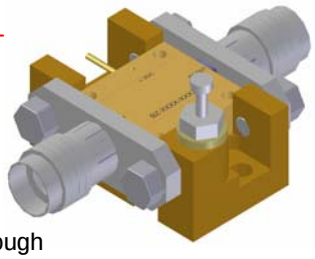
B&Z TECHNOLOGIES

Innovating to Excel

BZ-S1

ULTRA WIDEBAND, MEDIUM POWER LNA, 0.1-18GHz

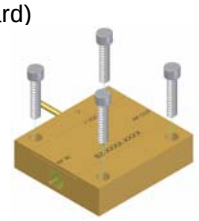
Features



- **Noise Figure ≤ 4.0 dB. Typical**
- Unconditionally Stable at all temperatures
- Internally Regulated DC Voltage
- 50 Ohm Matched Input/Output
- Field Replaceable SMA connectors
- Excellent Group Delay and Phase Linearity
- 0.009 inches diameter RF In/Out feed through
- 3 Year Warranty

Options

- **Optimized Performance over Selected Bandwidth**
- Internally DC Block Input (Output DC Block Standard)
- Hermetically Sealed Package
- Improved Gain Flatness ±1.0 dB Max
- Gain and Phase matching
- Lower Noise Figure (**Cryogenic Temp**)

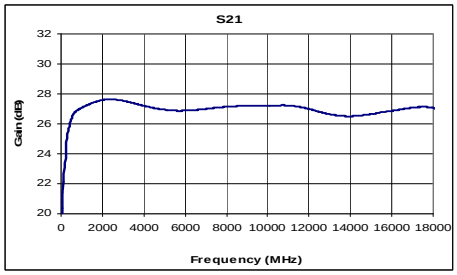


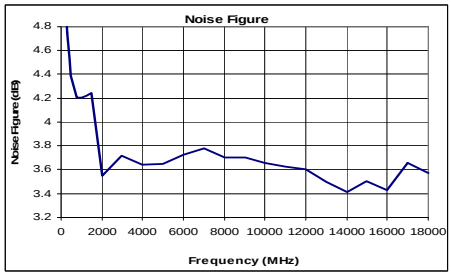
Specifications (23 °C)

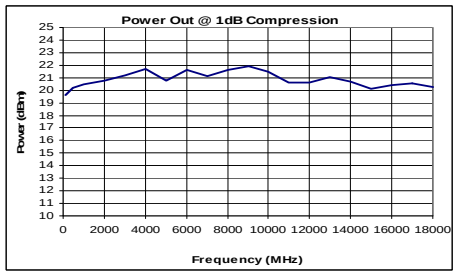
Parameter	Min	Typ	Max	
Frequency Range	0.1	–	18	GHz
Noise Figure *			5.0	dB
Gain	22	25	–	dB
Gain Flatness	–	±1.0	±2.0	dB
P1dB Output Power	17	20	–	dBm
Input VSWR	–	2.0:1	2.5:1	
Output VSWR	–	2.0:1	2.5:1	
Operating Temperature	-55	–	+85	°C
Third Order Intercept		29		dBm
Second Order Intercept		38		dBm
Voltage				
Current	+15			V
	–	225	285	mA

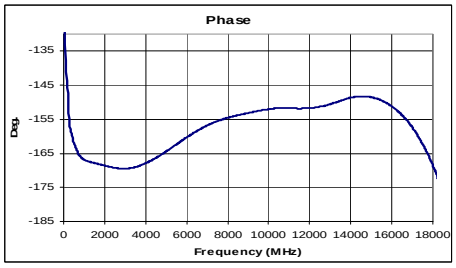
* Noise Sources used for measurement: 0.1– 18 GHz: HP346A, 18 – 20 GHz: HP346C N.F. Uncertainty (approx. 0.2 dB). 0.1 dB due to ENR of HP 346C, and 0.1 dB, due to gain modulation of the unit, caused by the HP 346C source impedance change in the ON and OFF state.
Noise Figures and other parameters degrade below 500 MHz.

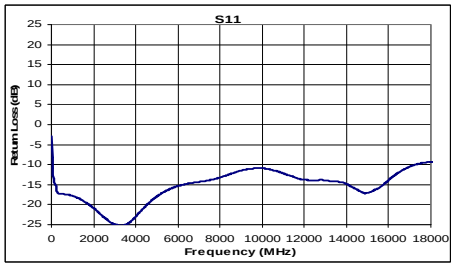
Performance Graphs

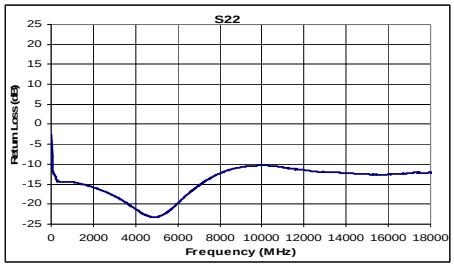




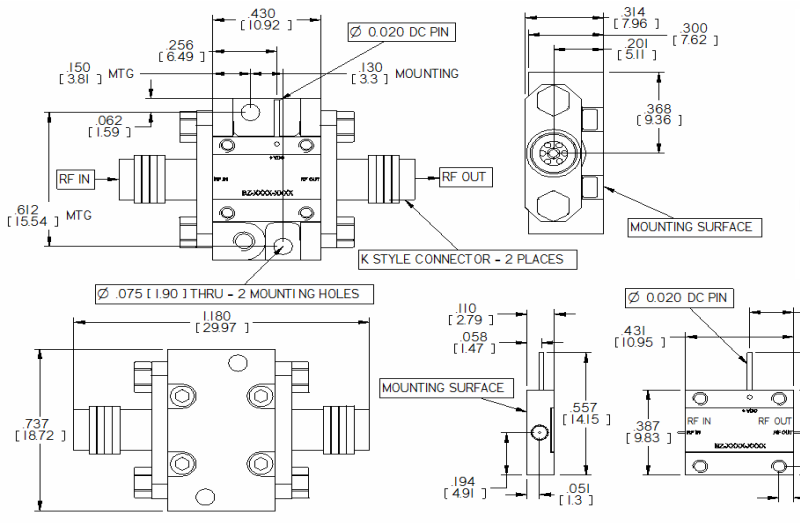








Outline Drawing



Mounting Drawing

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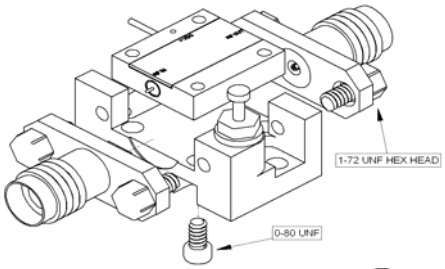
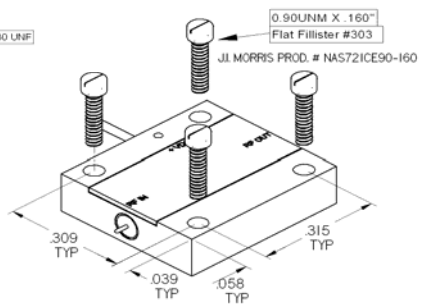


Drop In Module



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