# **B&Z TECHNOLOGIES**

Innovating to Excel

## Features

#### • Noise Figure ≤ 4.0 dB

- Unconditionally Stable at all temperatures
- Internally Regulated DC Voltage ٠
- 50 Ohm Matched Input/Output ٠
- Field Replaceable SMA connectors •
- Excellent Group Delay and Phase Linearity
- 0.009 inches diameter RF In/Out feed through
- ٠ 3 Year Warranty

#### Options

- Optimized Performance over Selected Bandwidth
- Internally DC Block Input (Output DC Block Standard)
- Hermetically Sealed Package

**Performance Graphs** 

- Improved Gain Flatness ±1.0 dB Max
- Gain and Phase matching
- Lower Noise Figure (Cryogenic Temp)



# Specifications (23 °C)

Parameter	Min	Тур	Max	
Frequency Range	0.1	-	30	GHz
Noise Figure *			4.0	dB
Gain	21	22	_	dB
Gain Flatness	-		±1.0	dB
P1dB Output Power	7		_	dBm
Input VSWR	-		2.0:1	
Output VSWR	_		2.0:1	
Operating Temperature	-55	-	+85	°C
Third Order Intercept				dBm
Second Order Intercept				dBm
Group Delay				psec
Voltage	+12	-	+15	V
Current	-	135	150	mA

Noise Sources used for measurement: 0.1- 18 GHz: HP346A, 18 - 30 GHz: HP346C-K01 N.F. Uncertainty (approx. 0.3 dB). 0.2 dB due to ENR of HP 346C-K01, and 0.1 dB, due to gain modulation of the unit, caused by the HP 346C-K01 source impedance change In the ON and OFF state.

Noise Figures and other parameters degrade below 500 MHz

Noise Figures at Cryogenic Temp, not given due to uncertainty of measurement for very low values. Call to discuss.

### **Mounting Drawing**

XXXXX

**BZP130UC1** 

ULTRA WIDEBAND LNA, 0.1 - 30 GHz

