

**Features**

- Noise Figure  $\leq 2.8$  dB
- Unconditionally Stable at all temperatures
- Internally Regulated DC Voltage
- 50 Ohm Matched Input/Output
- Field Replaceable 2.92mm K 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

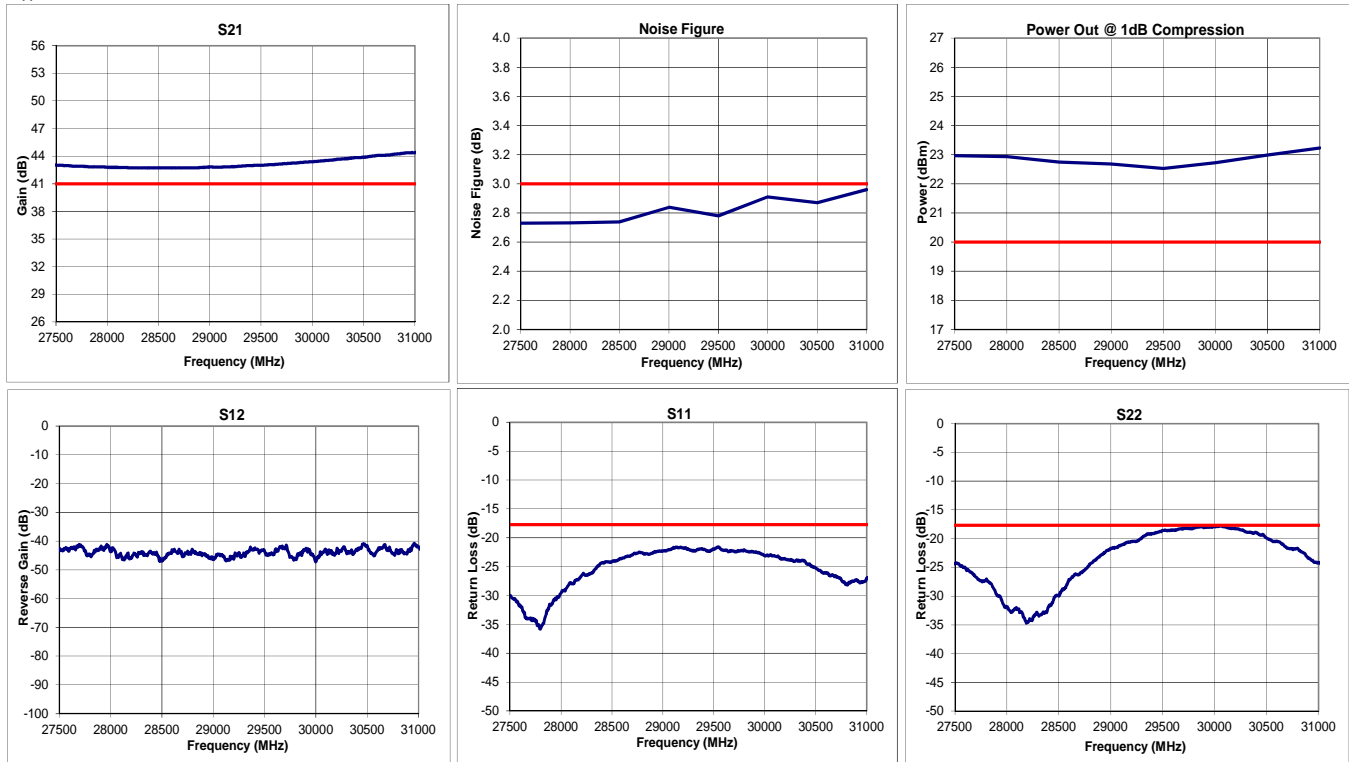
**Specifications (23 °C)**

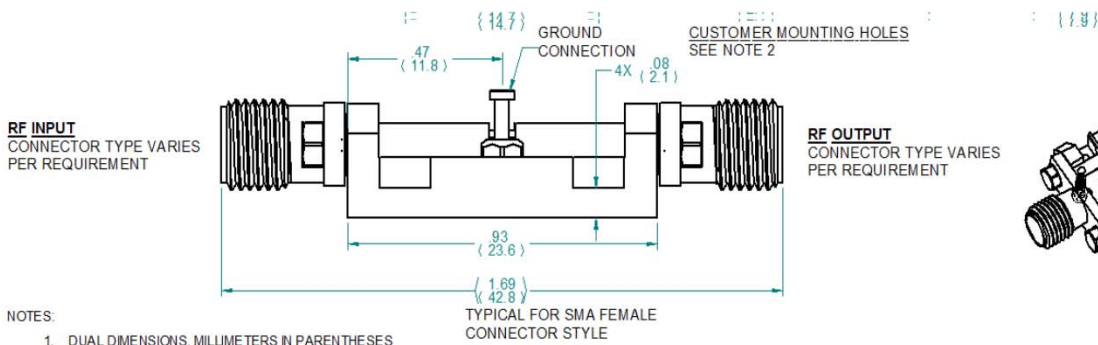
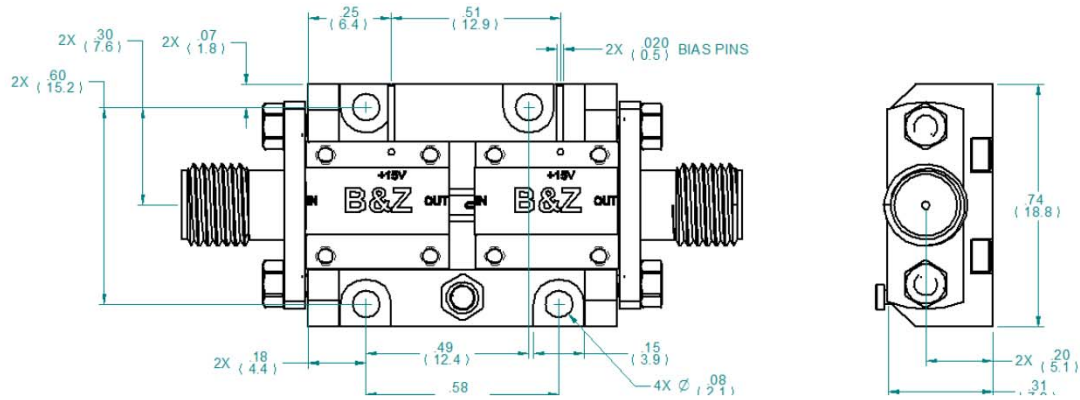
Parameter	Min	Typ	Max	Units
Frequency Range	27.5	-	31	GHz
Noise Figure*	-	2.8	3	dB
Gain	41	43	-	dB
Gain Flatness (+/-)	-	$\pm 1.0$	$\pm 1.5$	dB
P1 Output Power	+20	+23	-	dBm
Input VSWR	-	-	1.3:1	
Output VSWR	-	-	1.3:1	
Operating Temperature	-55	-	+85	°C
Non-Operating Temp Range	-65	-	+85	°C
RF Input Power (no-damage)	-	-	+13	dBm
Humidity (non-condensing)	-	-	95	%
Voltage	+12	+12	+15	VDC
Current	-	228		mA
Input Impedance	50			Ohms
RF Connector	2.92mm K - Female			
Dimensions	29.9 x 18.7 x 7.6			mm

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

\* 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.

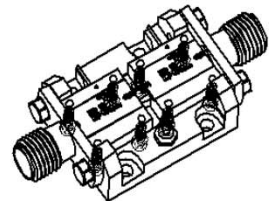
Typical Data





**NOTES:**

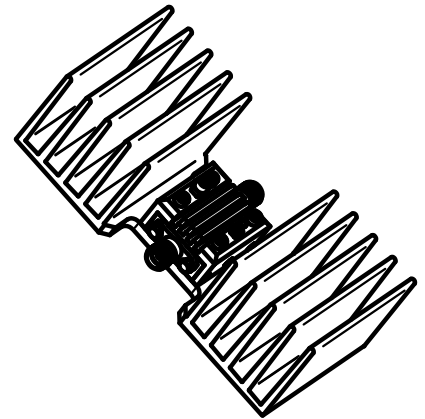
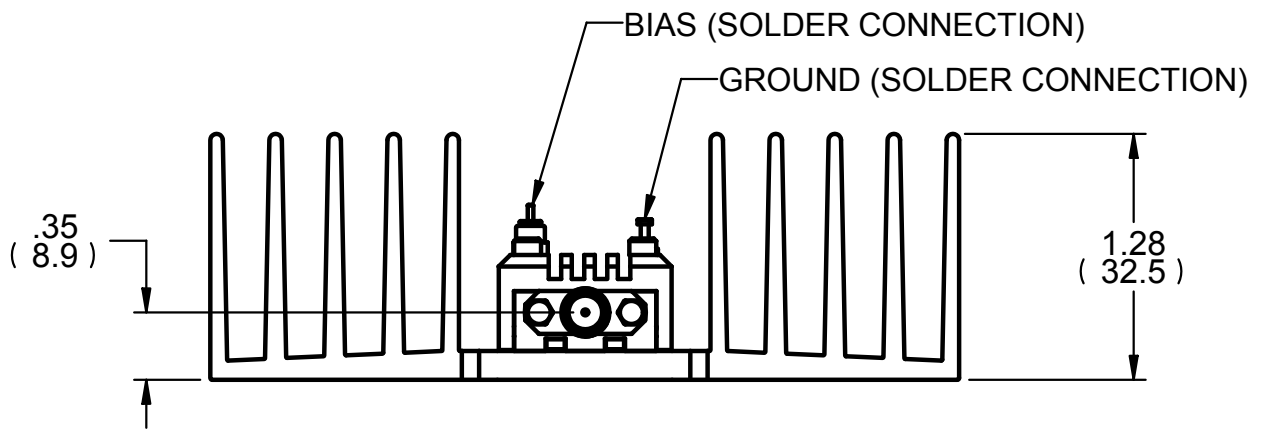
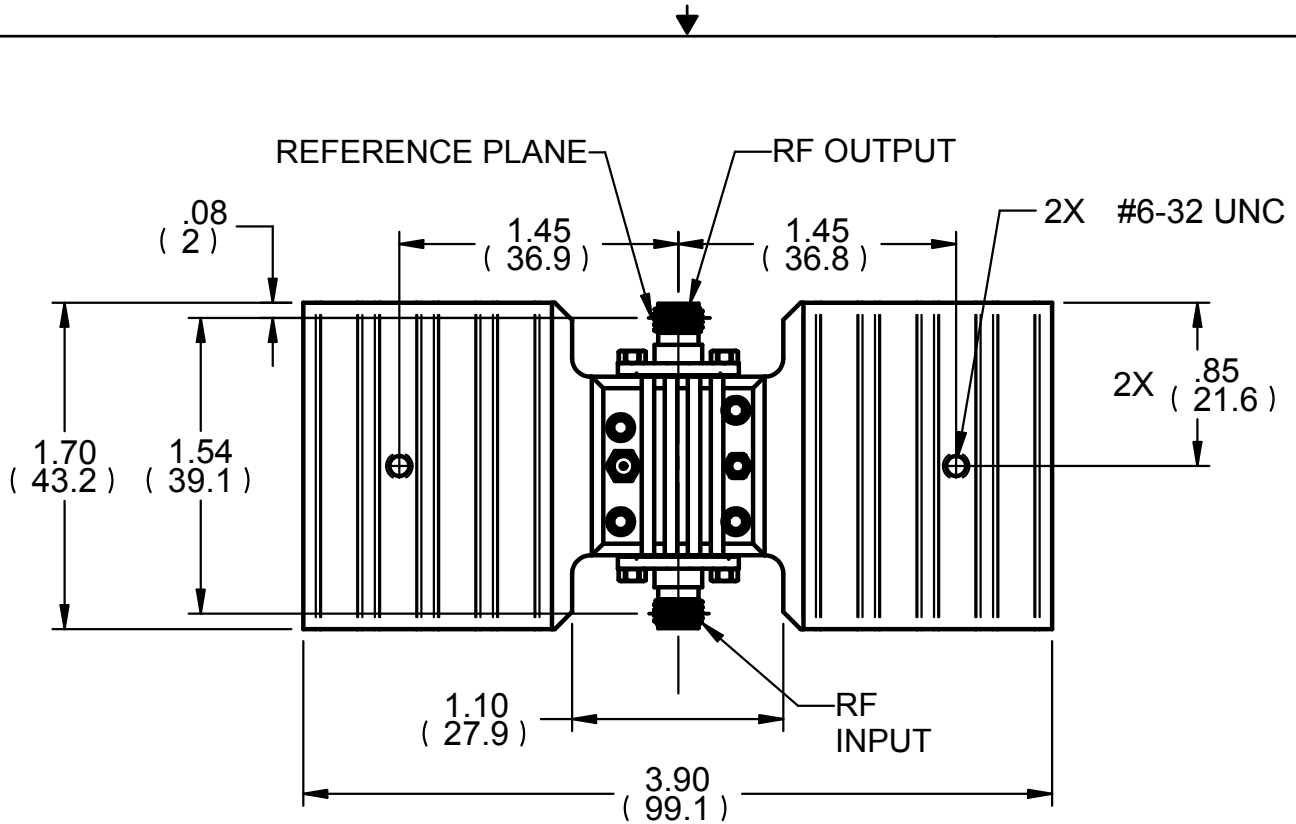
- DUAL DIMENSIONS, MILLIMETERS IN PARENTHESES
- RECOMMENDED MOUNTING HARDWARE:  
#1-72 SOCKET HEAD CAP SCREW  
M2 SOCKET HEAD CAP SCREW
- MOUNTING SURFACE SHOULD BE FLAT .002 INCH / INCH.
- STANDARD ESD PRECAUTIONS NEED TO BE OBSERVED.



OUTLINE, CA SCADED, 2X

100118

A



**B&Z**  
 TECHNOLOGIES

SIZE  
**A**

OUTLINE, CASCADED,  
 HEATSINK

**100171**

SCALE

REF\_FILE NAME: 100171\_A Outline, Cascaded, Heatsink.dft SHEET 1 OF 1

REV. **A**