B&Z TECHNOLOGIES
INNOVATING TO EXCEL

**LNA, 20MHz to 2GHz**

***Model:*** **BZ-00200200-101340-152222**

## Standard Features

- Unconditionally Stable at all temperatures
- No Regulator: DC Voltage = +8V (typ), +8.5V (max)
- Field Replaceable 3.5mm SMA connectors
- Excellent Group Delay and Phase Linearity
- 0.009 inches diameter RF In/Out feed through
- 3 Year Warranty

## Special Options

- AC coupled Input & Output
- Limiter option at the input. Protects Amplifier from moderated level ESD in case the amplifier is installed directly to the Antenna in EMC Applications
- The limiter allows amplifier to handle +20dBm CW.

## Other Options

- Optimized Performance over Selected Bandwidth
- Improved Gain Flatness
- Lower Noise Figure
- Improved IN and OUT VSWR
- Gain and Phase matching
- Hermetically Sealed Package


****CAUTION:** Gallium Arsenide Integrated Circuits are sensitive to electrostatic discharge (ESD) and can be damaged by static electricity. Proper ESD control techniques should be used when handling these devices.

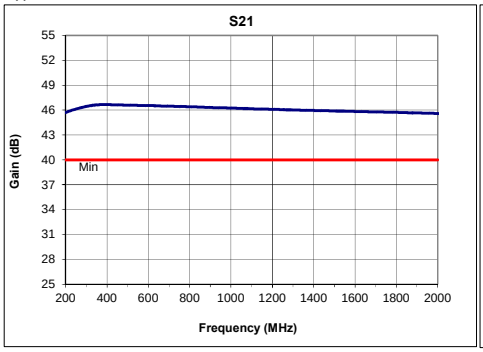
## Specifications (23 °C)

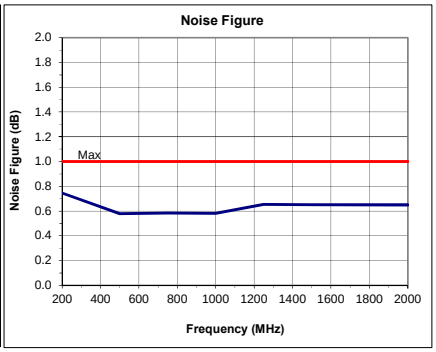
| Parameter | Min | Typ | Max | Units |
|---|---|---|---|---|
| Frequency Range | 0.2 | - | 2 | GHz |
| Noise Figure* | - | 0.8 | 1 | dB |
| Gain | 40 | 45 | - | dB |
| Gain Flatness (+/-) | - | ± 1.0 | ± 1.5 | dB |
| P1 Output Power | +13 | +14 | - | dBm |
| Input VSWR | - | - | 2.2:1 | |
| Output VSWR | - | - | 2.2:1 | |
| Operating Temperature | -55 | - | +85 | °C |
| Non-Operating Temp Range | -65 | - | +125 | °C |
| RF Input Power (no-damage) | - | - | +13 | dBm |
| Humidity (non-condensing) | - | - | 95 | % |
| Voltage (Caution: No Regulator) | +8 | +8 | +8.5 | VDC |
| Current | - | 165 | | mA |
| Input Impedance | 50 | | | Ohms |
| RF Connector (IN/ OUT) | 3.5mm SMA - Female | | | |
| Dimensions | 29.9 x 18.7 x 7.6 | | | mm |

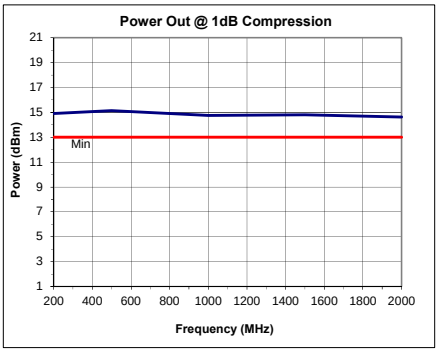
* Noise Source used for measurement from 0.01 to 26.5 GHz is HP346C .
NF Uncertainty (approx. 0. 1dB). 0.05 dB due to ENR of HP 346C; and 0.05 dB, due to the gain modulation of the unit, caused by the HP 346C source impedance change in the ON and OFF state. Noise Figure and other parameters degrade below 500MHz.

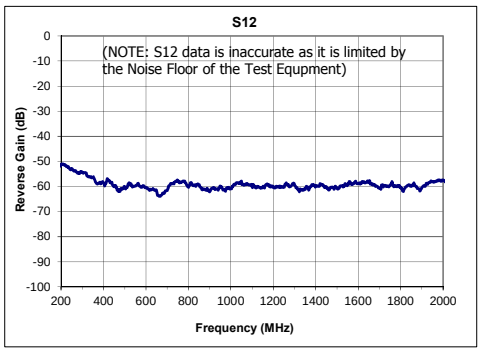
Typical Data

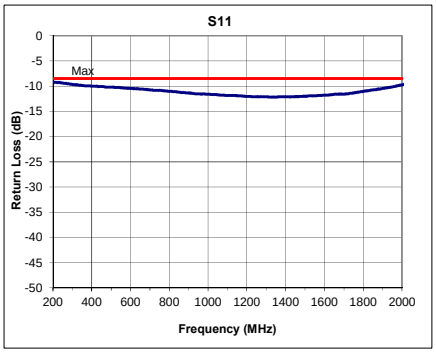
**Caution: No Voltage Regulator inside. DC Supply = +8V (typ), +8.5V (max)**

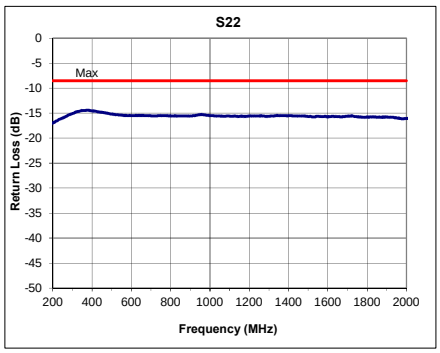
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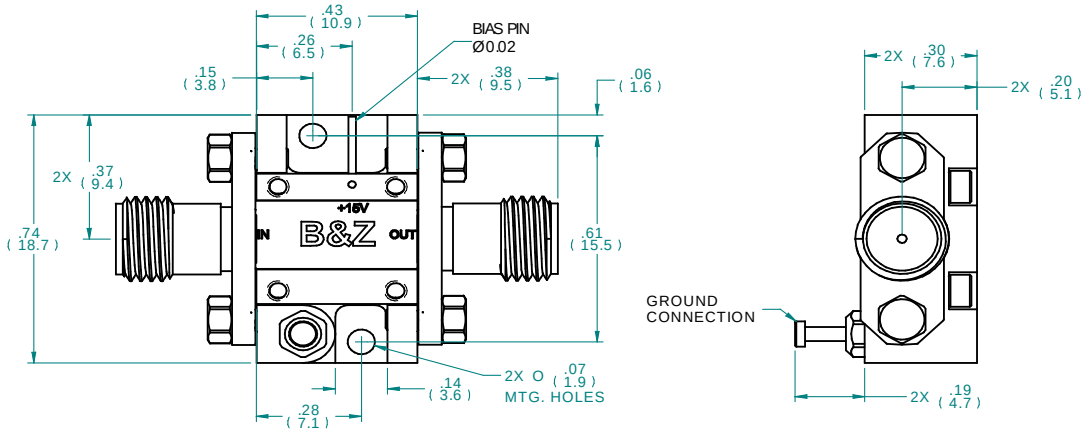
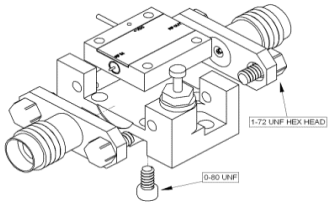



Approx. Actual Size


**Mounting Drawing**




**Drop In**