



Wide Band Power Amplifier 0.9GHz~2.5GHz

Features

- Gain: 31dB
- Output power: +35dBm typical
- Supply Voltage: +15V



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	0.9		1.7	1.7		2.5	GHz
Gain	28	31		28	31		dB
Gain Flatness		± 0.5	± 1.0		± 0.5	± 1.0	dB
Gain Variation Over Temperature (-45 ~ +85)		± 1.0			± 1.0		dB
Input VSWR		1.2	1.5		1.5	2.0	:1
Output 1dB Compression Point (P1dB)	34	36		33	35		dBm
Saturated Output Power (Psat)		37			36		dBm
3rd order intermodulation product (IM3) @P1dB		-25			-25		dBc
Isolation S12		-65			-65		dB
Supply Current (Vcc=+15V)		550	1500		550	1500	mA
Efficiency at Psat (RF Output Power / DC Power Consumption)		25			25		%

Weight	7.76ounces	Impedance	50 ohms
Input /Output Connector	SMA-Female	Material	Aluminum
Finishing	Nickel Plated	Package Sealing	Epoxy Sealing (Standard)
			Hermetically Seal (Option with extra charge)



Absolute Maximum Ratings

Operating Voltage	+15.5V@+25°C
RF Input Power (RFIN)	+9dBm@+25°C

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

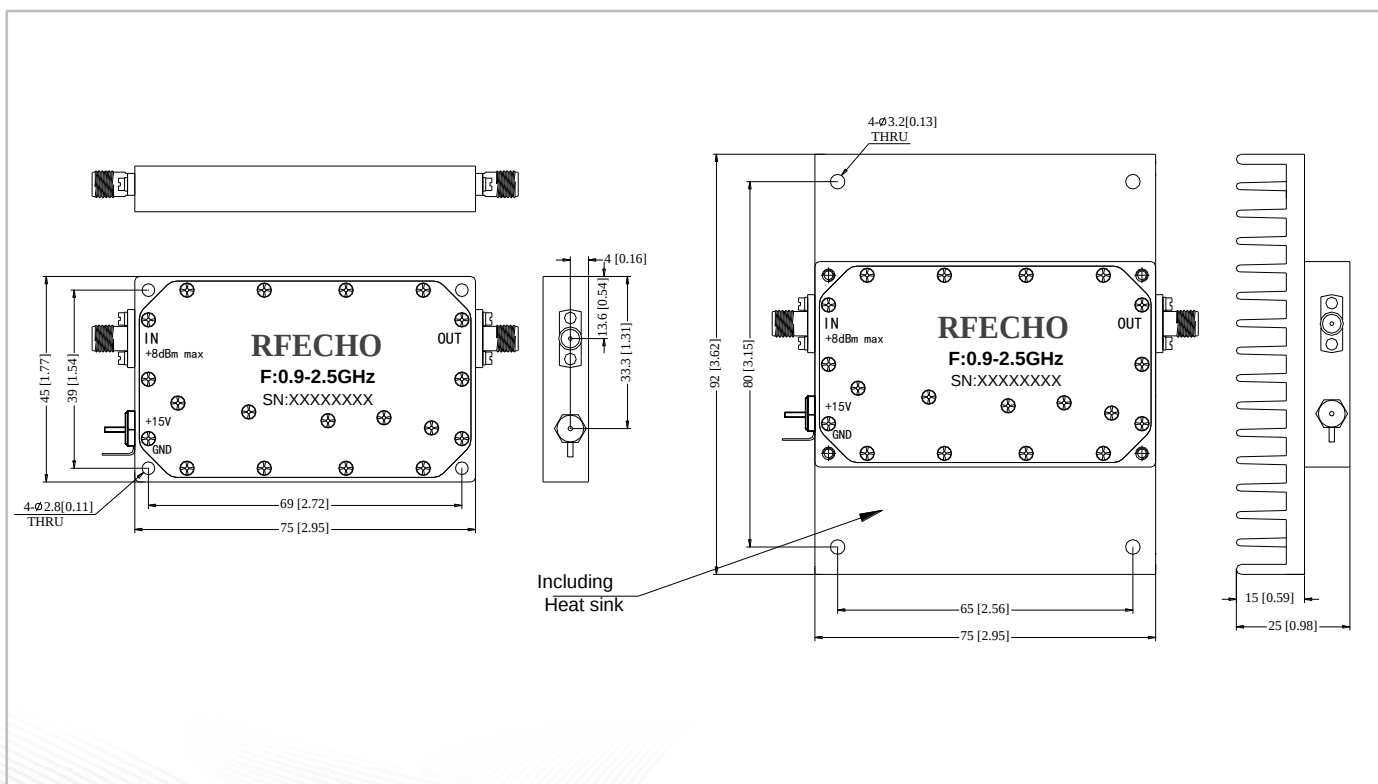
Environmental Specifications

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

Outline Drawing:

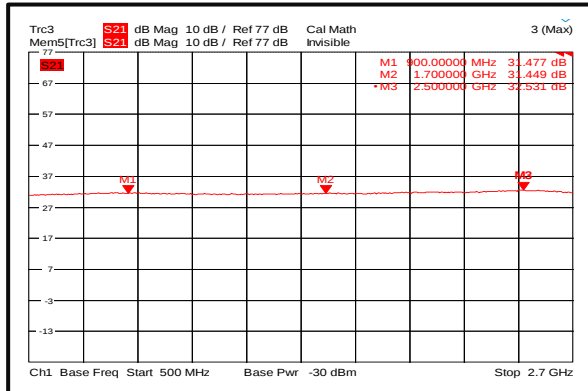
All Dimensions in mm (inches)

Heat Sink required during operation(Sold Separately)

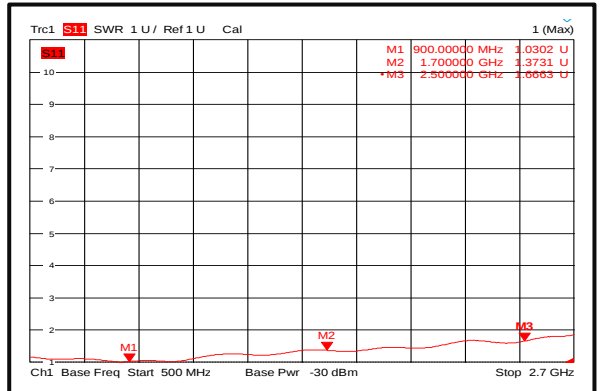




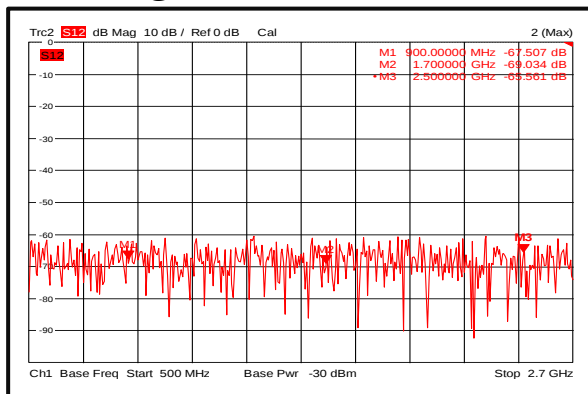
Gain@+25°C



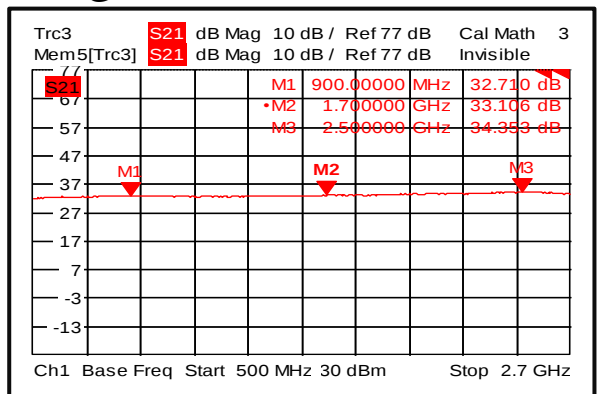
Input VSWR@+25°C



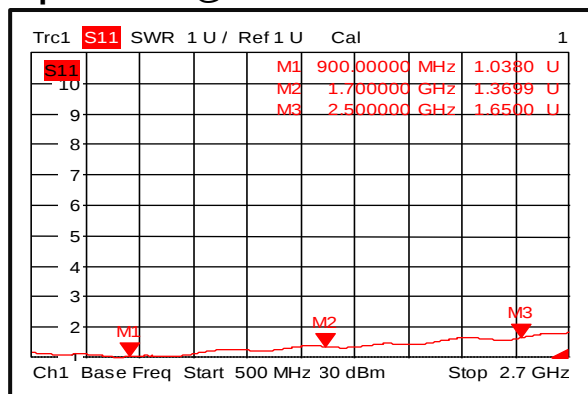
Isolation@+25°C



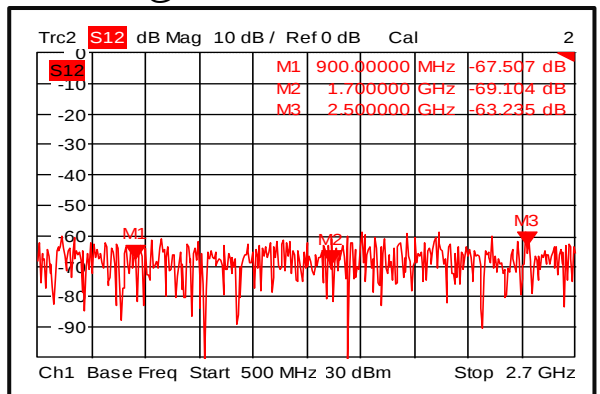
Gain@-40°C



Input VSWR@-40°C

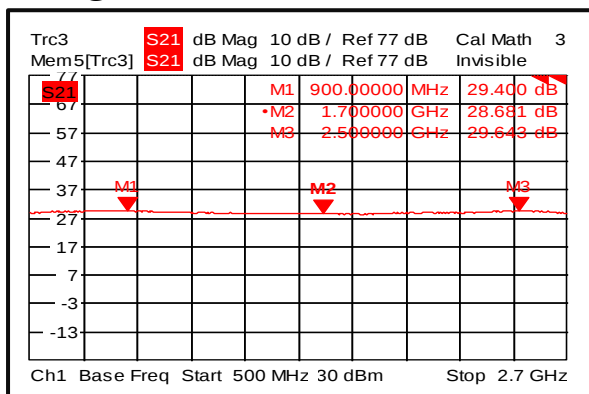


Isolation@-40°C

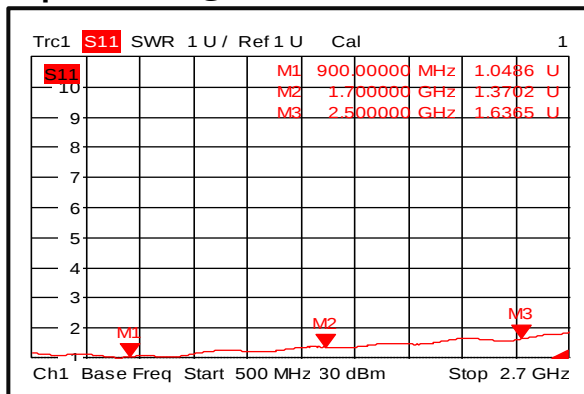




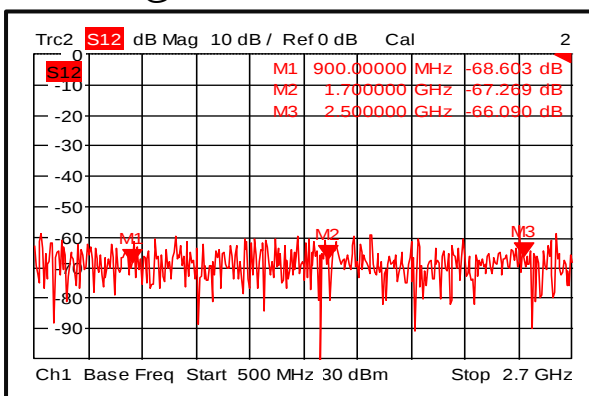
Gain@+85°C



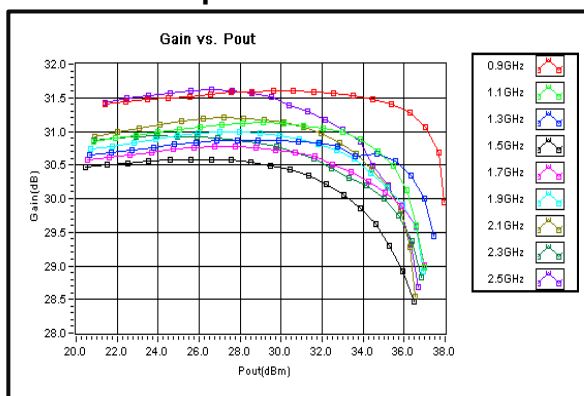
Input VSWR@+85°C



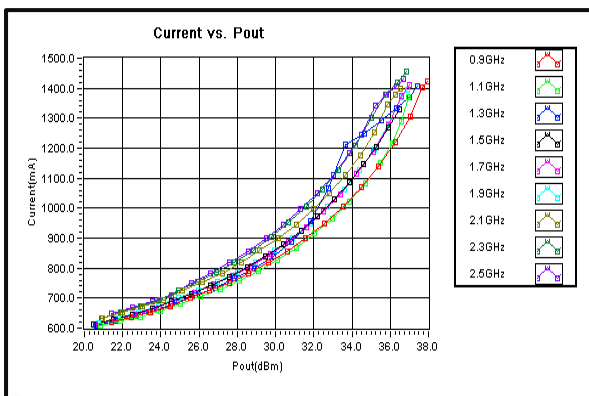
Isolation@+85°C



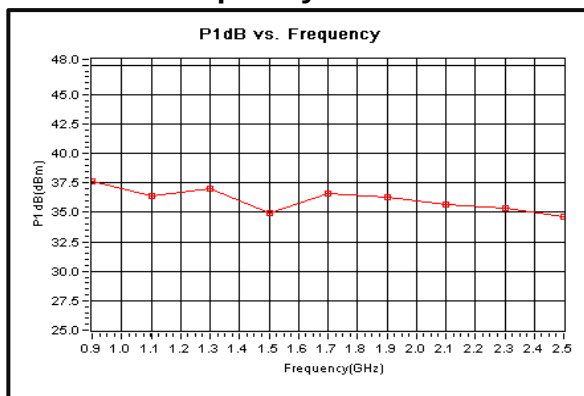
Gain vs. Output Power



Current

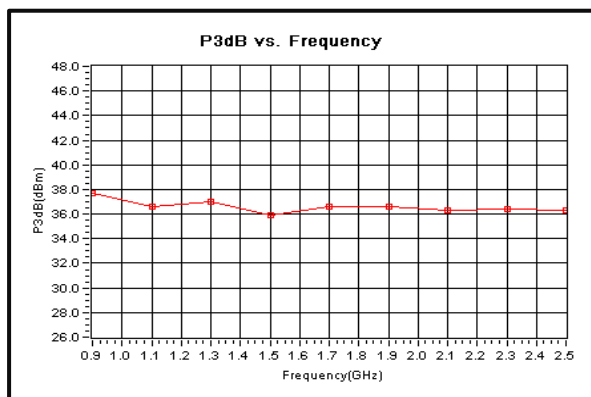


P1dB vs. Frequency

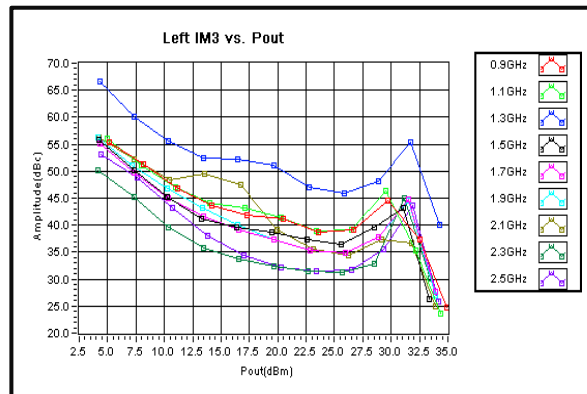




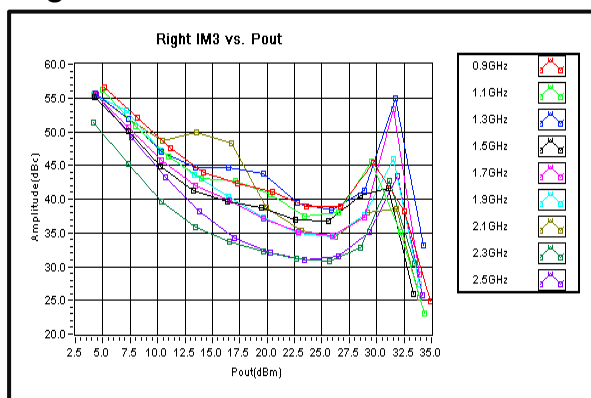
P3dB vs. Frequency



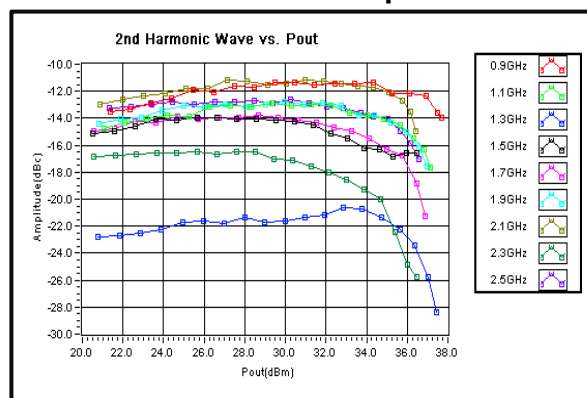
Left IM3 vs. Pout



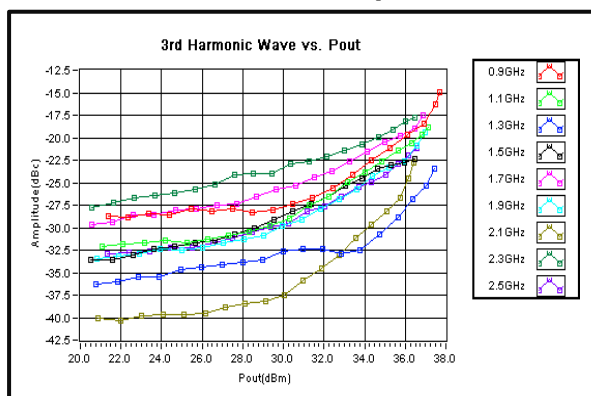
Right IM3 vs. Pout



2nd Harmonic Wave Output Power



3rd Harmonic Wave Output Power



4th Harmonic Wave Output Power

