

**Features**

- **Noise Figure  $\leq 1.8$ dB**
- Unconditionally Stable at all temperatures
- Internally Regulated DC Voltage
- 50 Ohm Matched Input/Output
- Field Replaceable 3.5mm SMA connectors
- Excellent Group Delay and Phase Linearity
- 0.009 inches diameter RF In/Out feed through
- Operating Temp. -40 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



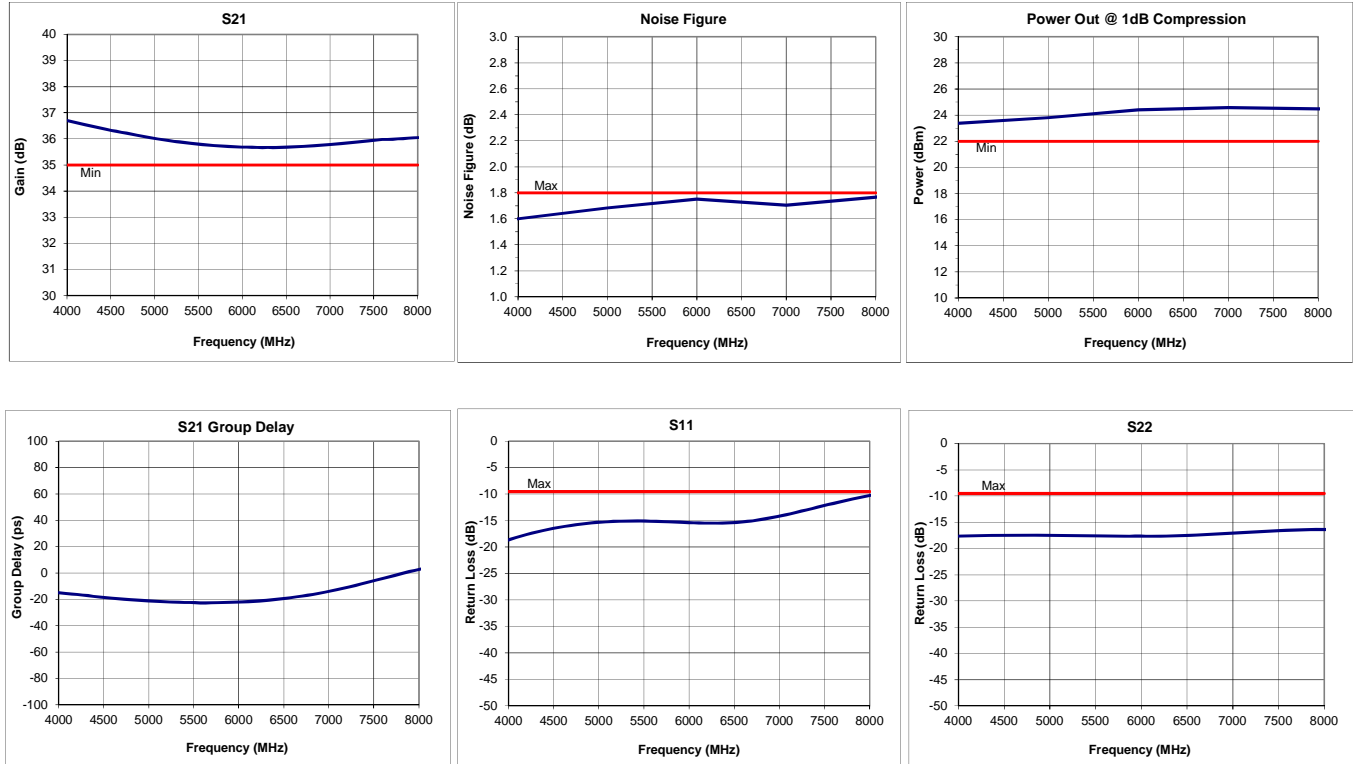
\*\*\* IMPORTANT: UNIT REQUIRES HEATSINK \*\*\*

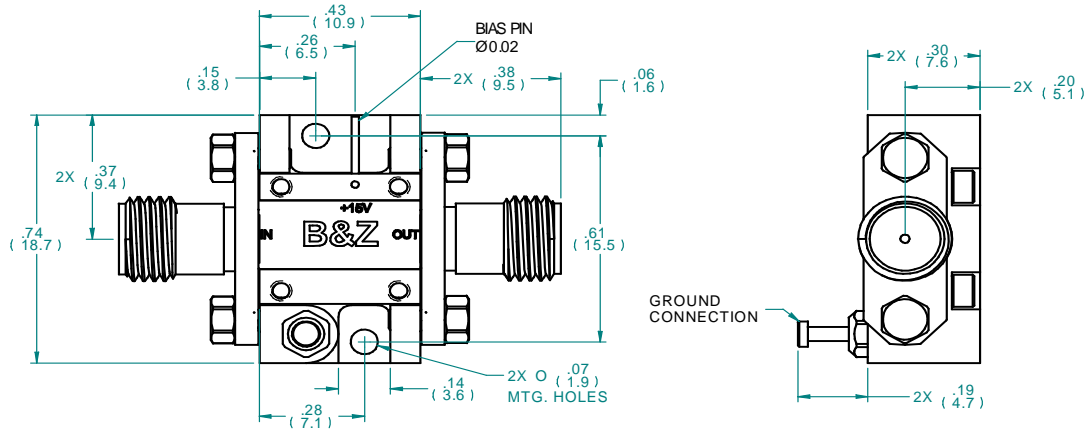
**Specifications (23 °C)**

Parameter	Min	Typ	Max	Units
Frequency Range	4	-	8	GHz
Noise Figure*	-	1.7	1.8	dB
Gain	35	36	-	dB
Gain Flatness (+/-)	-	$\pm 0.5$	$\pm 1.0$	dB
P1 Output Power	+22	+23	-	dBm
Input VSWR	-	-	2.0:1	
Output VSWR	-	-	2.0:1	
Operating Temperature	-55	-	+85	°C
Non-Operating Temp Range	-65	-	+85	°C
RF Input Power (no-damage)	-	-	+13	dBm
Humidity (non-condensing)	-	-	95	%
Voltage	+15	+15	+20	VDC
Current	-	205		mA
Input Impedance	50			Ohms
RF Connector	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 Figures and other parameters degrade below 500 MHz. Call to discuss.

**Typical Data**

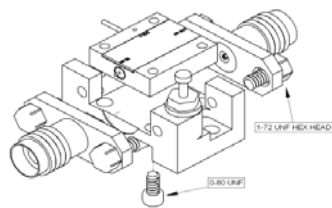




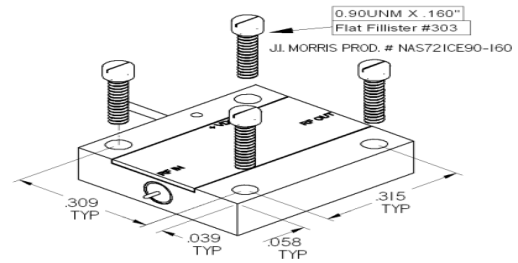
Approx. Actual Size

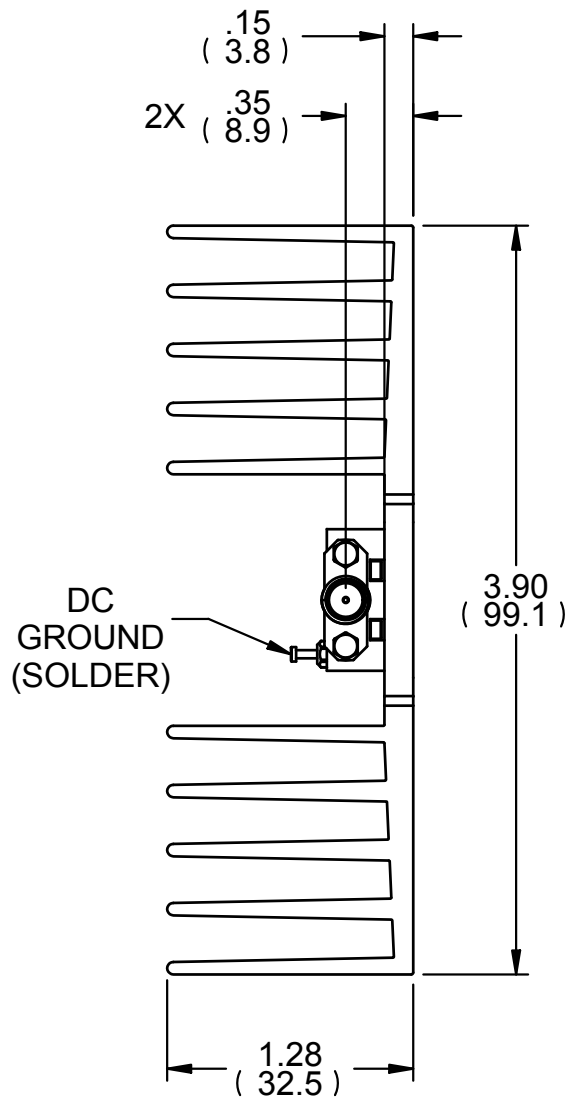
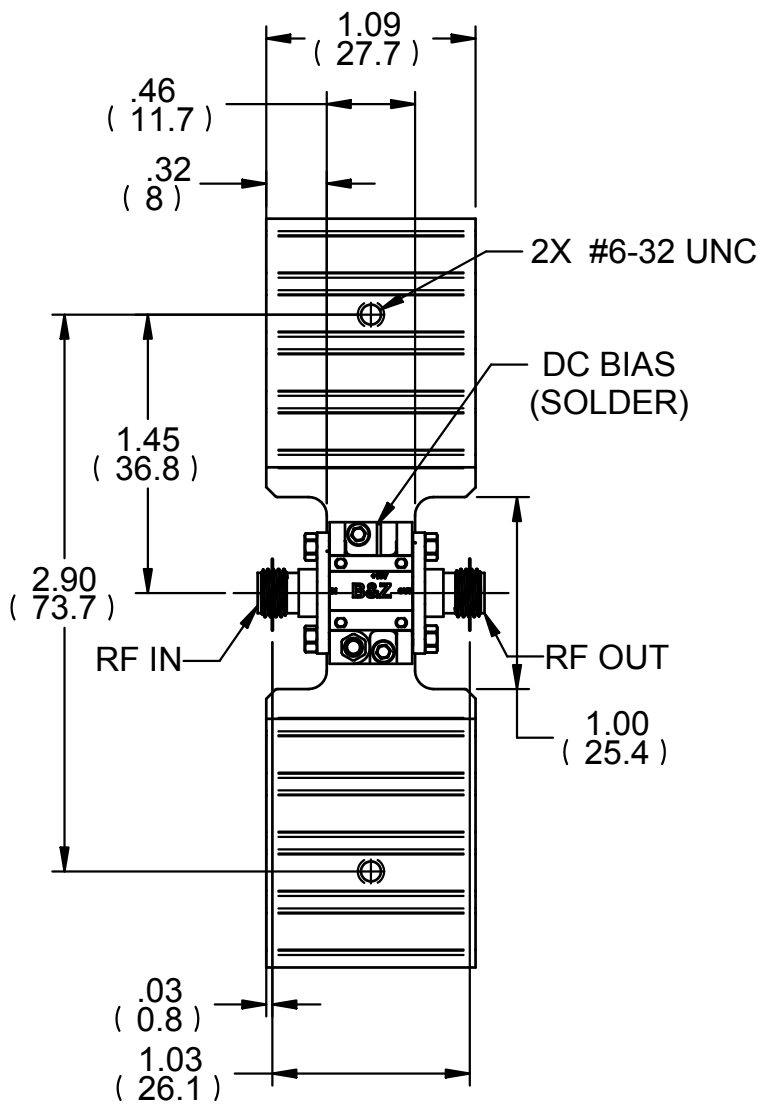


**Mounting Drawing**



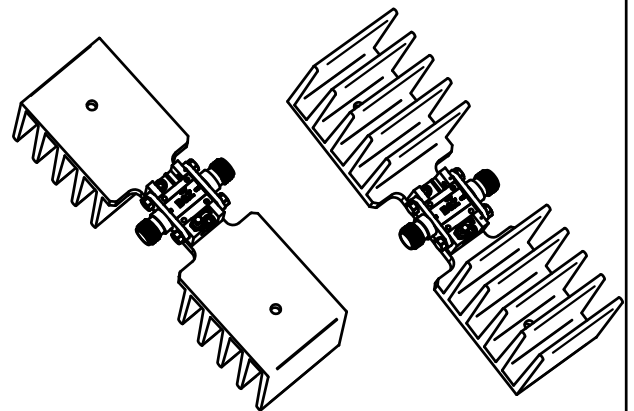
**Drop In**





**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**