STZ-22-02-2

WR-22 Noise Source, 18 dB ENR

STZ-22-02-2 is a WR-22 noise source that delivers 18 dB nominal ENR across the frequency range of 33 GHz to 50 GHz. The RF port uses a WR-22 Uni-Guide™ Waveguide with UG-383/U Anti-Cocking Flange and the DC bias port is equipped with a BNC (F) connector, which is readily available for standard noise figure meter and noise figure analyzer interfaces. The noise source is designed with improved port return loss for more reliable and accurate noise figure measurements. The noise source can work also in either CW or pulse AM mode up to 1 kHz depending on the driving signal. Added features, such as TTL triggering signal port used in automatic test systems or toggle switches to manually turn the module on and off can be added as an option under different part numbers. A Calibration Certificate for ENR values will be included.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	33 GHz		50 GHz
ENR		18 dB	
ENR Flatness		± 2 dB	
AM Modulation Rate		1 kHz	
Return Loss		15 dB	
DC Voltage		+28 V_{DC}	
DC Current		30 mA	
Specification Temperature		+25°C	
Operating Temperature	0 °C		+50 °C

Mechanical Specifications:

Item	Specification
RF Output Port	WR-22 Uni-Guide™ Waveguide with UG-383/U Anti-Cocking Flange
Bias Port	BNC (F)
Housing Material	Brass
Housing Finish	Gold Plated
Weight	9.2 Oz
Size	4.65” (L) x 1.20” (W) x 0.80” (H)
Outline	TZ-OQ-A

ECCN

EAR99

FEATURES

- Full WR-22 Waveguide Operation
- Precision Calibrated and Flat ENR
- Excellent Return Loss

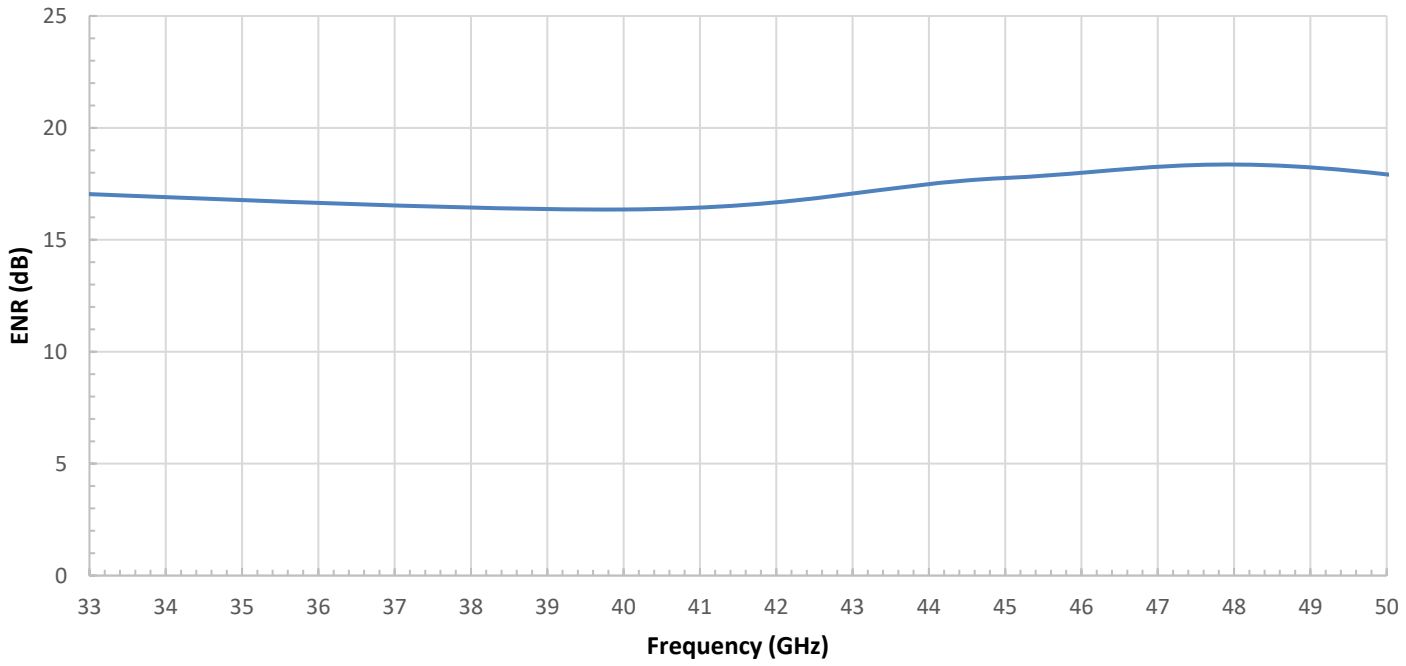
APPLICATIONS

- Test Lab
- Instrumentation

SUPPLEMENTAL DETAILS

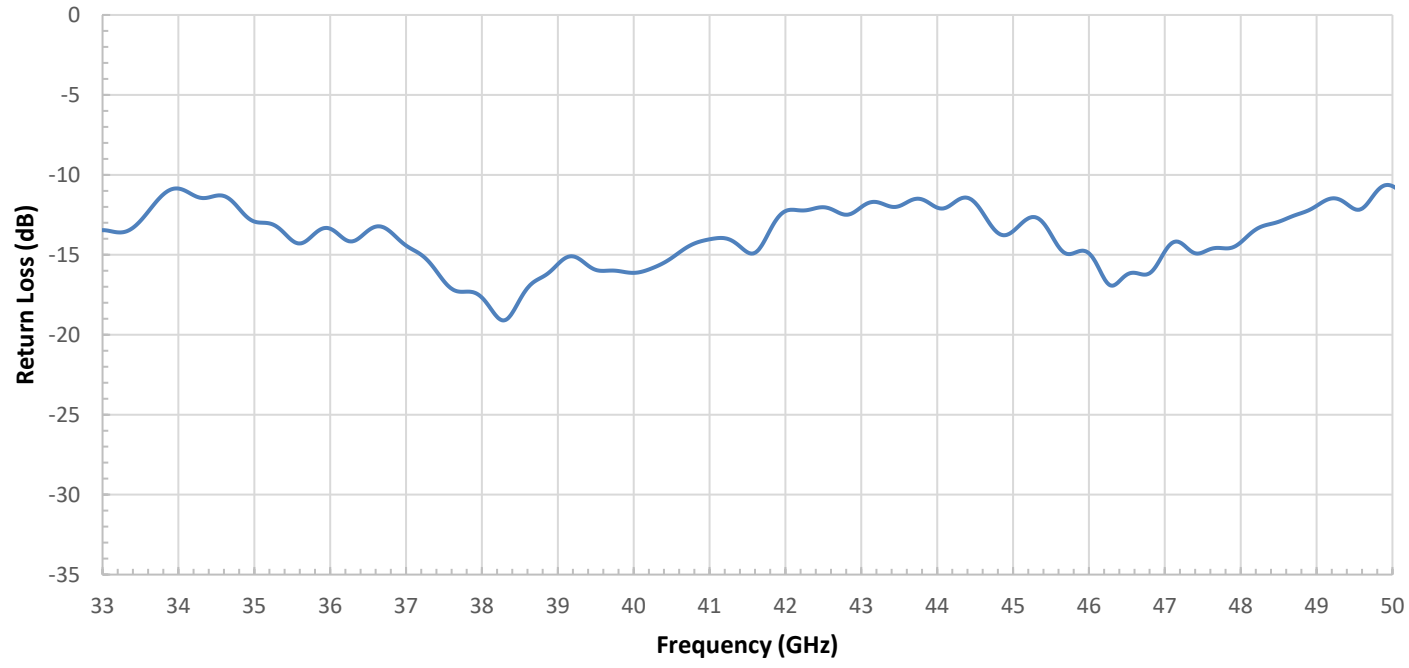
ENR vs. Frequency

Bias: +28 V_{DC}/18 mA

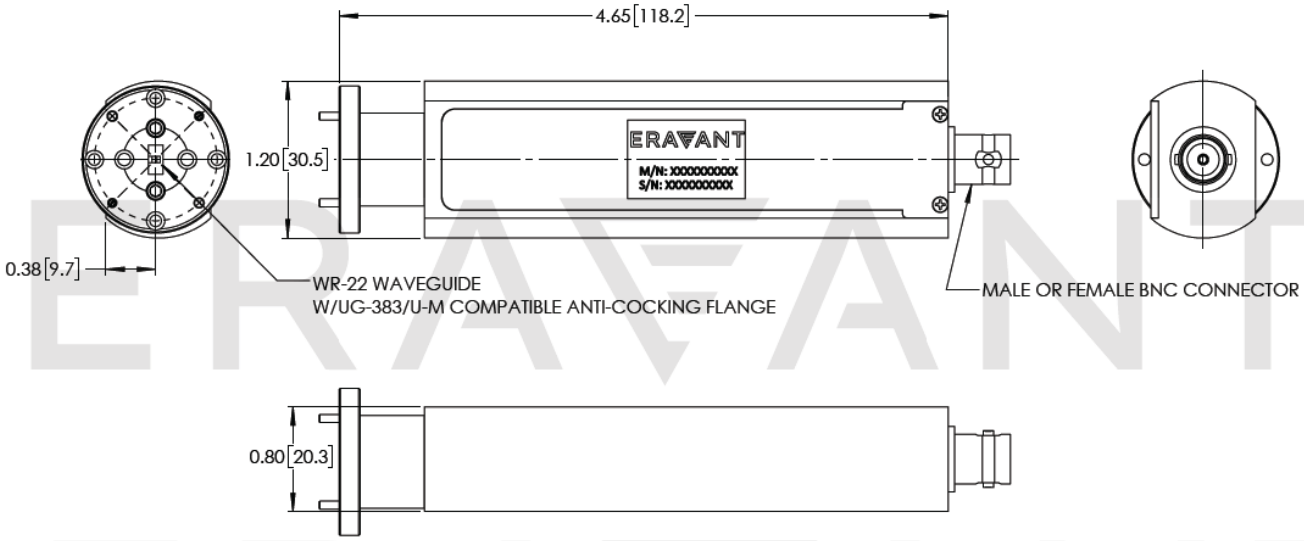


Return Loss vs. Frequency

Bias: +28 V_{DC}/18 mA



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



NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- On condition that simulated test data is provided, actual measured data may slightly vary.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended.