Wide Band Power Amplifier
0.02GHz~6GHz

Features

- Gain: 35dB Typical
- P1dB Output Power: 30dBm Min
- Supply Voltage: +28V @ 400mA
- 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	0.02		6	GHz
Gain	33	35		dB
Gain Flatness		±2.0	±3.0	dB
Gain Variation Over Temperature(-40ºC ~ +85ºC)		±2.0		dB
Input VSWR		1.5		: 1
Output Power for 1 dB Compression (P1dB)	30	31		dBm
Saturated Output Power (Psat)		34		dBm
The 2nd harmonic @P1dB		-15		dBc
Supply Current (Idd) (Vcc=+28V)		400	1000	mA
Power Added Effeciency		20		%
Isolation		-55		dB
Ruggedness: Output Mismatch, all phase angles	VSWR = 6:1, No Device Damage			

Weight	11.29 Ounces	Impedance	50 ohms
Input / Output Connectors	SMA-Female	Material	Aluminum
Finish	Nickel Plated	Package Sealing	Epoxy Sealing (Standard)
			Hermetically Seal (Option with extra charge)

Absolute Maximum Ratings

Operating Voltage	+32V @+25ºC
RF Input Power (RFIN)	+2dBm @+25ºC

Biasing Up Procedure

Step 1	Connect Ground Pin
Step 2	Connect input and output
Step 3	Connect +28V biasing

Power OFF Procedure

Step 1	Turn off +28V biasing
Step 2	Remove RF connection
Step 3	Remove Ground

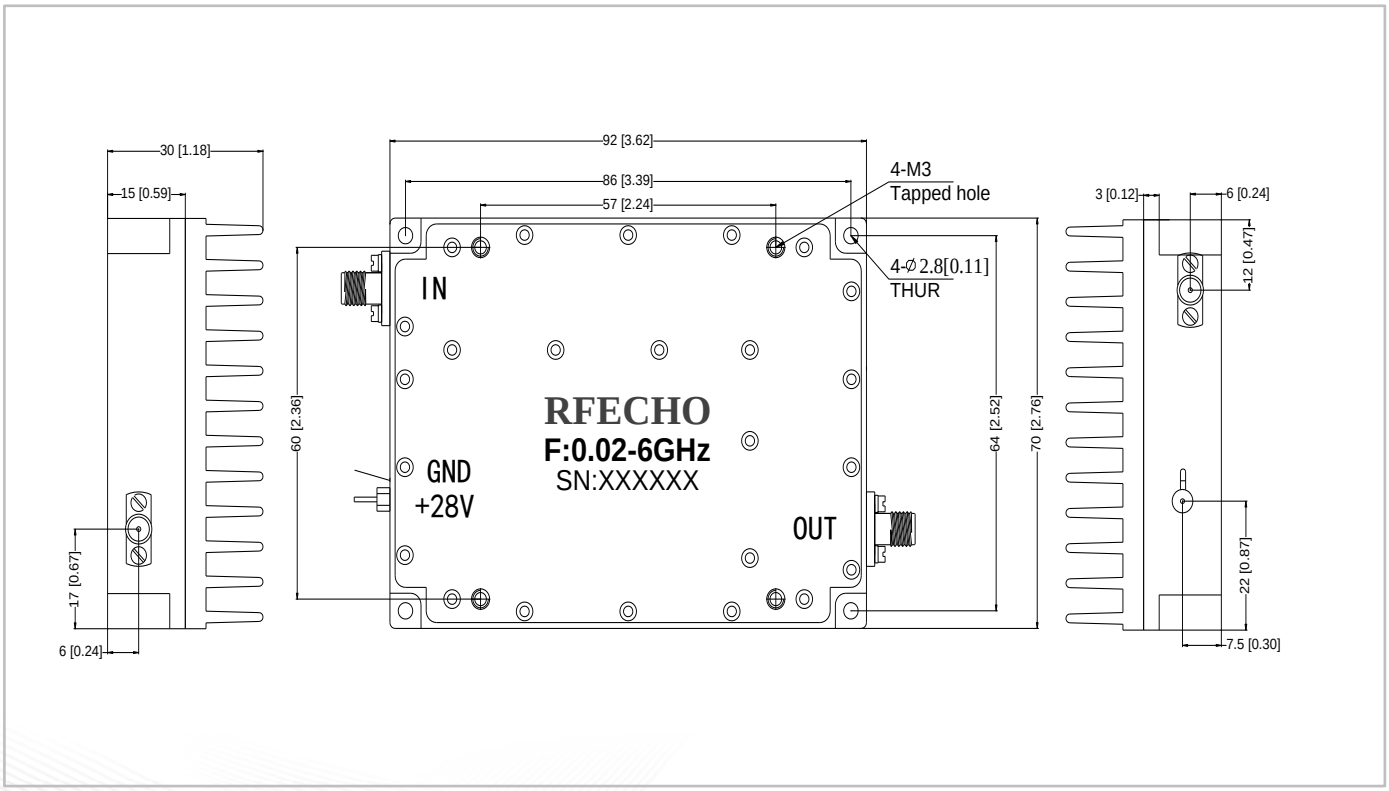
Environmental Specifications

Operational Temperature	-40ºC~+85ºC
Storage Temperature	-50ºC~+105ºC
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 35ºc, 95%RH at 40ºc
Shock	20G for 11msec half sine wave,3 axis both directions

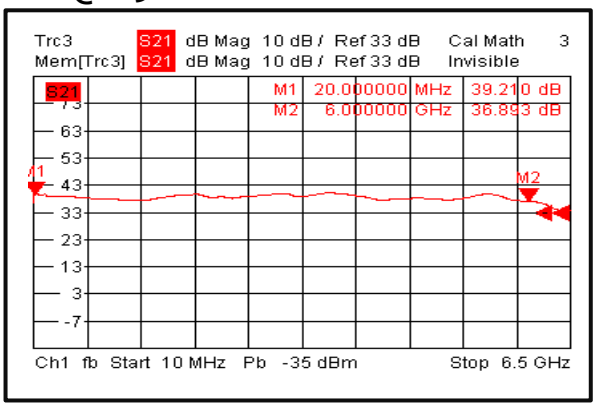
Outline Drawing:

All Dimensions in mm (inches)

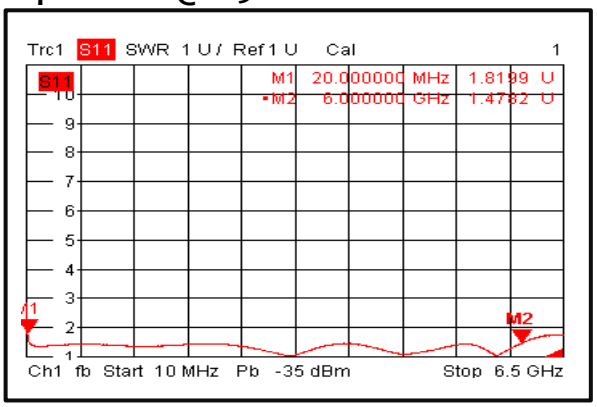
Heat Sink required during operation(Sold Separately)



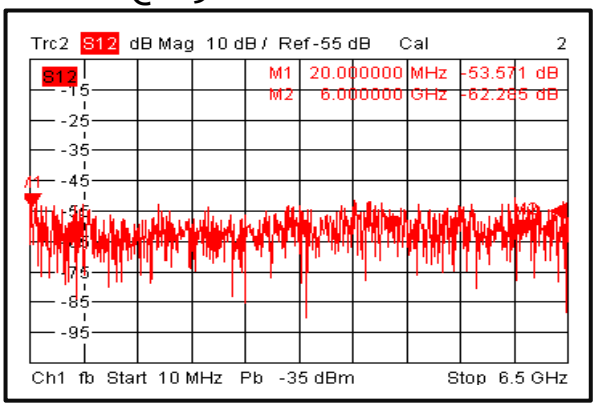
Gain@+25℃



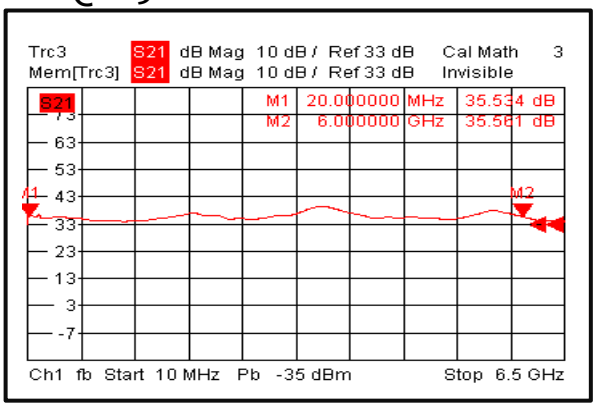
Input VSWR@+25℃



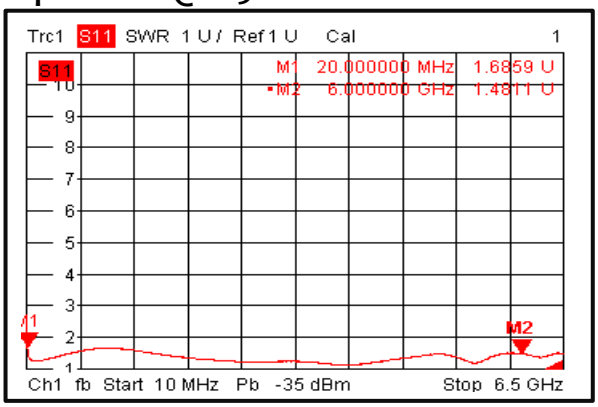
Isolation@+25℃



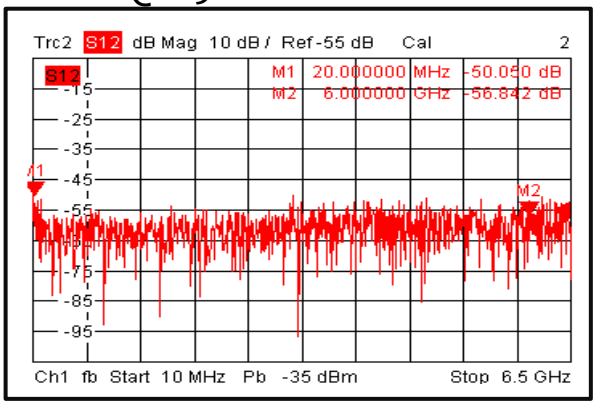
Gain@+85℃



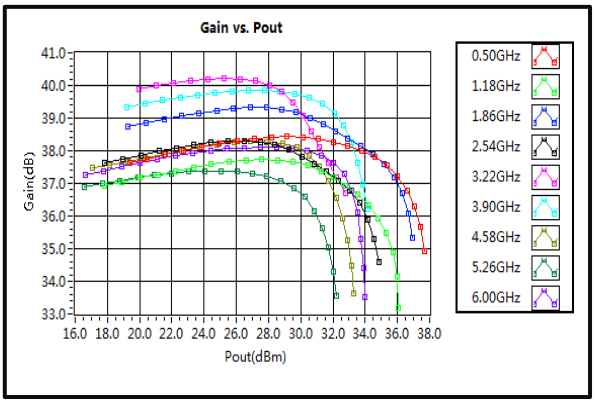
Input VSWR@+85℃



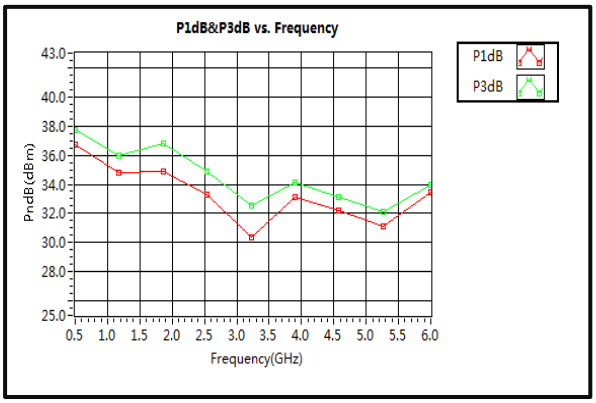
Isolation@+85℃



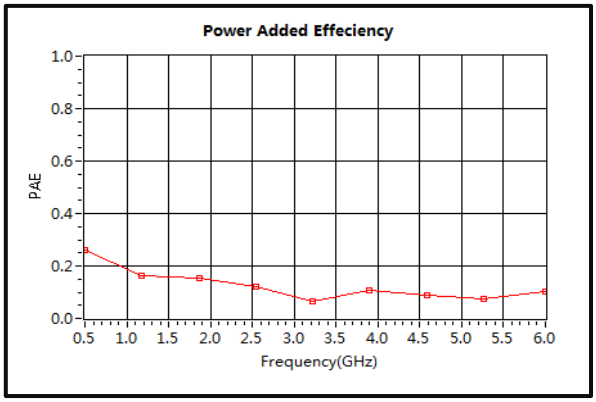
Gain vs. Output Power



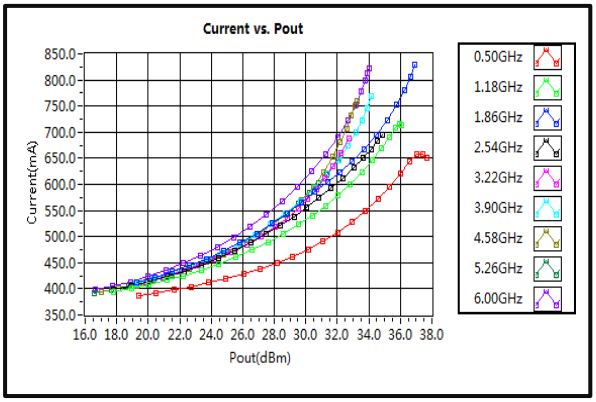
P1dB & P3dB vs. Frequency



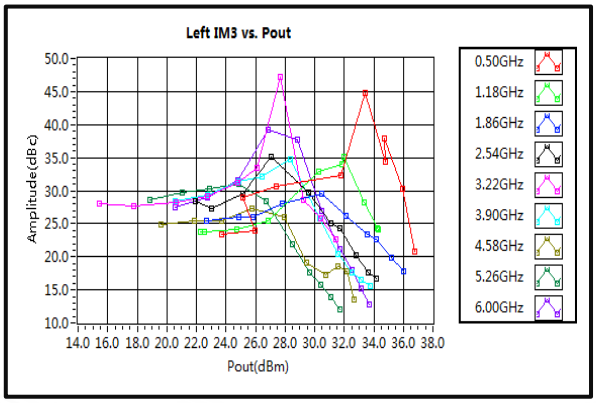
Power Added Efficiency



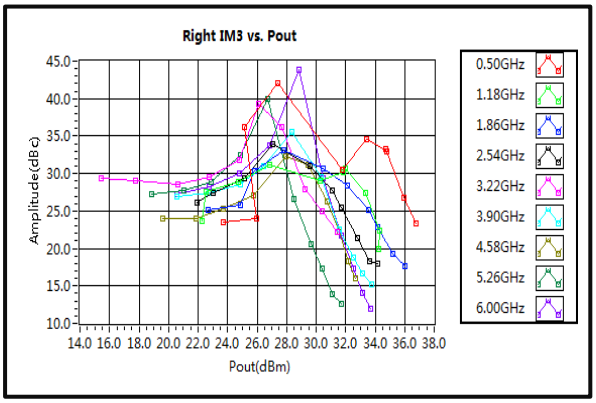
Current



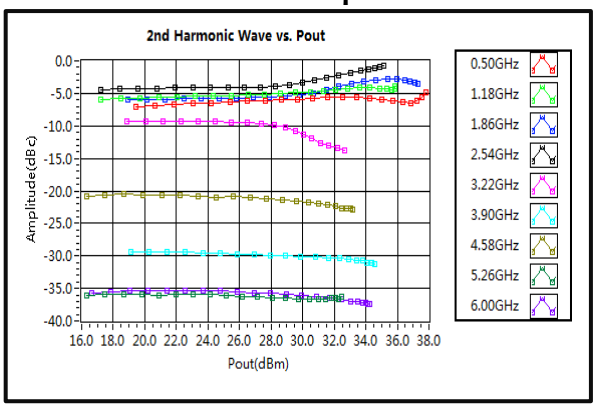
Left IM3 vs. Pout



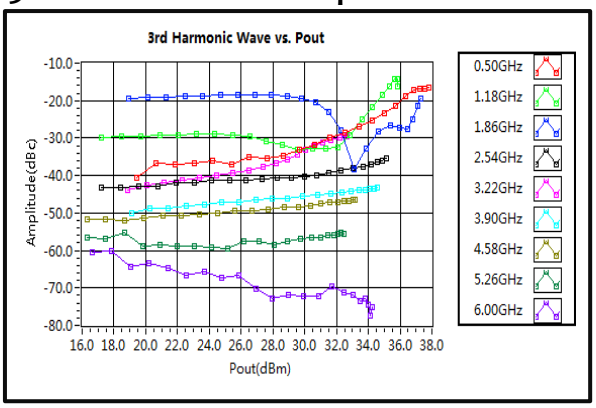
Right IM3 vs. Pout



2nd Harmonic Wave Output Power



3rd Harmonic Wave Output Power



4th Harmonic Wave Output Power