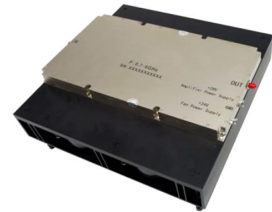




# Ultra Wide Band A/C Amplifier 0.7GHz~ 6GHz

## Features

- High Output Power > 38dBm.
- High peak to average handling capability.
- High linearity and low noise figure.
- Convenient AC Power Input. (AC 110V/220V)
- Integrated Heat Sink and Fan.



## 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	0.7		3.0	3.0		6.0	GHz
Gain	35	37	45	35	37	44	dB
Gain Flatness		±2.5			±2.0		dB
Gain Variation Over Temperature (-40°C~+70°C)		±1.0			±1.0		dB
Input Return Loss		15			12		dB
Output 1dB Compression Point (P1dB)	35	38		35	38		dBm
Saturated Output Power (Psat)		41			40		dBm
IM3		25			25		dBc
Isolation S12		-65			-65		dB

Weight	120 ounces(Max.)	Impedance	50ohms
Input /Output Connectors	SMA-Female	Material	Aluminum
Finish	Gray Painted	Package Sealing	Epoxy Sealed (Standard)
			Hermetically Sealed (Option with extra charge)



### Absolute Maximum Ratings

Supply Voltage	110~240 VAC	
RF Input Power (RFIN)	@0.7~1GHz	+1dBm
	@1~6GHz	+3dBm

### Environmental Specifications

Operational Temperature	-40°C~+70°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

### Biassing Up Procedure

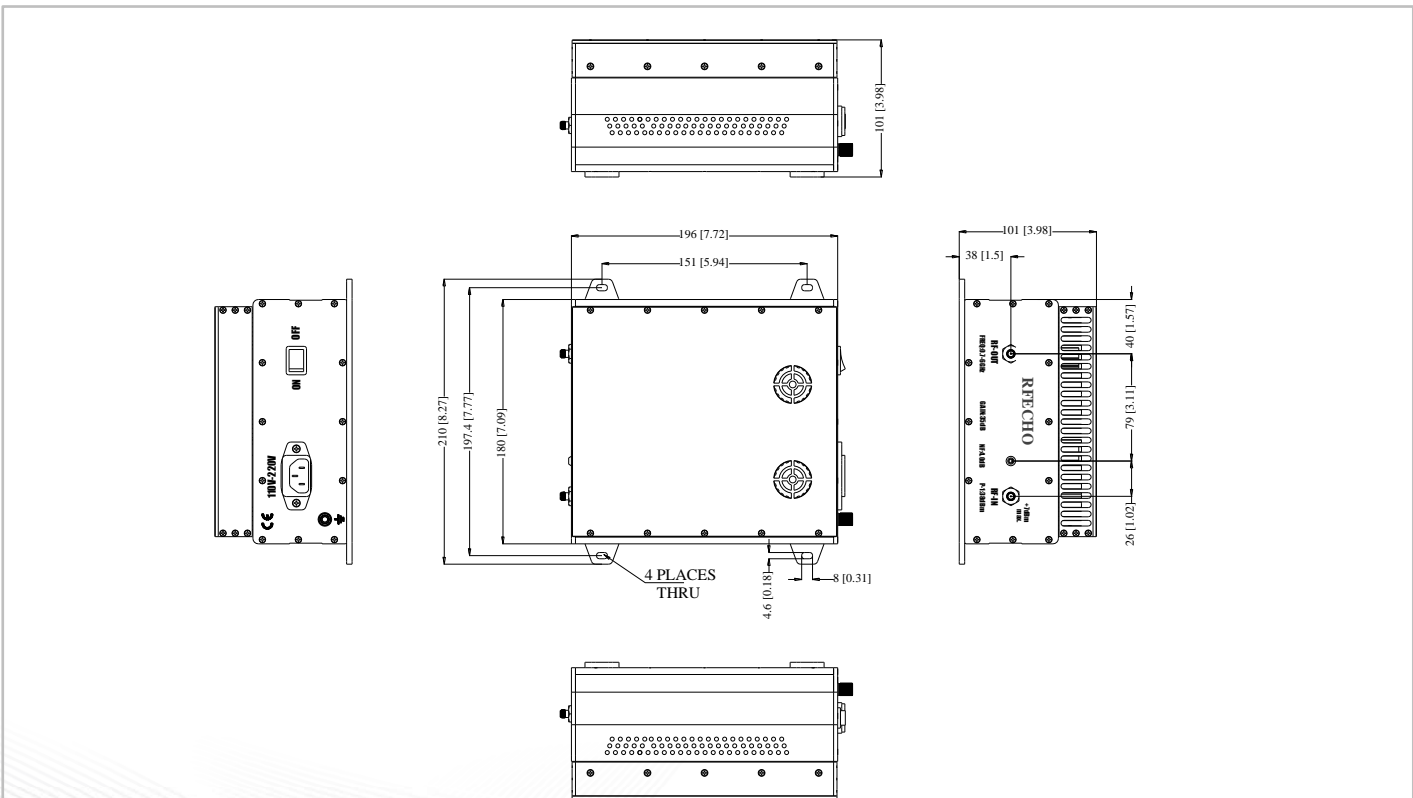
Step 1	Connect input and output with 50 Ohm source and load with in band return loss better than 10dB.
Step 2	Connect AC Plug
Step 3	Flip switch to "ON" position

### Power OFF Procedure

Step 1	Flip switch to "OFF" position
Step 2	Remove AC Plug
Step 3	Remove RF Connection

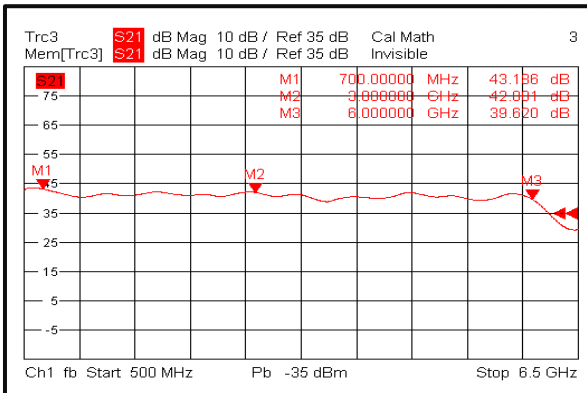
### Outline Drawing:

All Dimensions in mm (inches)

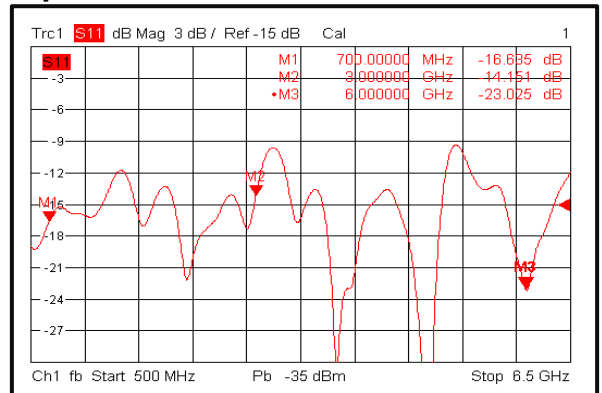




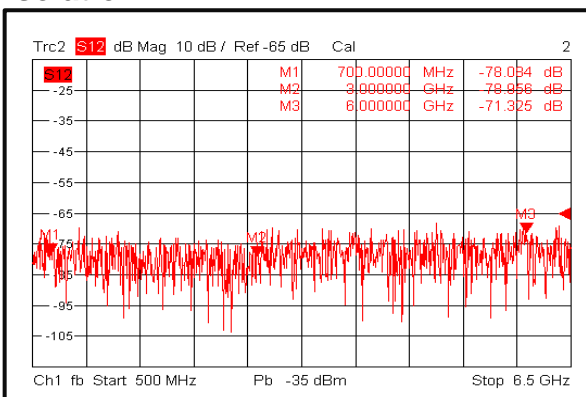
### Gain



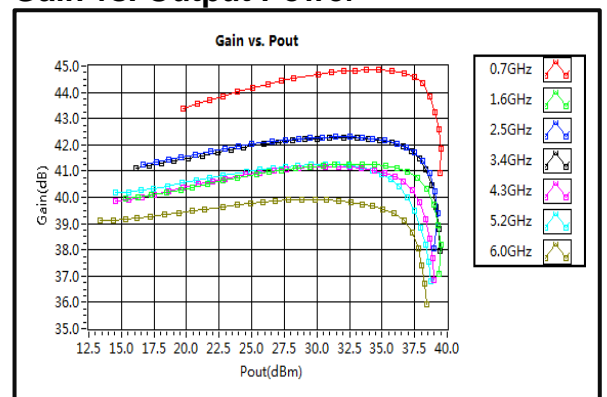
### Input Return Loss



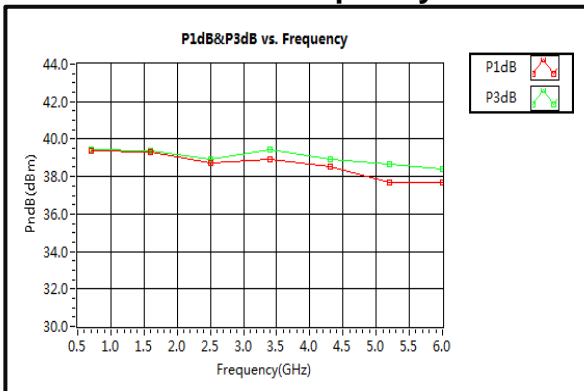
### Isolation



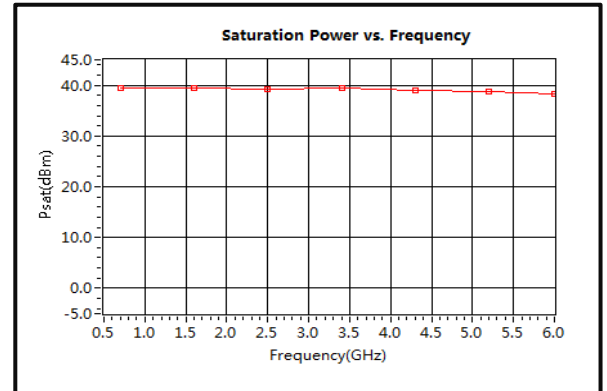
### Gain vs. Output Power



### P1dB & P3dB vs. Frequency

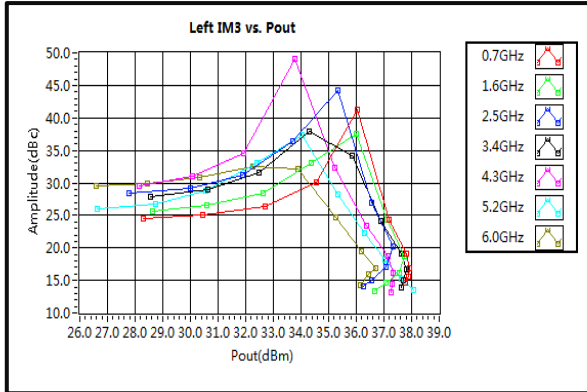


### Saturated Power vs. Frequency

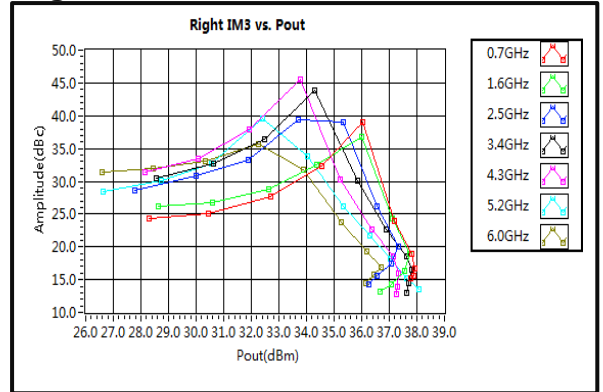




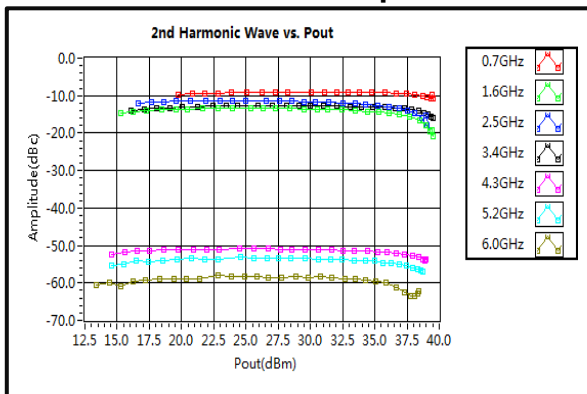
### Left IM3 vs. Pout



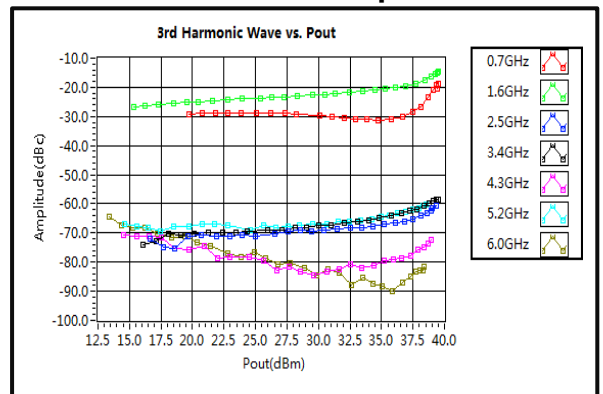
### Right IM3 vs. Pout



### 2nd Harmonic Wave Output Power



### 3rd Harmonic Wave Output Power



### 4th Harmonic Wave Output Power

