## Millimeterwave Solid State Noise Sources

**Bulletin No. ONS** 

#### **FEATURES**

- Solid state noise source
- Full waveguide band
- High ENR with good flatness
- High stability
- Compatible with Agilent noise test set
- Compact size

#### **APPLICATIONS**

- Calibration source
- Noise figure measurement
- Test instrument



**ONS Series** 

### **DESCRIPTION**

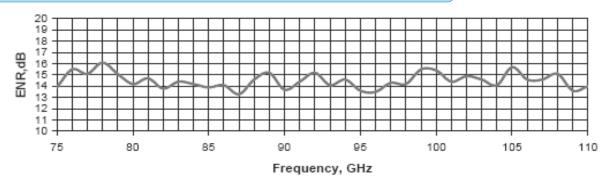
The **ONS** Series of solid state noise sources cover <u>full waveguide bands</u>. The noise sources offered cover the frequency range of 26.5 to 170 GHz in eight overlapping waveguide bands. The noise sources utilize a silicon IMPATT diode to provide a stable 15 dB typical ENR. The bias voltage and current for the noise source are +28 Vdc at 60 mA typical, which is compatible with the Agilent 8970A/B noise meters.

The standard noise sources are supplied with a full band Faraday isolator. While waveguide is the standard interface, the noise sources are also available with a coaxial interface by using the appropriate WiseWave PTC series waveguide to coax adapter up to 110 GHz.

#### **SPECIFICATIONS**

Model Number	Frequency (GHz)	ENR (dB, Typ)	Flatness (dB, Typ)	Bias Voltage (volts, Typ)	Bias Current (mA, Typ)	Waveguide Flange
ONS-28FF15-I1	26.5-40	15	±1.0	+28	60	WR-28, UG599/U
ONS-22FF14-I1	33-50	14	±1.5	+28	60	WR-22, UG383/U
ONS-19FF13- I1	40-60	13	±1.5	+28	60	WR-19, UG383/U Mod
ONS-15FF13- I1	50-75	13	±1.5	+28	60	WR-15, UG385/U
ONS-12FF13- I1	60-90	13	±1.5	+28	60	WR-12, UG387/U
ONS-10FF12- I1	75-110	12	±1.5	+28	60	WR-10, UG387/U Mod
ONS-08FF12- I1	90 to 140	12	±1.5	+28	60	WR-08, UG387/U Mod
ONS-06FF12- I1	110- to 170	12	±2.0	+28	60	WR-06, UG387/U Mod

## Representative ENR (The ENR shown is without FFF-10-01 isolator)





# Millimeterwave Solid State Noise Sources Outline Drawing

#### **OUTLINE DRAWING**

