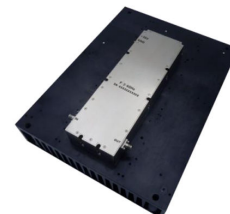




Wide Band Power Amplifier 2GHz~6GHz

Features

- Gain: 50dB Typical
- P1dB Output Power: 42dBm Typical
- Supply Voltage: +36V @ 300mA
- 50 Ohm Matched Input / Output



Typical Applications

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

RF Microwave & VSAT
Fiber Optics

Parameter	Min.	Typ.	Max.	Units
Frequency Range	2		6	GHz
Gain	47	50		dB
Gain Flatness		±2.5		dB
Gain Variation Over Temperature(-40°C~+70°C)		±3.0		dB
Input VSWR		1.3		:1
Output 1dB Compression Point (P1dB)	41	42		dBm
Saturated Output Power (Psat)	43	44		dBm
3rd Order Intermodulation Product(IM3)@P1dB		-25		dBc
Supply Current (Idd) (Vcc=+36V)		300	2500	mA
Isolation S12		-60		dB

Net Weight	46 ounces (Max.)	Impedance	50ohms
Weight (Including Heat Sink)	138 ounces (Max.)	Material	copper
Input / Output Connectors	SMA-Female	Package Sealing	Epoxy Sealed (Standard)
Finish	Nickel Plated		Hermetically Sealed (Option with extra charge)



Absolute Maximum Ratings

Operating Voltage	+38V
RF Input Power (RFIN)	+2dBm

Biasing Up Procedure

Step 1	Connect Ground Pin
Step 2	Connect input and output
Step 3	Connect +36V biasing

Power OFF Procedure

Step 1	Turn off +36V biasing
Step 2	Remove RF connection
Step 3	Remove Ground

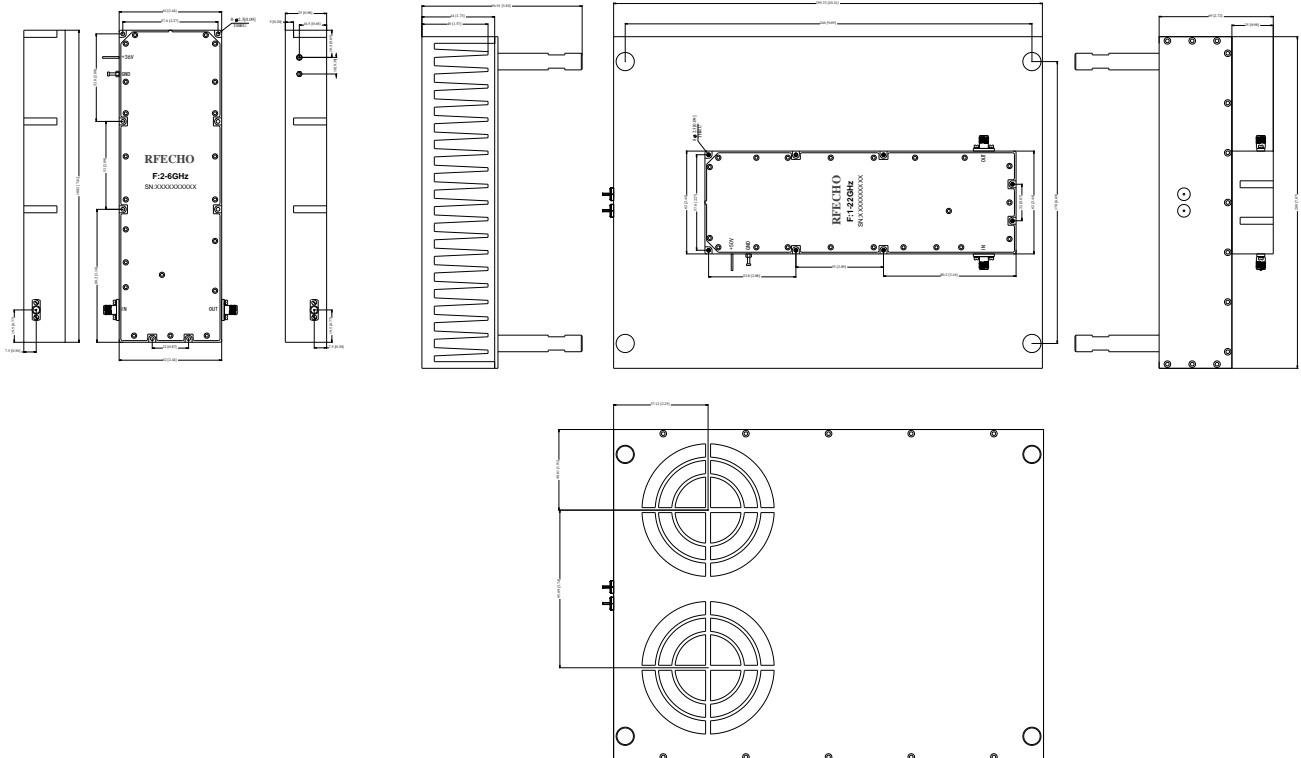
Environmental Specifications

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

Outline Drawing:

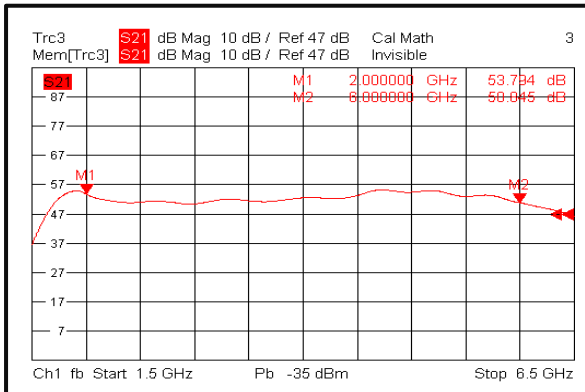
All Dimensions in mm (inches)

Heat Sink required during operation(Sold Separately)

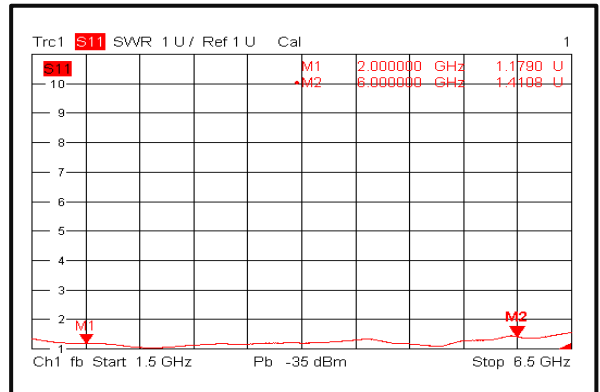




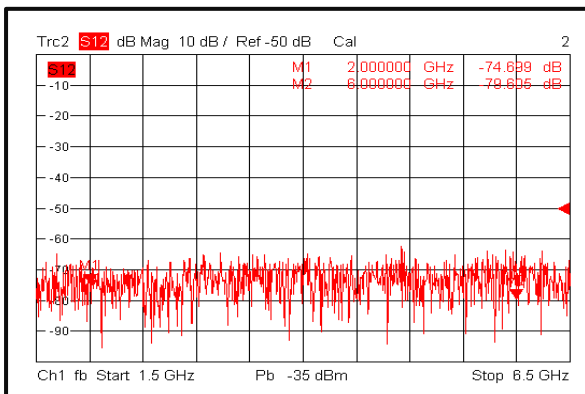
Gain@+25°C



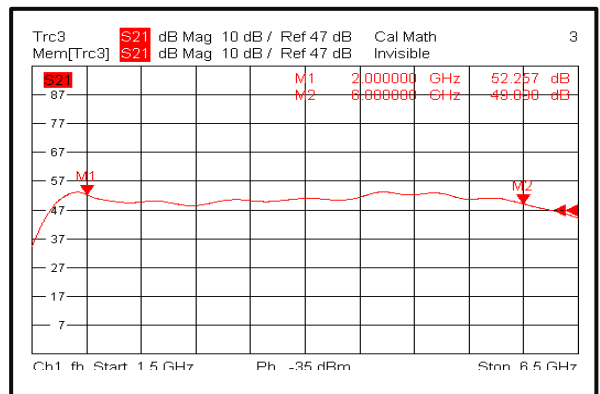
Input VSWR @+25°C



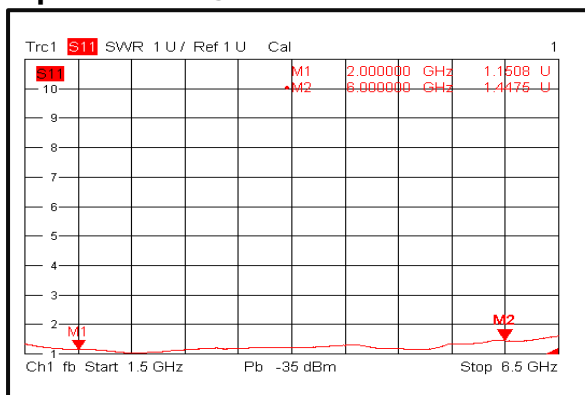
Isolation@+25°C



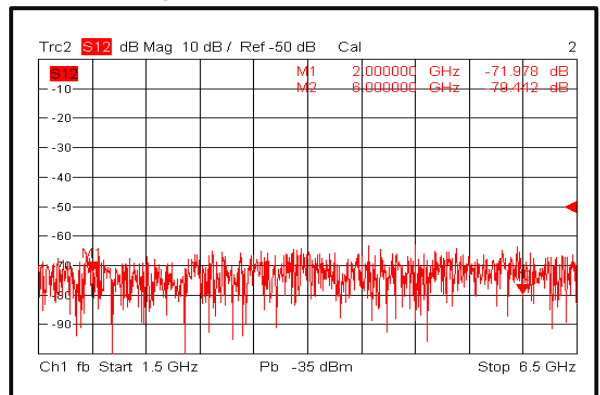
Gain@+70°C



Input VSWR @+70°C

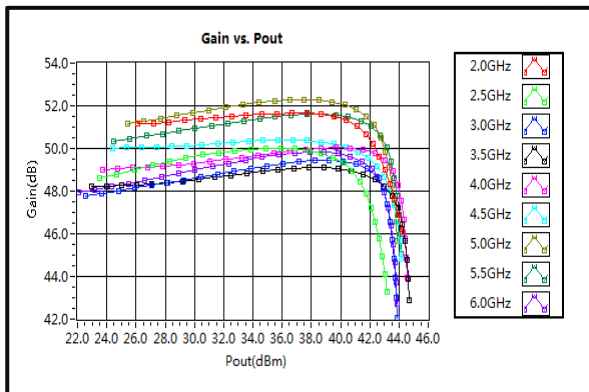


Isolation@+70°C

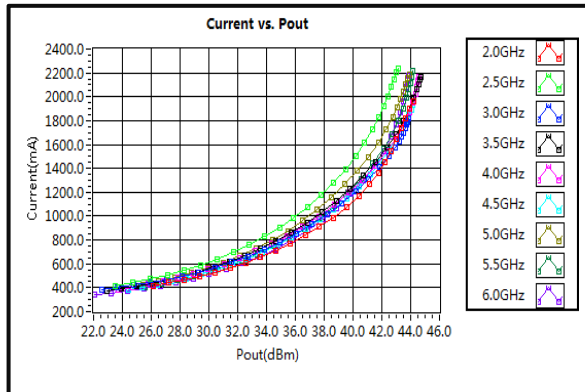




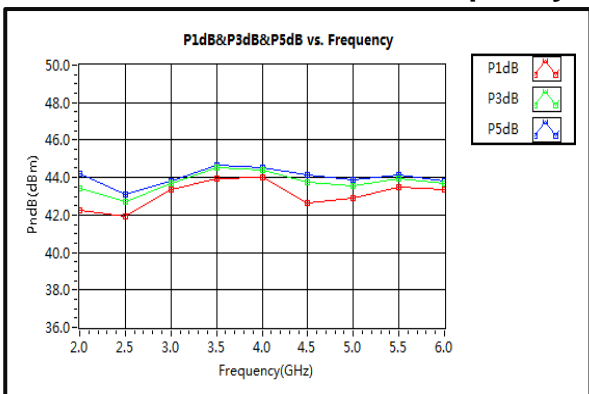
Gain vs. Output Power



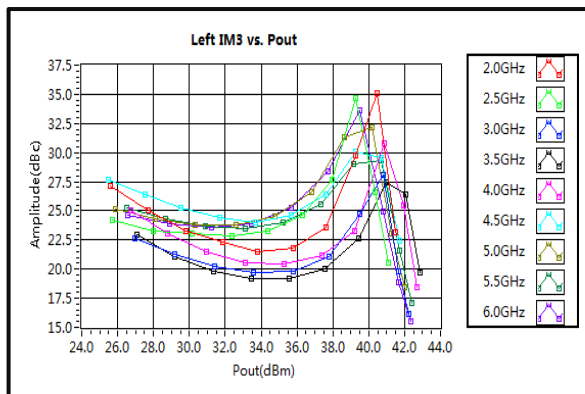
Current



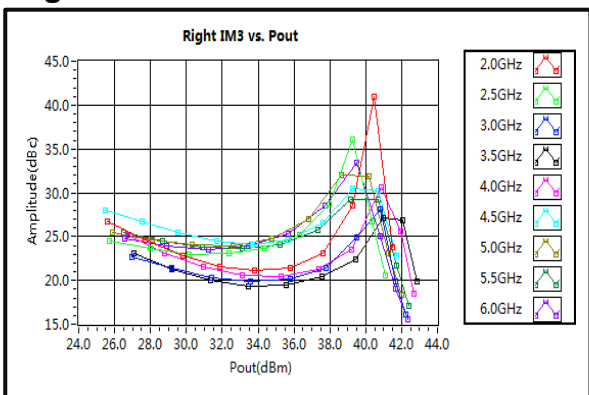
P1dB & P3dB & P5dB vs. Frequency



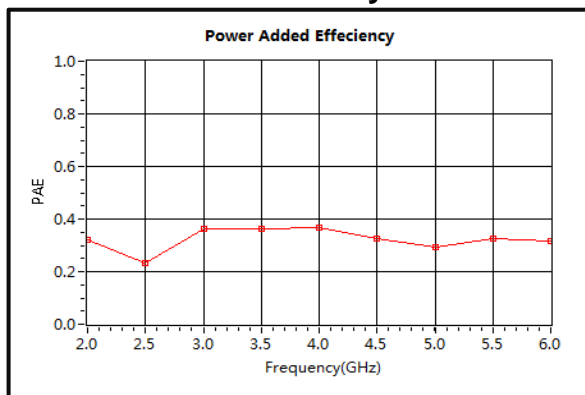
Left IM3 vs. Pout



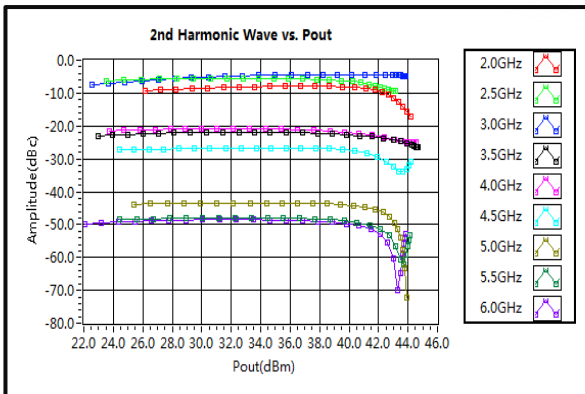
Right IM3 vs. Pout



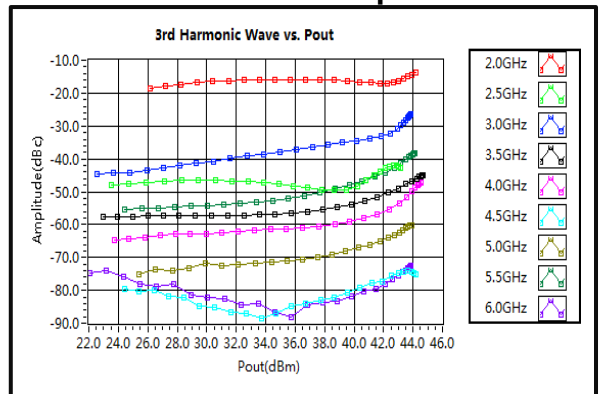
Power Added Efficiency



2nd Harmonic Wave Output Power



3rd Harmonic Wave Output Power



4th Harmonic Wave Output Power

