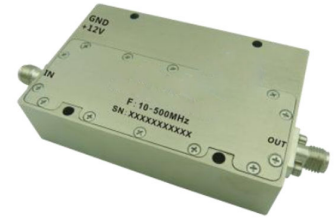




2W Wide Band Medium Power Amplifier

Features

- Gain: 25dB Typical
- P1dB Output Power: 33dBm Typical
- Functional Bandwidth : 10MHz – 1000MHz
- Supply Voltage: +12V



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	10		500	500		1000	MHz
Gain	24	26		23	25		dB
Gain Flatness		±1.0			±1.0		dB
Gain Variation Over Temperature (-40°C ~ +85°C)		±1.0			±1.0		dB
Input VSWR		1.7			1.5		: 1
Output Power for 1 dB Compression (P1dB)	32	33		28	31		dBm
Saturated Output Power (Psat)		36			34		dBm
The 2 nd harmonic @P1dB		-20			-20		dBc
Supply Voltage	10	12		10	12		V
Supply Current (Vcc=+12V) Low Voltage Shutdown (Vcc<+8.5V)		720	1500		720	1500	mA
Isolation S12		-55			-55		dB

Weight	5.0 ounces(Max.)	Impedance	50ohms
Input / Output Connectors	SMA-Female	Material	Aluminum
Finish	Nickel Plated	Package Sealing	Epoxy Sealing (Standard)
			Hermetically Sealed (Option with extra charge)



Absolute Maximum Ratings

Operating Voltage	+15V
RF Input Power (RFIN)	+8dBm

Biasing Up Procedure

Step 1	Connect Ground Pin
Step 2	Connect input and output
Step 3	Connect +12V biasing

Power OFF Procedure

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

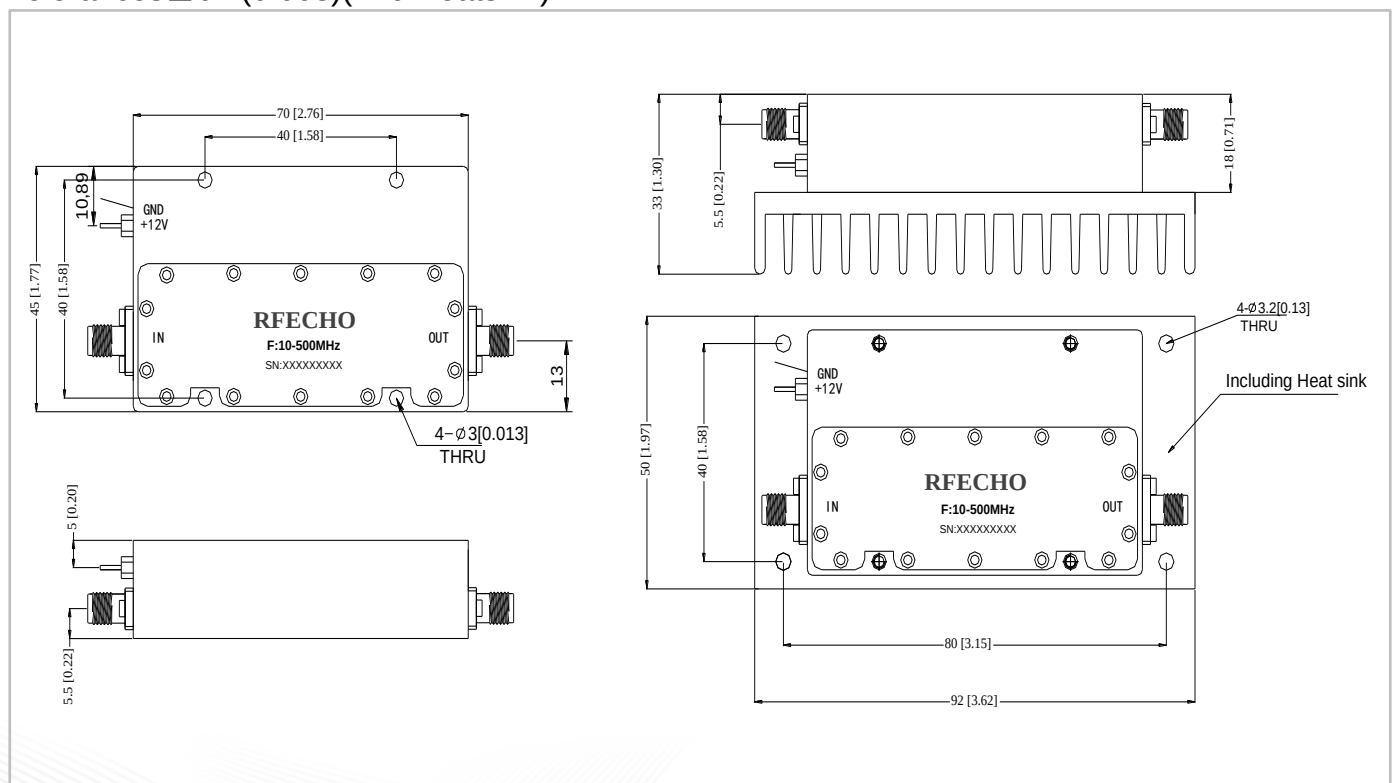
Environmental Specifications

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

Outline Drawing:

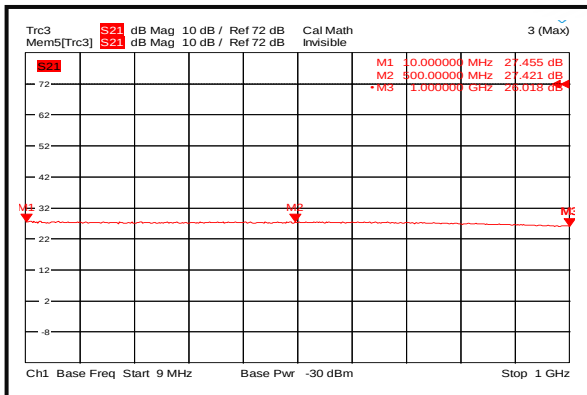
All Dimensions in mm (inches)
Tolerances $\pm 0.2(0.008)$ (Excl heatsink)

Heat Sink required during operation(Sold Separately)

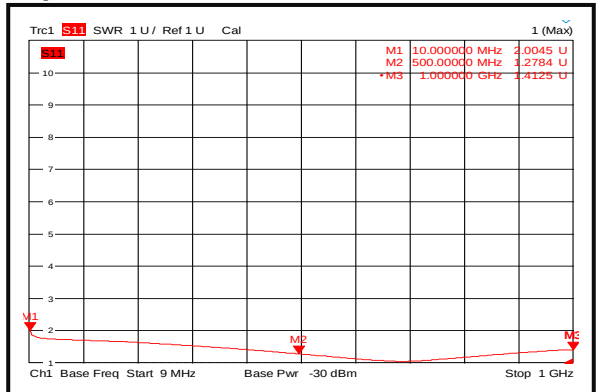




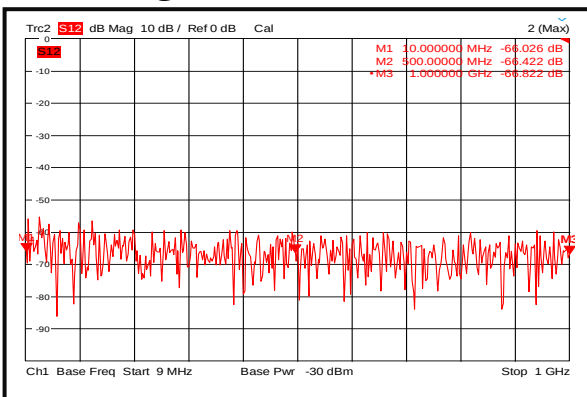
Gain @+25°C



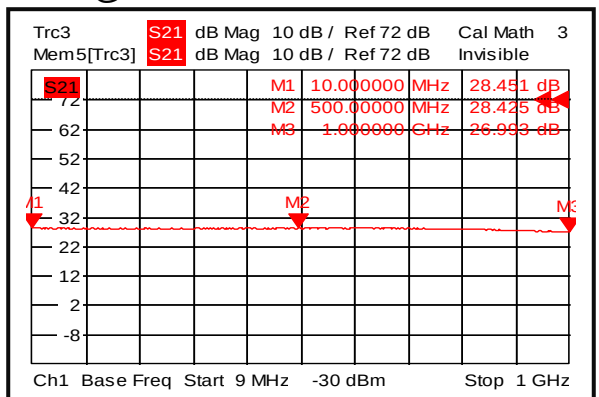
Input VSWR @+25°C



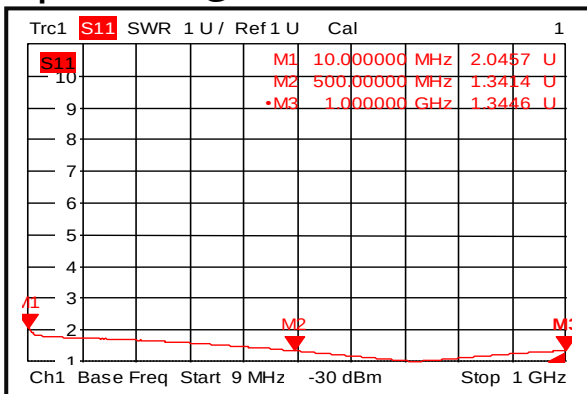
Isolation @+25°C



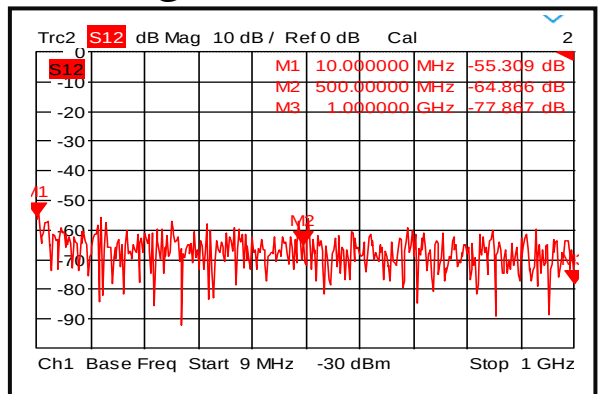
Gain @-40°C



Input VSWR @-40°C

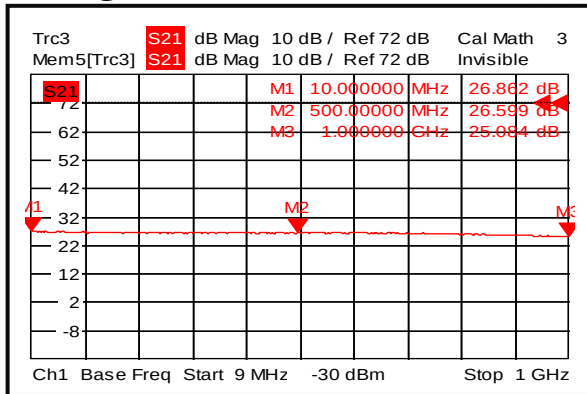


Isolation @-40°C

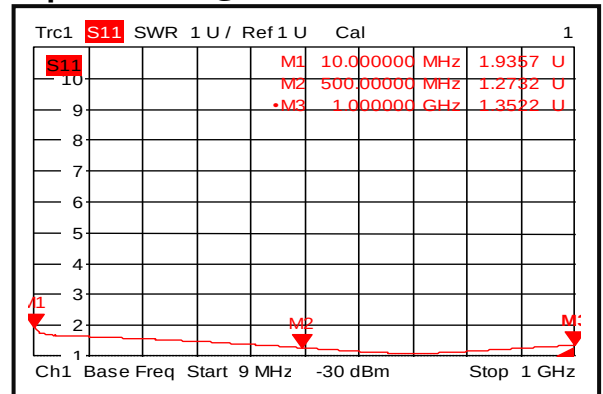




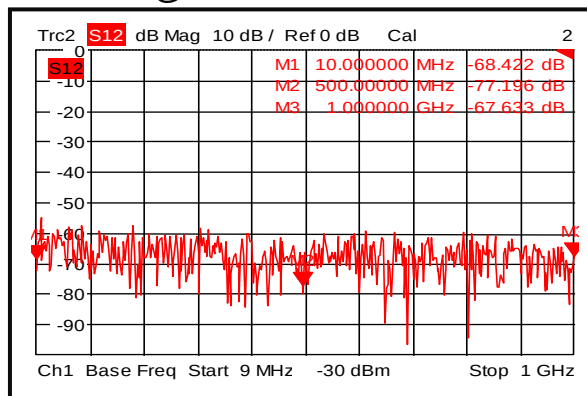
Gain @+85°C



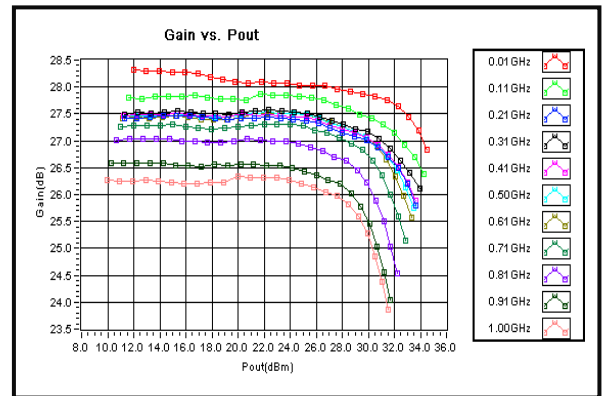
Input VSWR @+85°C



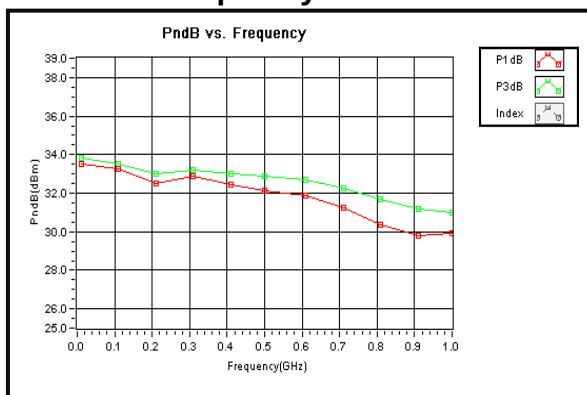
Isolation @+85°C



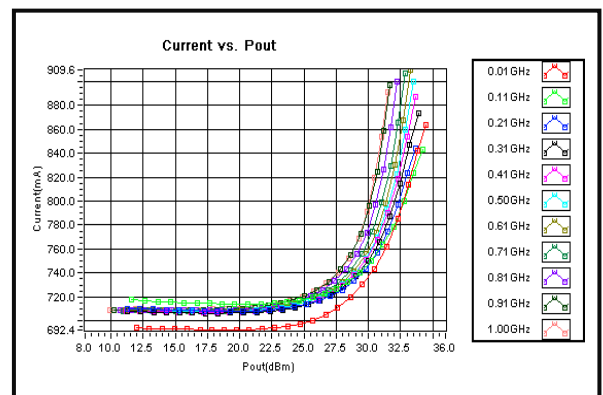
Gain vs. Output Power



P1dB vs. Frequency

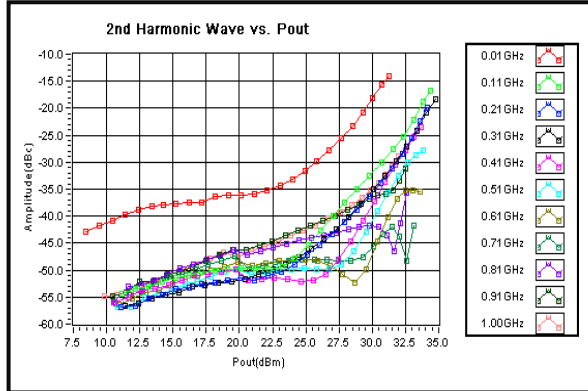


Current

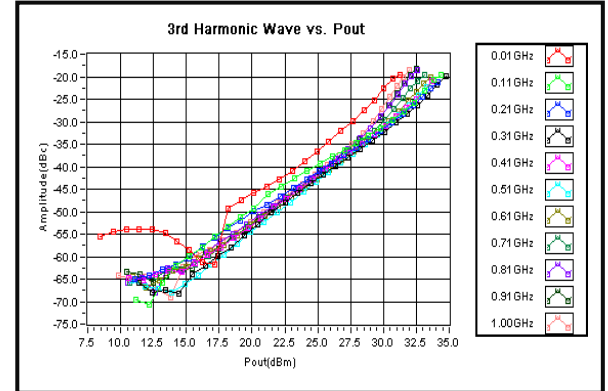




2nd Harmonic Wave Output Power



3rd Harmonic Wave Output Power



4th Harmonic Wave Output Power

