STN-SF612-03-D2

Rev. 1.0

E-Band Network Analyzer Extender

Description:

Model STN-SF612-03-D2 is an E-band scalar network analyzer extender that extends low frequency scalar network analyzers to 60 to 90 GHz. The extender offers a low cost means of producing E-band measurements while preserving the functionality and features of standard models. The extender is constructed with SAGE Millimeter's high performance millimeterwave frequency extender (model STE-SF612-03-S1), direct reading attenuator (model STA-60-12-D1), directional coupler (model SWD-1040H-12-SB), and waveguide detectors (model STD-12SF-NI).



Features:

- Full Waveguide Band Operation
- Moderate Dynamic Range
- Cost Effective Solution

Applications:

- Test Lab
- Test Instrumentations

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Output Frequency Range	60.0 GHz		90.0 GHz
Input Frequency Range	10.0 GHz		15.0 GHz
Output Power		+3 dBm	
Input Power		+5 dBm	+20 dBm
Insertion Loss Dynamic Range		30 dB	
Return Loss Dynamic Range		20 dB	
DC Voltage	+8 V_{DC}	+8 V_{DC}	+12 V_{DC}
DC Current		450 mA	750 mA

Mechanical Specifications:

Item	Specification
RF Input	SMA (F)
RF Output	WR-12 Waveguide with UG-387/U Flange
Detector Output	SMA (F)
Extender Bias	Banana Jack
Finish	Black Anodized and Gold Plated
Weight	6.8 lb
Outline	TN-DE2

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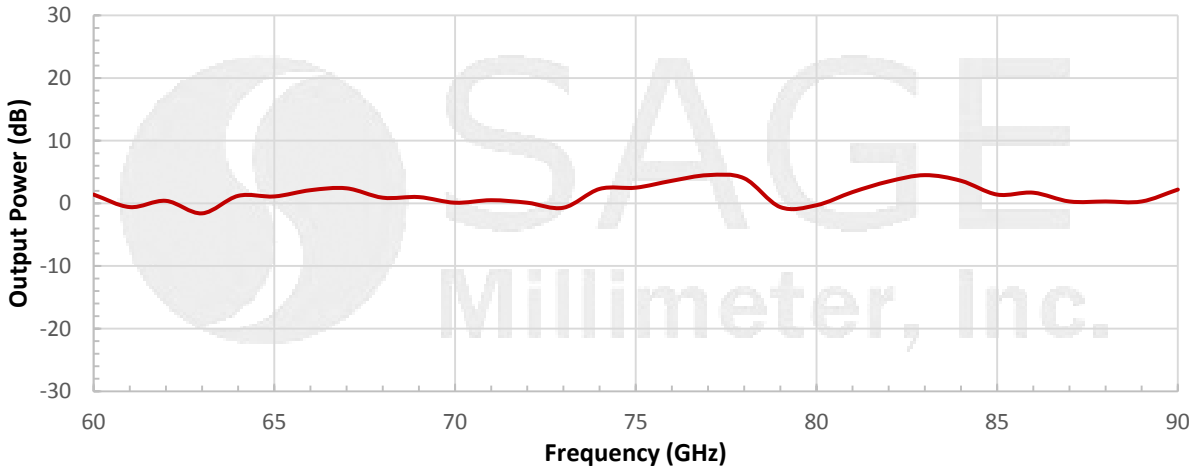
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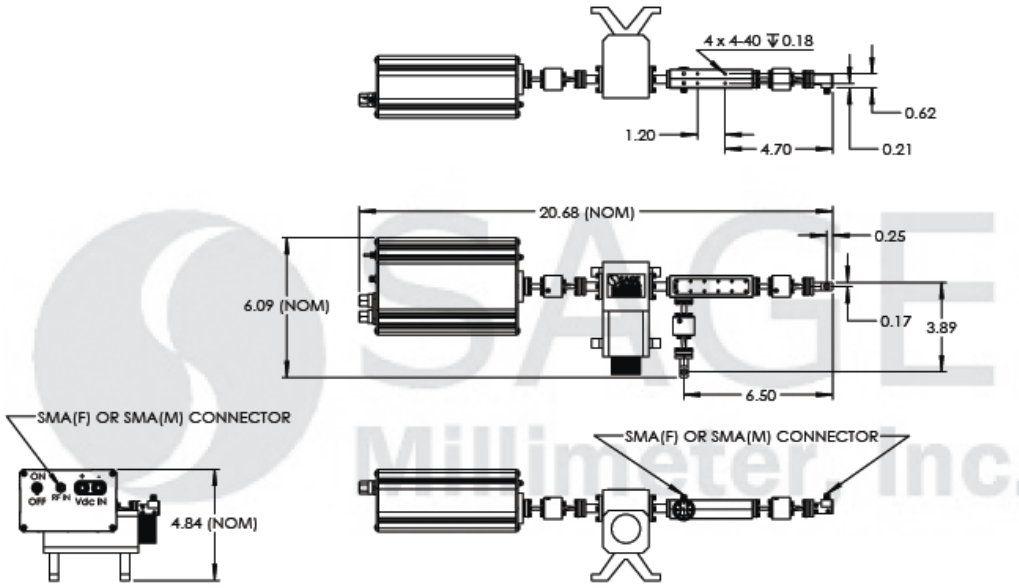
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Typical Performance vs. Frequency

P_{in}: +0 dBm, Bias: +8 V_{DC}/450 mA



Mechanical Outline: (Unless otherwise specified, all dimensions are in inches)



Note:

- All data are presented using a limited sample lot. Actual data may vary unit to unit.
- All testing was performed under +25˚C case temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

- Exceeding absolute maximum ratings of the device will damage the device.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.92 ± 0.05 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**
- Any foreign objects in the waveguide will cause performance degradation or damage the device.

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