

Wide Band Ultra Low Noise Amplifier

4-8GHz

- Noise Figure: 1.0dB Typ.
- Gain: 48dB Typ.
- Output P1dB: +15dBm Typ.



RF Parameters				
	Min.	Typ.	Max.	Unit
Frequency Range	4		8	GHz
Gain	45	48		dB
Gain Flatness		±1.5	±3.0	dB
Gain Variation Over Temperature (-45C~+85C)		±1.0		dB
Noise Figure	0.9	1.0	1.1	dB
Input VSWR		1.8	2.5	:1
Output VSWR		1.8	3.0	:1
Output 1 dB Compression Point (P1dB)	13	15		dBm
Saturated Output Power (Psat)		17		dBm
Output Third Order Intercept (IP3)		25		dBm
Supply Current (Vcc=+15V)		165	200	mA
Isolation S12		-55		dB

Physical Specifications			
Weight	1.06 ounces (30g)	Impedance	50 ohms
Input / Output Connectors	SMA Female	Material	Aluminium
Finish	Standard: Gold 40 micron; Nickel 220 micron thickness	Package Sealing	Epoxy Sealing



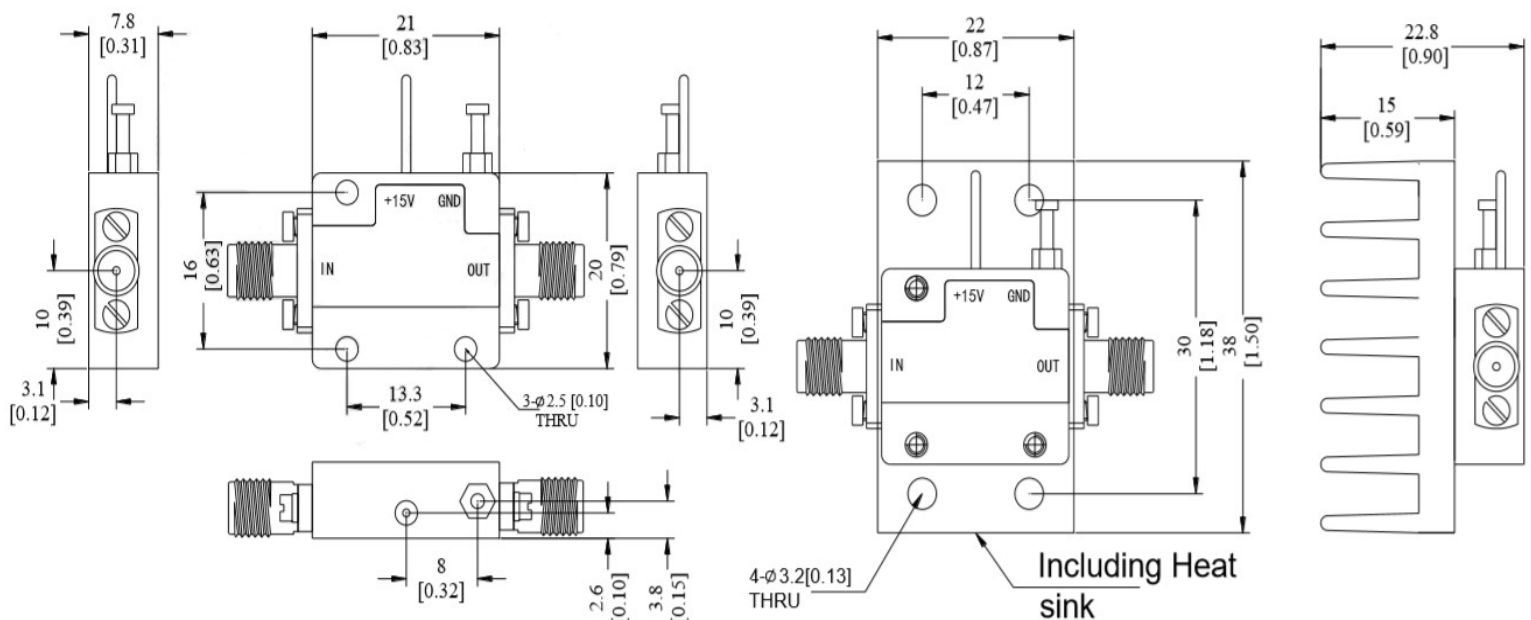
Absolute Maximum Ratings	
Operating Voltage	+15.5V
RF Input Power (RFIN)	-20dBm

Biasing Up Procedure	
Step 1	Connect Ground Pin
Step 2	Connect input and output
Step 3	Connect +15V biasing

Power Off Procedure	
Step 1	Turn off +15V biasing
Step 2	Remove RF connection
Step 3	Remove Ground

Environmental	
Operating Temperature	-45°C to +85°C
Storage Temperature	-55°C to +125°C
Altitude	30,000 ft. max
Vibration	25g RMS (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95% RH at 40°C max.
Shock	20g for 11msec half sine wave, 3 axis both directions

All Dimensions in mm [inches]
Heat Sink required during operation (Sold separately)



Note 1: The specification provided is at nominal bias voltage and at 25°C unless otherwise specified

Note 2: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy.

Note 3: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage.

