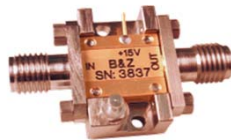


**Features**

- Noise Figure  $\leq 3.0$  dB (typ)
- 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. -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



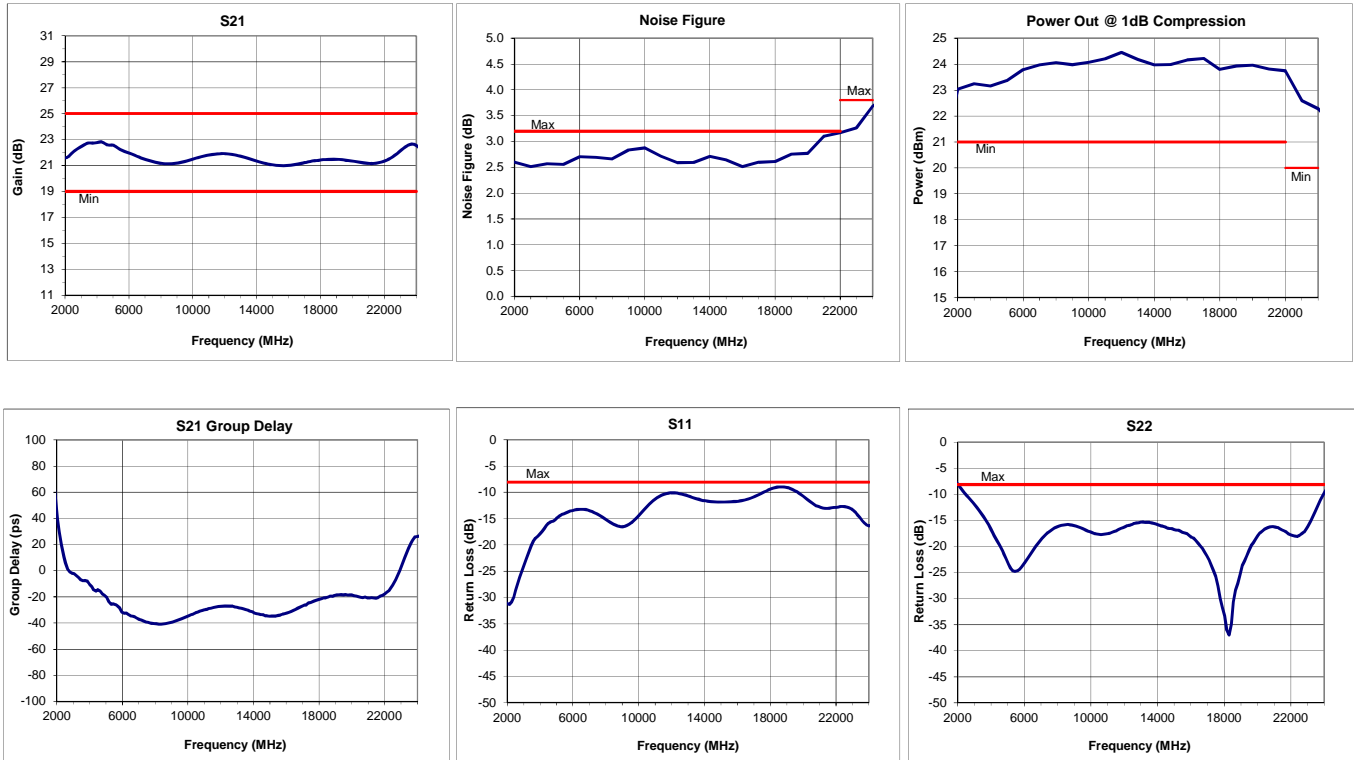
\*\*\* IMPORTANT: UNIT REQUIRES HEATSINK \*\*\*

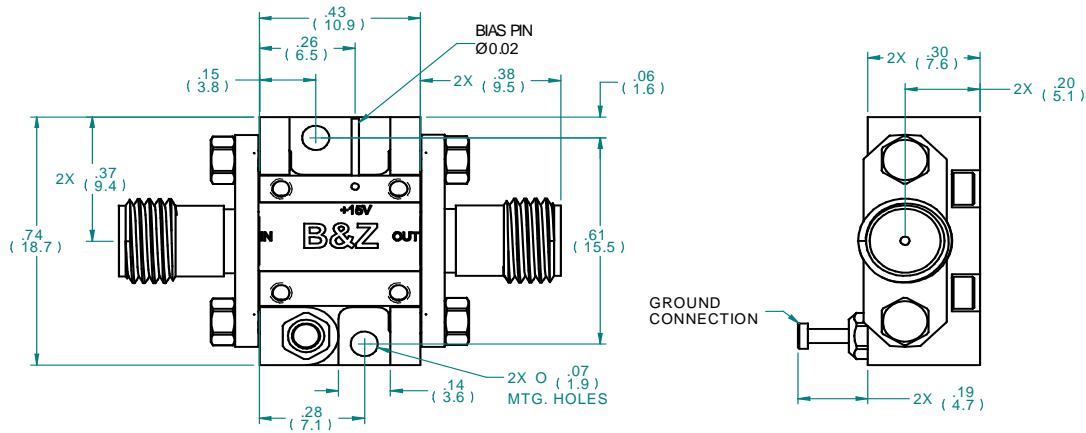
**Specifications (23 °C)**

Parameter	Min	Typ	Max	Units
Frequency Range	2	-	24	GHz
Noise Figure*	-	3.0	3.2	dB
Gain	19	21	25	dB
Gain Flatness (+/-)	-	$\pm 1.5$	$\pm 1.7$	dB
P1 Output Power**	+21	+23	-	dBm
Input VSWR	-	-	2.3:1	
Output VSWR	-	-	2.3:1	
Operating Temperature	-55	-	+85	°C
Non-Operating Temp Range	-65	-	+85	°C
RF Input Power (no-damage)	-	-	+13	dBm
Humidity (non-condensing)	-	-	95	%
Voltage	+12	+12	+15	VDC
Current	-	347		mA
Input Impedance	50			Ohms
RF Connector	3.5mm SMA - Female			
Dimensions	29.9 x 18.7 x 7.6			mm

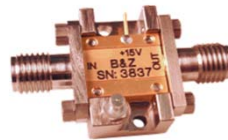
\* Noise Source used for measurement from 0.01 to 26.5 GHz is HP346C .  
 NF Uncertainty (approx. 0. 1dB), 0.05 dB due to ENR of HP 346C; and 0.05 dB, due to the gain modulation of the unit, caused by the HP 346C source impedance change in the ON and OFF state.  
 \*\*Max NF above 22GHz = 3.8dB; \*\*Min Power Out above 22GHz = +20dBm

**Typical Data**

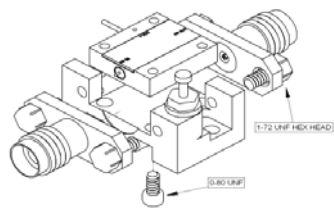




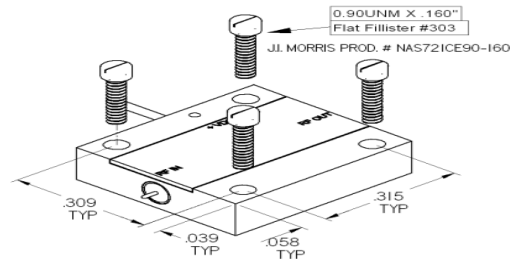
Approx. Actual Size

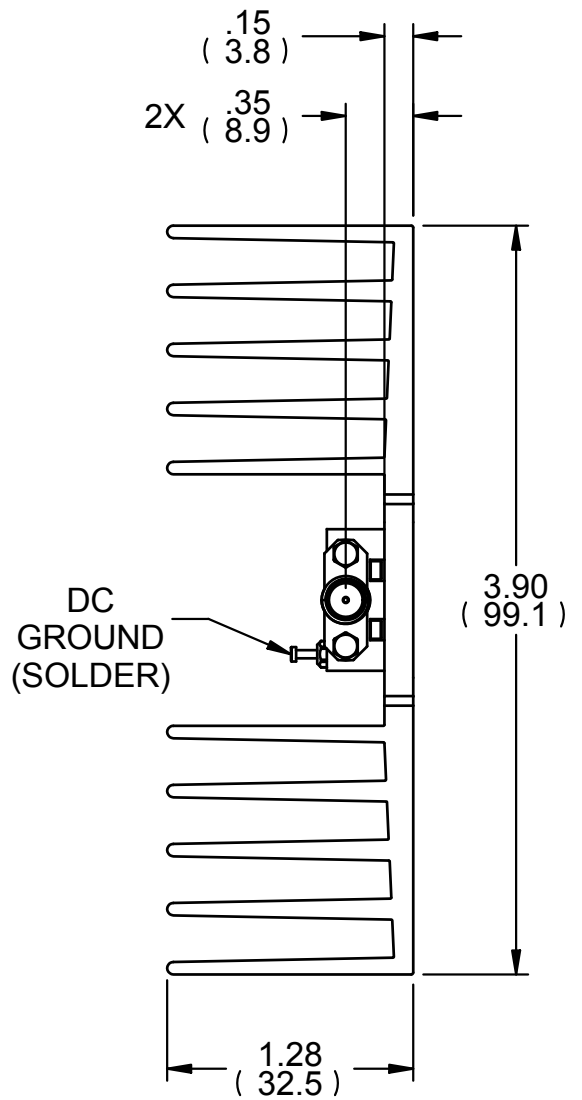
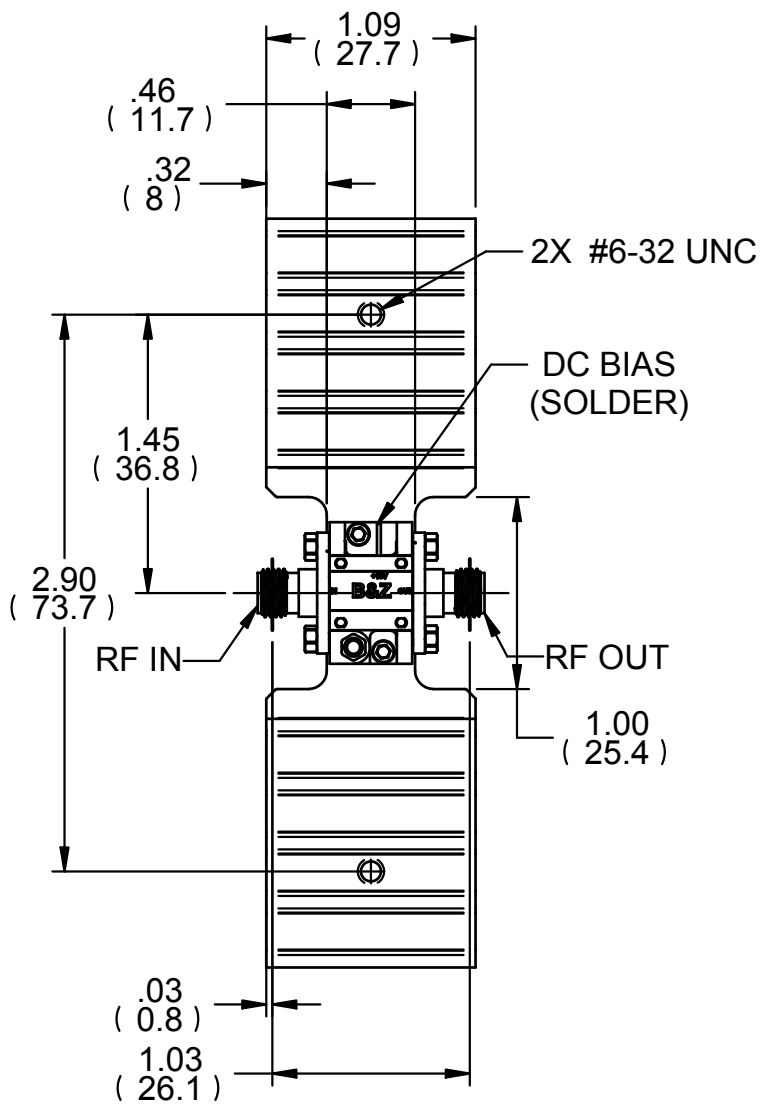


**Mounting Drawing**



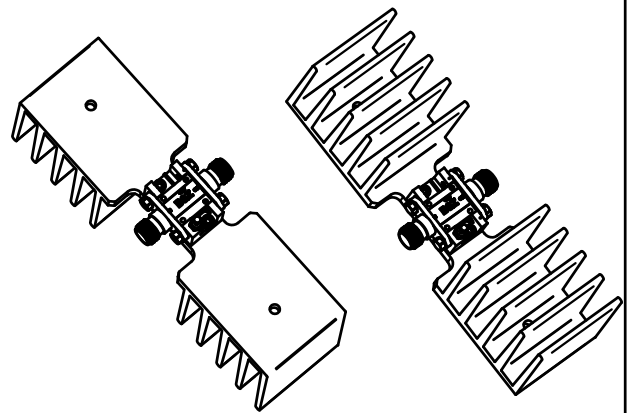
**Drop In**





**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**