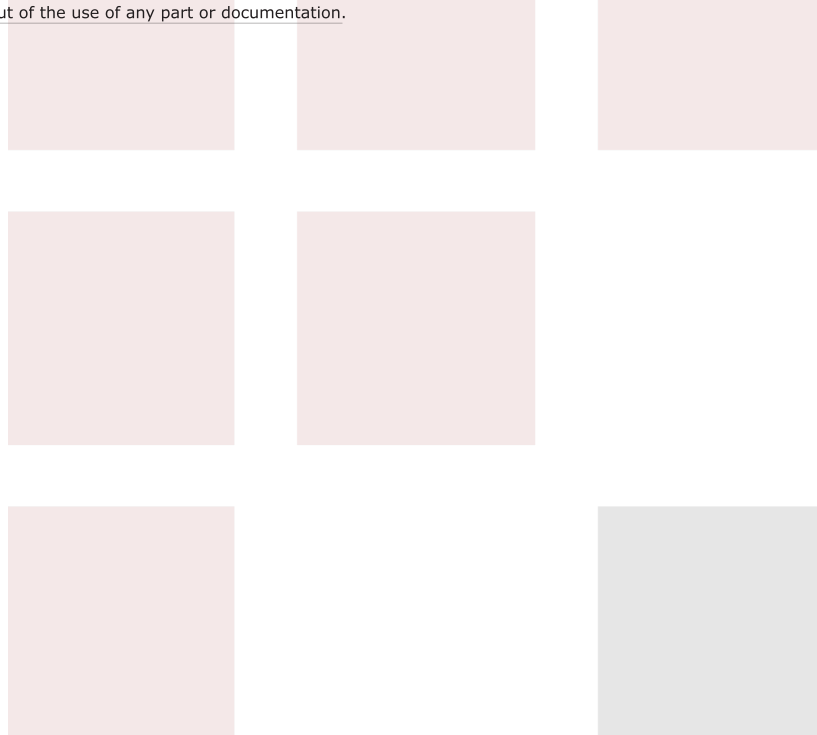


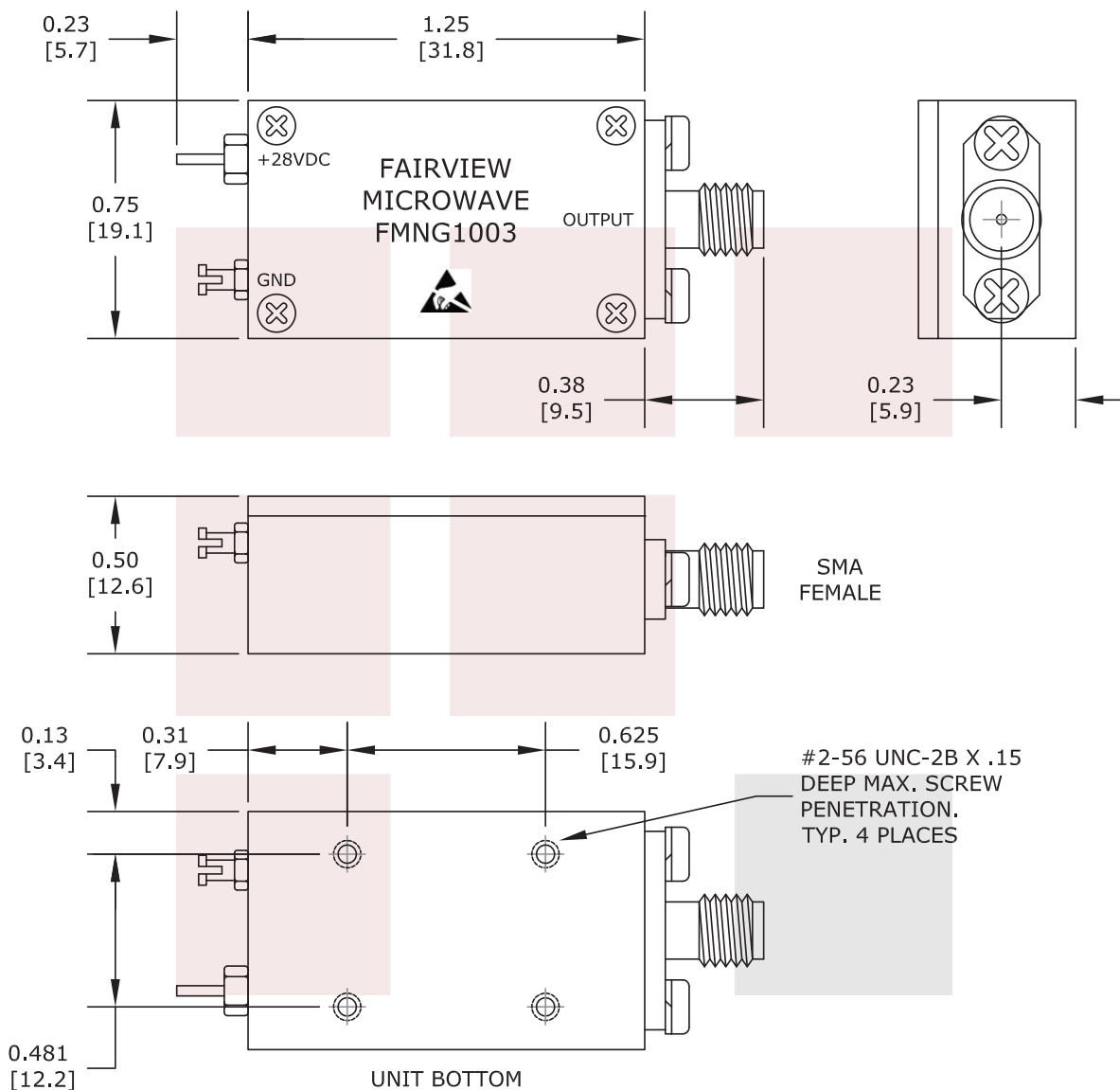
Calibrated Medium Power Noise Source (Generator) With A Noise Output ENR Of 26 dB Operating From 10 MHz to 6 GHz, SMA from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Calibrated Medium Power Noise Source \(Generator\) With A Noise Output ENR Of 26 dB Operating From 10 MHz to 6 GHz, SMA FMNG1003](#)

URL: <http://www.fairviewmicrowave.com/calibrated-medium-power-noise-source-generator-enr-26-db-6-ghz-sma-fmng1003-p.aspx>

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TITLE Calibrated Medium Power Noise Source (Generator) With A Noise Output ENR Of 26 dB Operating From 10 MHz to 6 GHz, SMA		DWG NO FMNG1003		CAGE CODE 3FKR5	
CAD FILE	110415	SHEET	SCALE	N/A	SIZE A 2233