



Wide Band Low Noise Amplifier 15.1GHz~15.4GHz

Features

- Gain: 32dB typical
- Noise Figure: 1.8dB typical
- High P1dB: +19.5dBm typical
- Supply Voltage: +12V @ 200mA
- 50 Ohm Matched



Typical Applications

- Wireless Infrastructure
- 5G communication
- Test and measurement Instrument

RF Microwave & VSAT
Fiber Optics

Parameter	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	15.1		15.4	6		18	GHz
Gain	30	32		29	31		dB
Gain Flatness		±0.25	±0.5		±1.0		dB
Gain Variation Over Temperature (-40°C~+85°C)		±0.8			±0.8		dB
Noise Figure		1.8	2.0		1.8	2.5	dB
Input VSWR		1.6	1.8		1.8		: 1
Output VSWR		1.2	1.5		1.8		: 1
Output 1dB Compression Point (P1dB)	17.5	19.5		17	19		dBm
Saturated Output Power (Psat)		20.5			21		dBm
Output Third Order Intercept (OIP3)		23			23		dBm
Supply Current (Vcc=+12V)		200	230		200	230	mA
Isolation S12		-70			-70		dB

Weight	0.71ounces	Impedance	50ohms
Input /Output Connectors	SMA-Female	Material	Aluminum
Finish	Gold Plated	Package Sealing	Epoxy Sealed (Standard)
			Hermetically Sealed (Option with extra charge)



Absolute Maximum Ratings

Operating Voltage	+15V
RF Input Power(RFIN)	-10dBm

Biasing Up Procedure

Step 1	Connect Ground Pin
Step 2	Connect input and output
step3	Connect +12V biasing

Power OFF Procedure

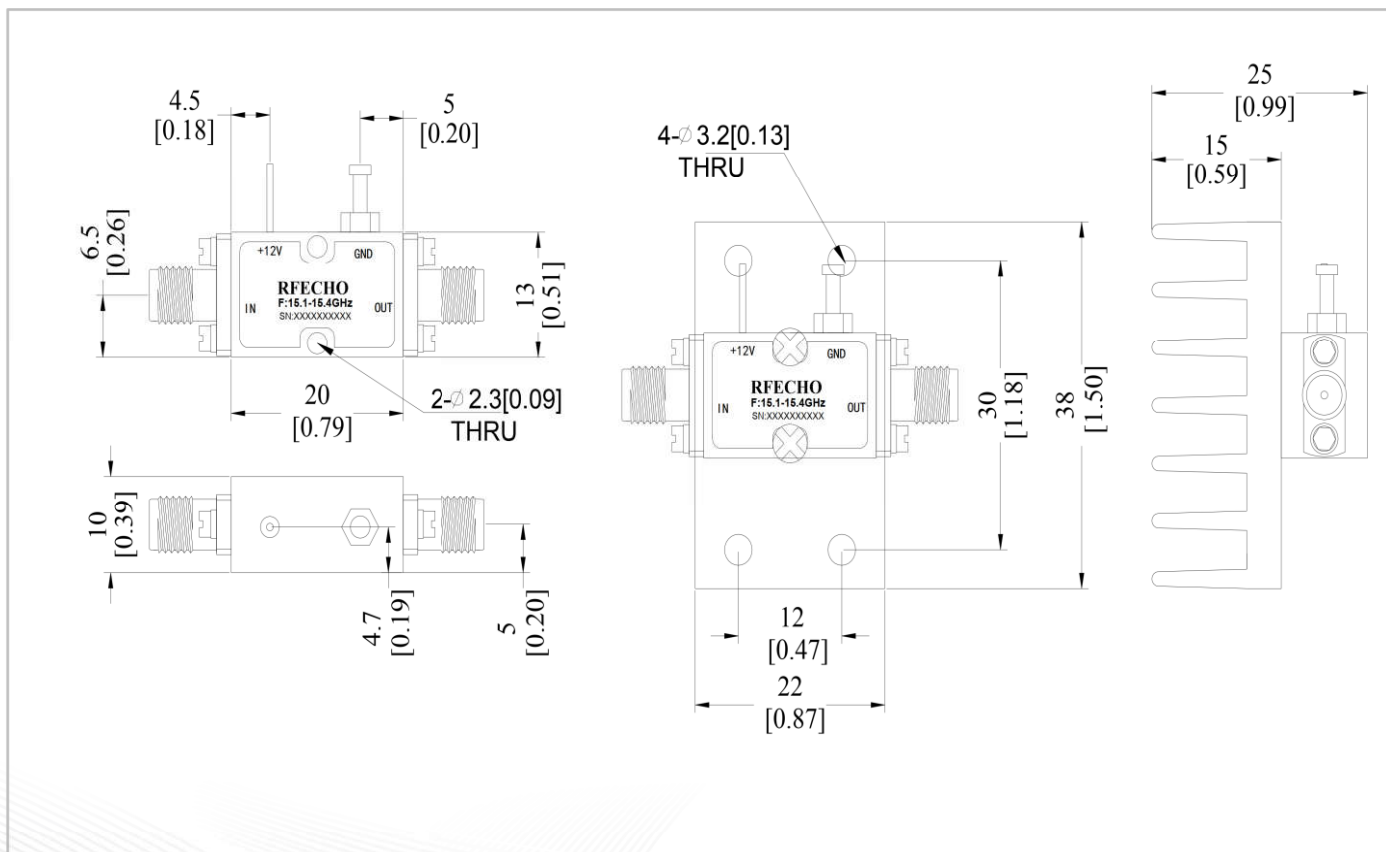
Step 1	Turn off +12V biasing
Step 2	Remove RF connection
Step 3	Remove Ground.

Environmental Specifications

Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

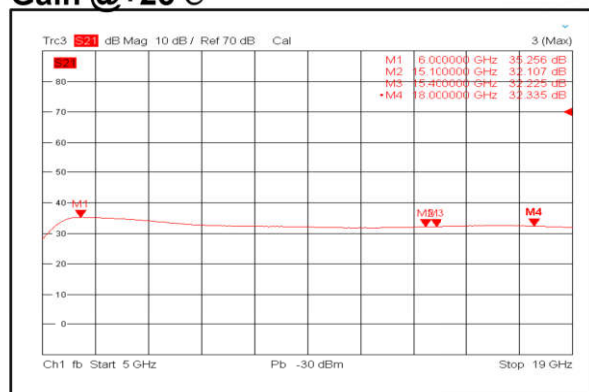
All Dimensions in mm (inches)

Heat Sink required during operation (Sold Separately)

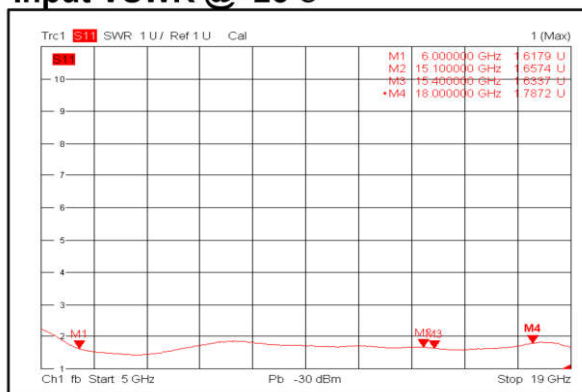




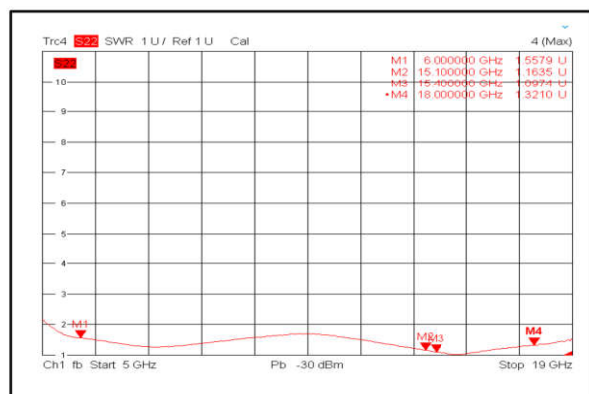
Gain @+25°C



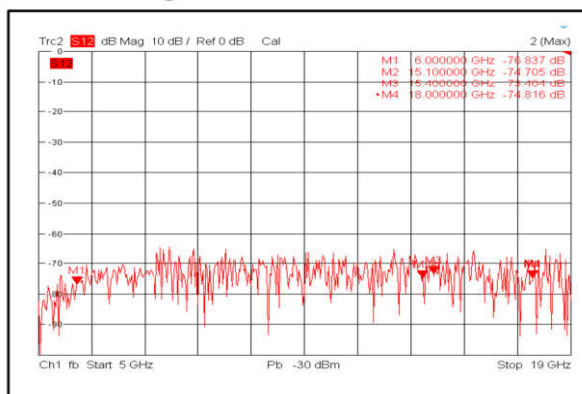
Input VSWR @+25°C



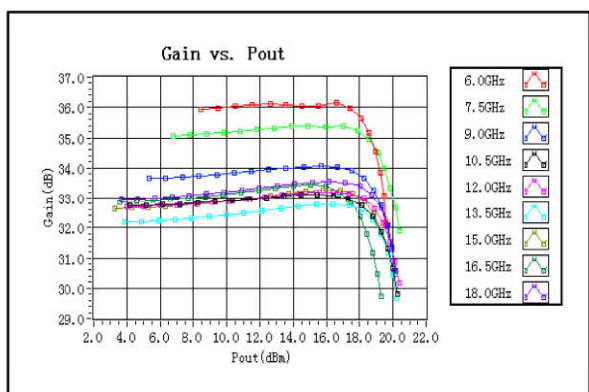
Output VSWR @+25°C



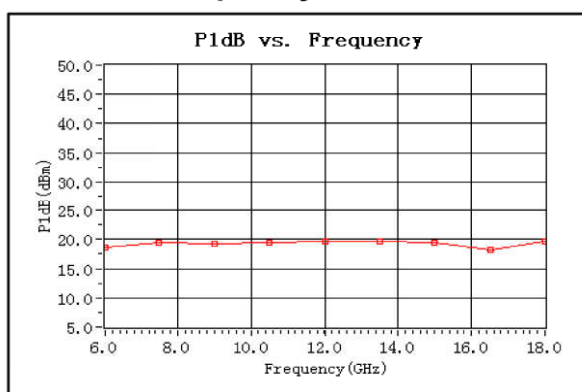
Isolation @+25°C



Gain vs. Output Power

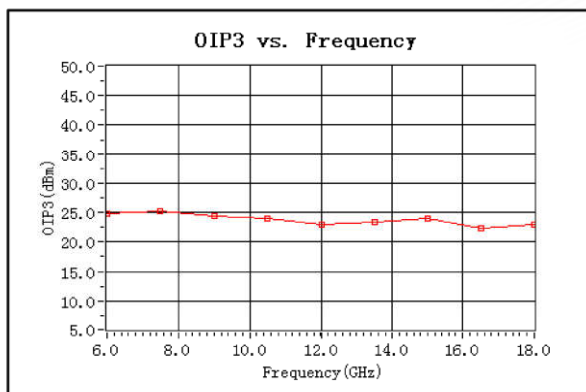


P1dB vs. Frequency

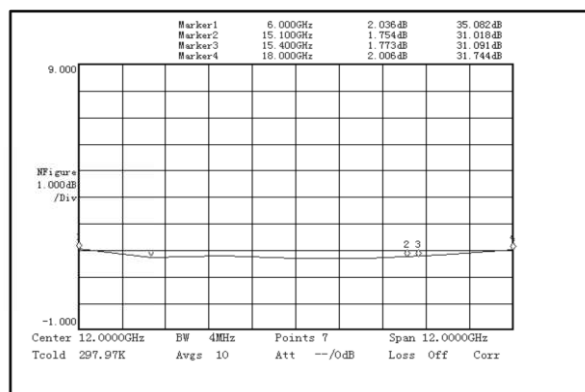




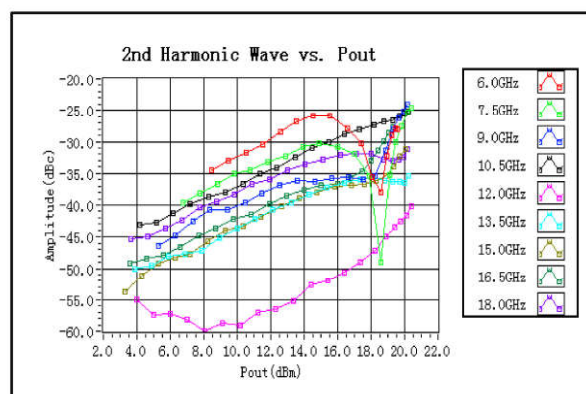
Output Third Order Intercept (OIP3)



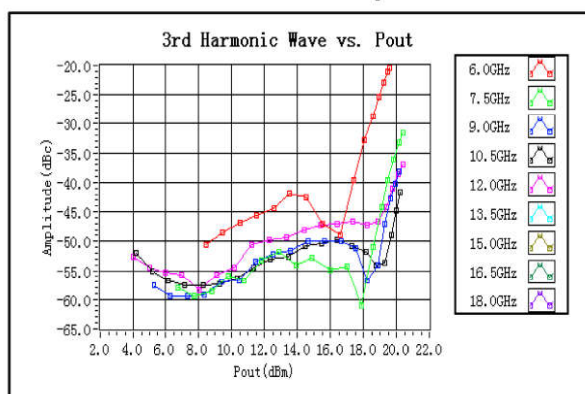
Noise Figure



2nd Harmonic Wave Output Power



3rd Harmonic Wave Output Power



4th Harmonic Wave Output Power

