

The Leader In Low Noise Amplifiers Introduces its New
Ka-Band Low Noise Block Downconverter
With Lowest Noise Figure in The Industry!

AmpliTech, the leader in Low Noise Amplifiers
breaks the noise barrier again with our new Industry-Leading Low Noise Ka-Band LNB
For smallsats, LEO, MEO, GEO, and portable or fixed Ka-Band teleport applications



MADE IN USA

Features

- **Noise Temp: 80K/1.06 dB Typ, 92K/1.2 dB Max**
- **Min Gain: 55 dB**
- **Low Phase Noise**
- **Compact Size**
- **Separate DC/10 MHz Ref Interfaces**
- **Weatherproof**
- **LO Stability / Tri-Band / N Connector / Waveguide Isolator Options Available**

Technical Specifications

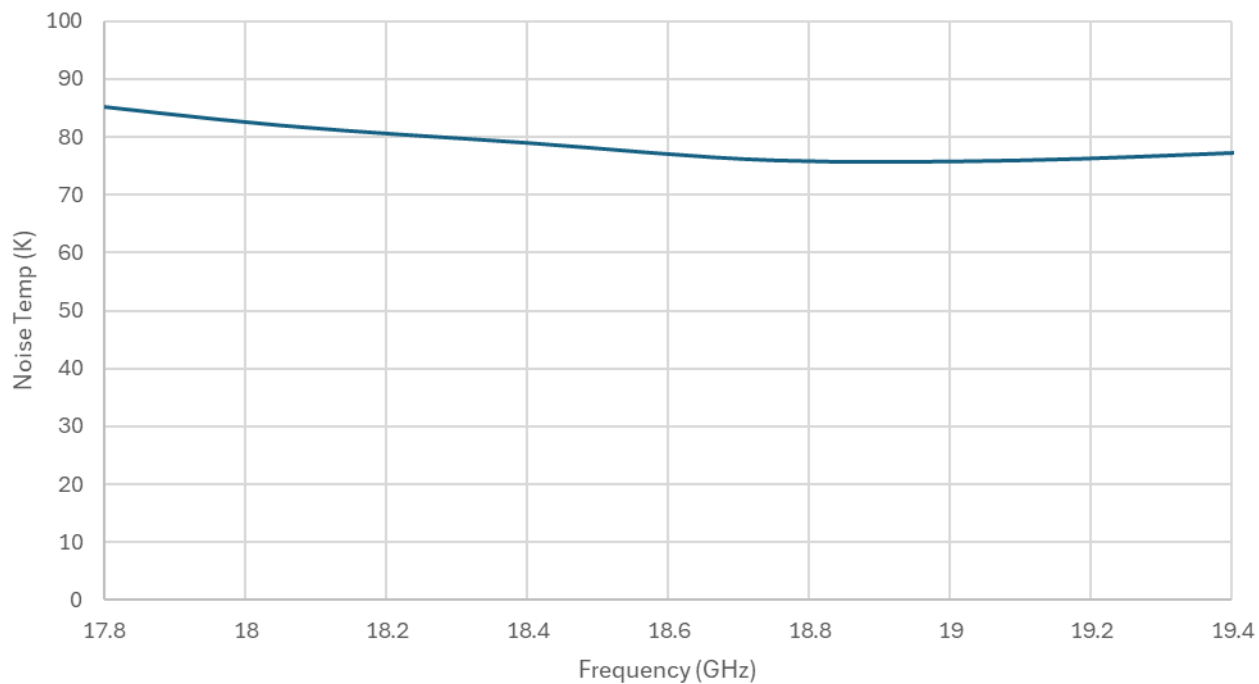
Operating Frequency	17.8 – 19.3 GHz (Up to 21.2 GHz available)
LO Frequency	16.8 GHz
IF Frequency	920 - 2420 MHz (Customizable)
Gain	55 dB Min
Gain Flatness	±1 dB Max across band
Output P1dB	+10 dBm Min
Noise Temperature	80K/1.06 dB Typ, 92K/1.2 dB Max
Image Rejection	40 dB Min
Input VSWR	1.25:1 Typ
Output VSWR	1.3:1 Typ
DC Power	+12 to +24 VDC @ 270 mA Nom
Input Power	+10 dBm Max
External Ref	10 MHz
Input Waveguide	WR-42
Output Connector	SMA Female
Pressurization	Up to 2.0 psig
Dimensions / Weight	5.5 x 2.5 x 2.5 inches / 2 lbs.

Phase Noise

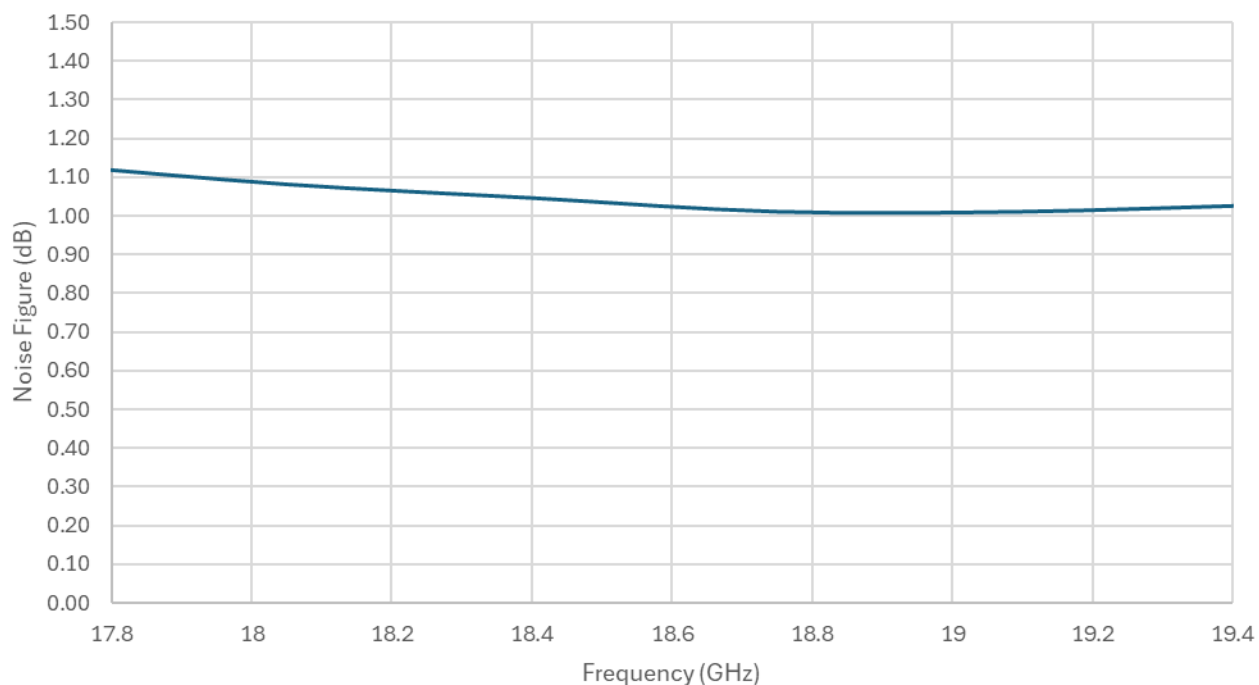
Frequency Offset from Carrier	SSB Phase Noise Power Density
100 Hz	-70 dBc
1 kHz	-75 dBc
10 kHz	-98 dBc
100 kHz	-109 dBc
1 MHz	-112 dBc

Typical Test Data @ 23°C

Noise Temperature Vs Frequency

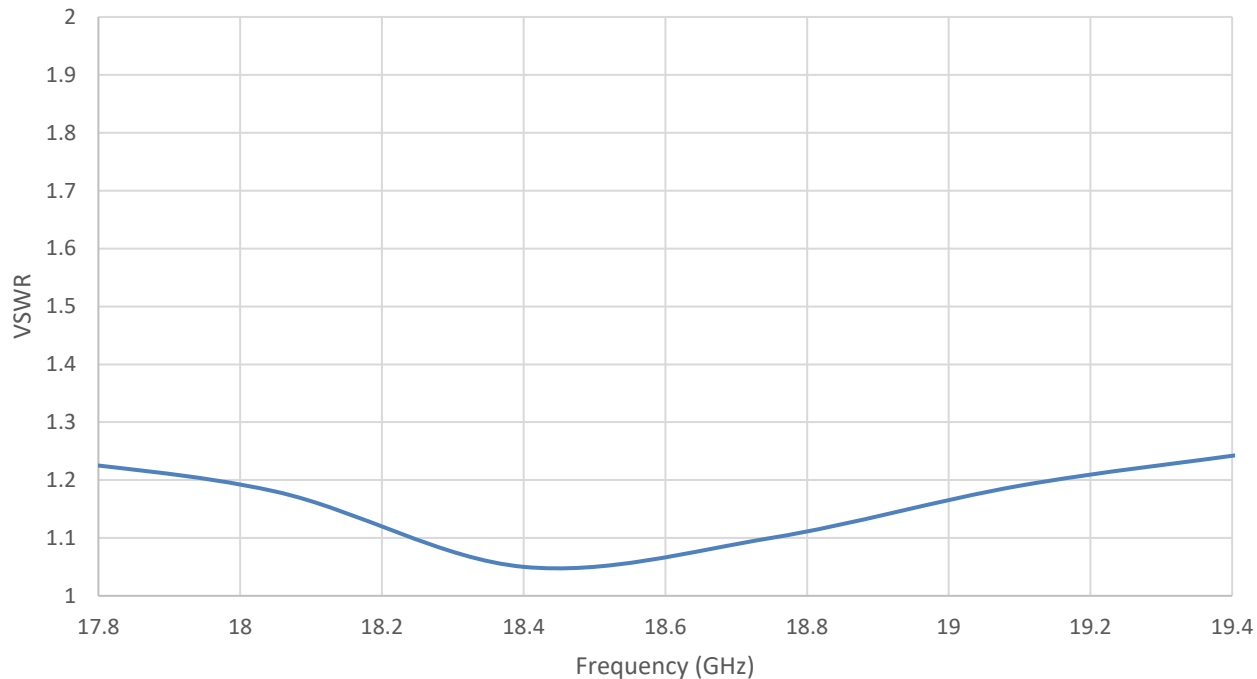


Noise Figure Vs Frequency

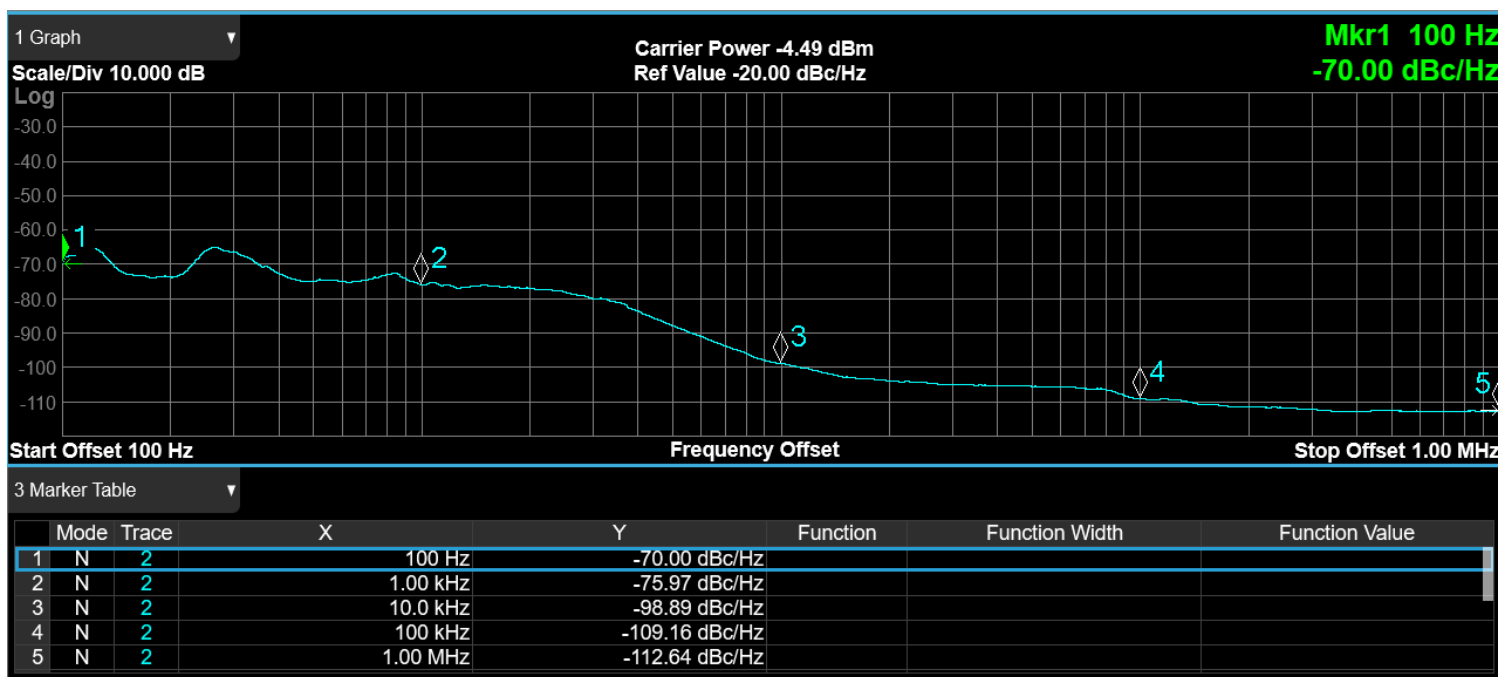


Typical Test Data @ 23°C

Input VSWR Vs Frequency



Phase Noise



OUTLINE

