

**Features**

- **Noise Figure  $\leq 9.0$  dB**
- Unconditionally Stable at all temperatures
- Internally Regulated DC Voltage
- 50 Ohm Matched Input/Output
- Field Replaceable 1.85mm V connectors
- Excellent Group Delay and Phase Linearity
- 0.009 inches diameter RF In/Out feed through
- Operating Temp. -55 C to +85 C
- 3 Year Warranty

**Options**

- **Optimized Performance over Selected Bandwidth**
- Internally DC Block Input (Output DC Block Standard)
- Hermetically Sealed Package
- Improved Gain Flatness
- Improved IN and OUT VSWR
- Gain and Phase matching
- Lower Noise Figure

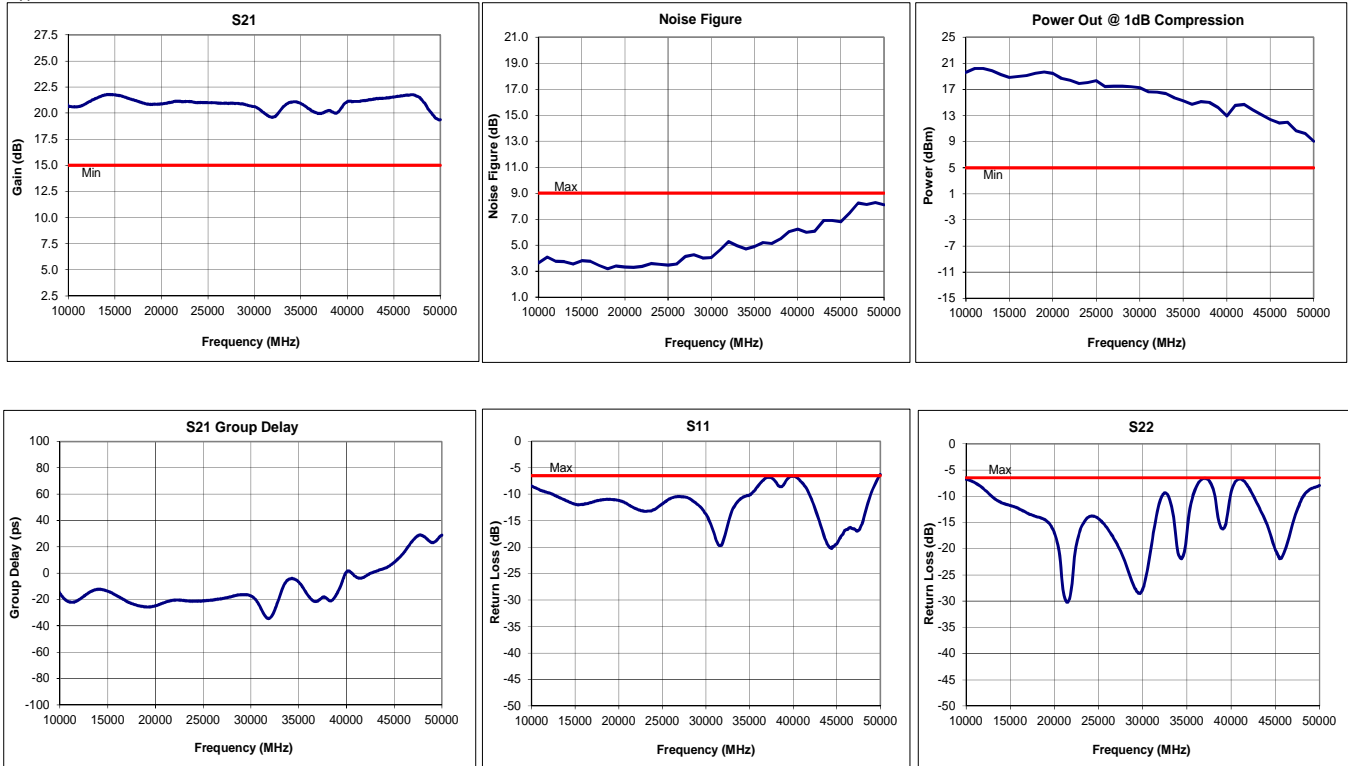


**Specifications (23 °C)**

| Parameter                  | Min               | Typ | Max       | Units |
|----------------------------|-------------------|-----|-----------|-------|
| Frequency Range            | 10                | -   | 50        | GHz   |
| Noise Figure*              | -                 | -   | 9.0       | dB    |
| Gain                       | 15                | -   | -         | dB    |
| Gain Flatness (+/-)        | -                 | -   | $\pm 2.5$ | dB    |
| P1 Output Power            | +5                | -   | -         | dBm   |
| Input VSWR                 | -                 | -   | 2.8:1     |       |
| Output VSWR                | -                 | -   | 2.8:1     |       |
| Operating Temperature      | -55               | -   | +85       | °C    |
| Non-Operating Temp Range   | -65               | -   | +125      | °C    |
| RF Input Power (no-damage) | -                 | -   | +13       | dBm   |
| Humidity (non-condensing)  | -                 | -   | 95        | %     |
| Voltage                    | +12               | +12 | +15       | VDC   |
| Current                    | -                 | 255 |           | mA    |
| Input Impedance            | 50                |     |           | Ohms  |
| RF Connector               | 1.85mm - Female   |     |           |       |
| Dimensions                 | 29.9 x 18.7 x 7.6 |     |           | mm    |

\* Noise Source used for measurement from 18GHz to 42 GHz is HP346C-K01.  
NF Uncertainty (approx. 0.3 dB). 0.2 dB due to ENR of HP 346C-K01, and 0.1 dB due to the gain modulation of the unit caused by the HP 346C-K01 source impedance change in the ON and OFF state.

**Typical Data**





Approx. Actual Size

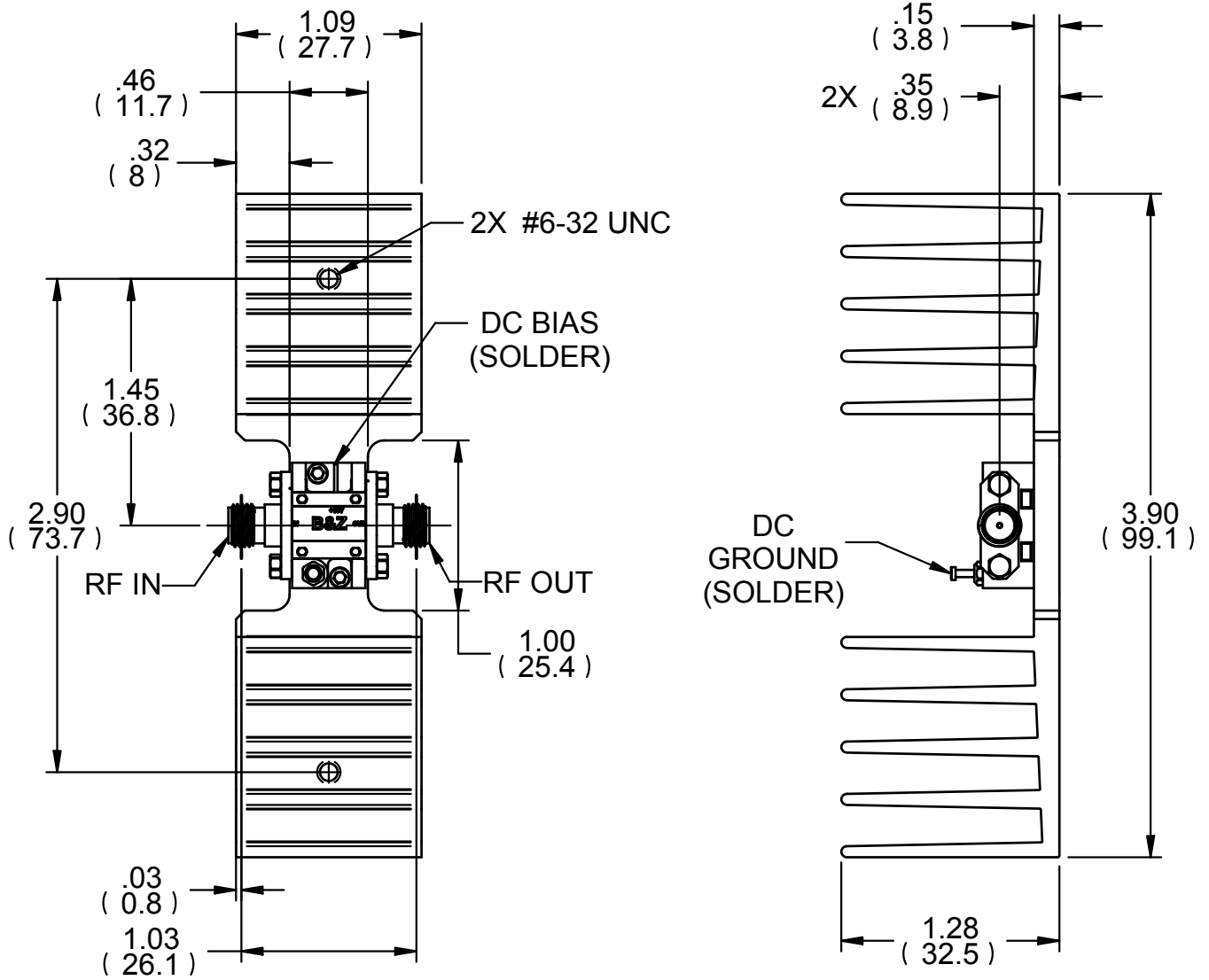


**Mounting Drawing**



**Drop In**

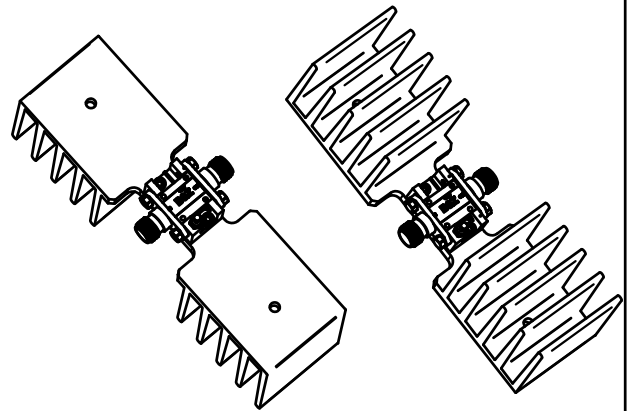




THE AMPLIFIER IS REMOVABLE FROM THE HEATSINK

NOTES:

1. HEATSINK SURFACE AREA 35.14 SQ. INCHES
2. HEATSINK MATERIAL: ALUMINUM ALLOY
3. APPROXIMATE TEMPERATURE RISE IS 6.5°C/W IN STILL AIR.



**B&Z**  
TECHNOLOGIES

SIZE  
**A**

OUTLINE,  
STD. AMPLIFIER ON HEATSINK

**100169**

SCALE

REF. FILE NAME: 100169\_A Outline, Std Amplifier on Heatsink

SHEET 1 OF 1

REV. **A**