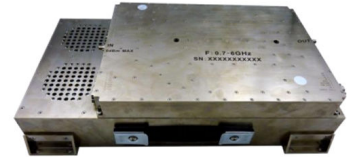




Wide Band Power Amplifier 0.7GHz~6GHz

Features

- Gain: 53dB
- Output power +48dBm typical
- High P1dB: +44dBm Full Band
- Supply Voltage: +28V



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		5.5	5.5		6.0	GHz
Gain	49	55		49	55		dB
Gain Flatness		±3.0	±5.0		±2	±3	dB
Gain Variation Over Temperature (-40°C ~ +70°C)		±3.0			±3.0		dB
Input VSWR		1.5			1.5		:1
Output 1dB Compression Point (P1dB)	45	47		44	45		dBm
Saturated Output Power (Psat)	46	48		44	45		dBm
Isolation S12	50	60		50	60		dB
Supply Current (Vcc=+28V)		0.7	14		0.7	14	A
FAN Supply Current (Vcc=+24V)		1.0			1.0		A
Efficiency at P1dB	15	20		15	17		%
Switching Speed (10% to 90%)		2.5	5		2.5	5	ms

Weight	360.49 ounces	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	+30V
RF Input Power (RFIN)	0dBm

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

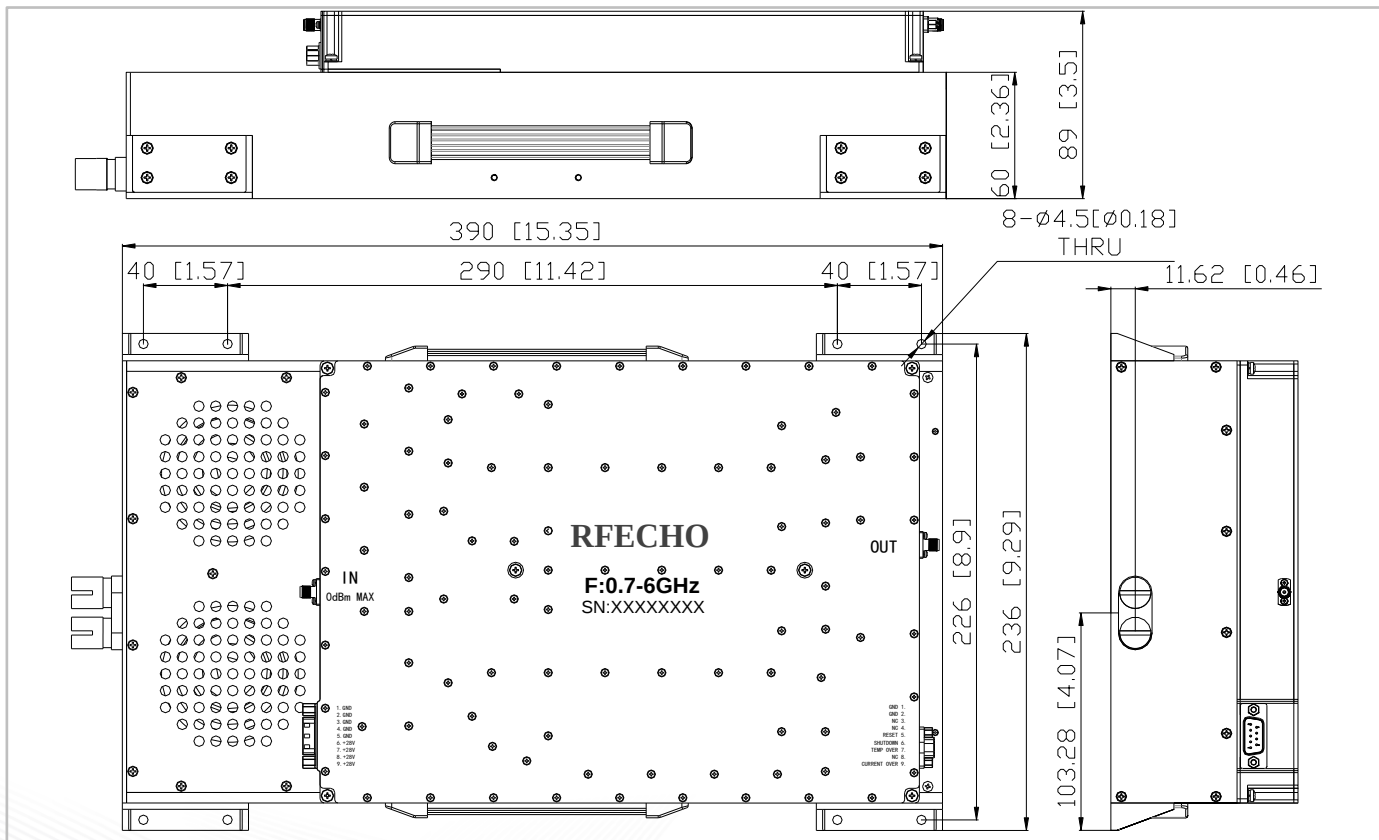
Environmental Specifications

Operational Temperature	-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:

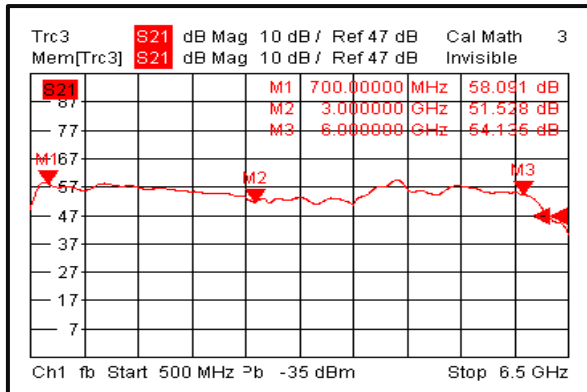
All Dimensions in mm (inches)

Heat Sink required during operation(Sold Separately)

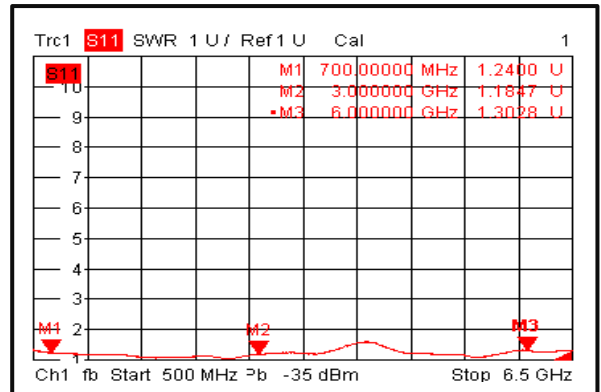




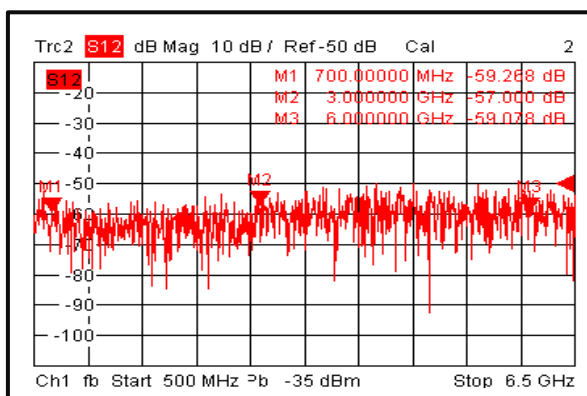
Gain



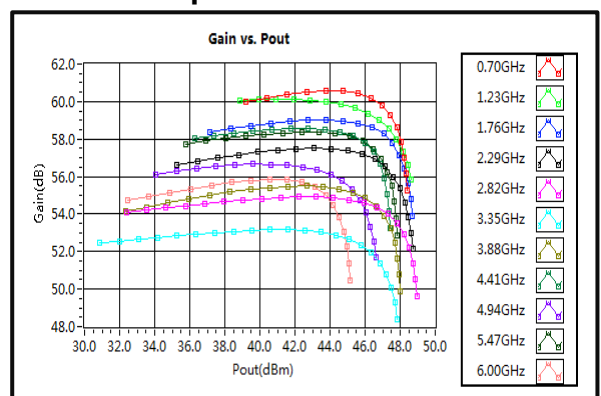
Input VSWR



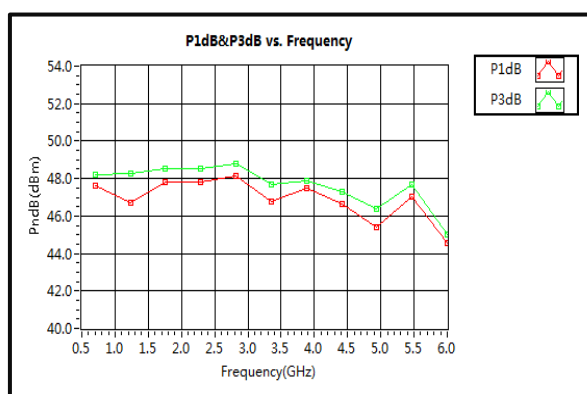
Isolation



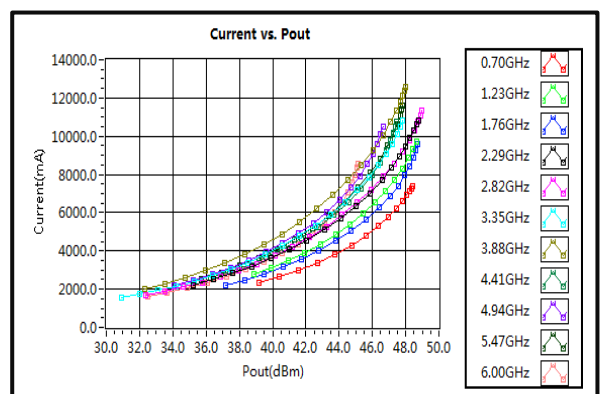
Gain vs. Output Power



P1dB & P3dB vs. Frequency

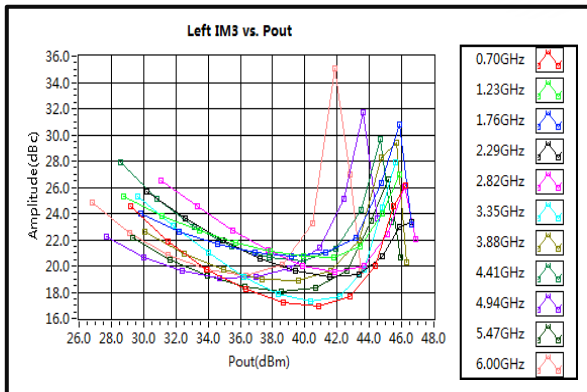


Current

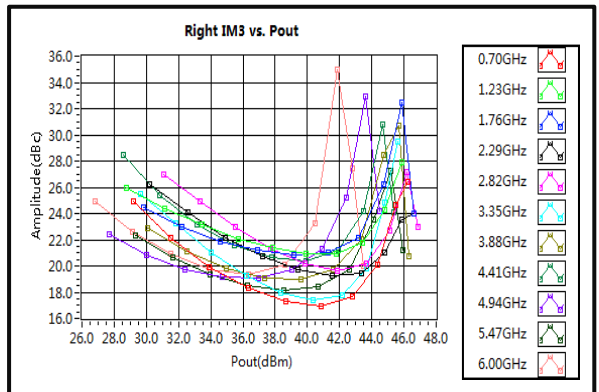




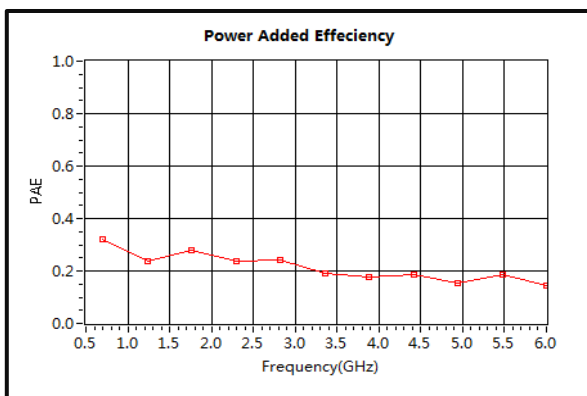
Left IM3 vs. Pout



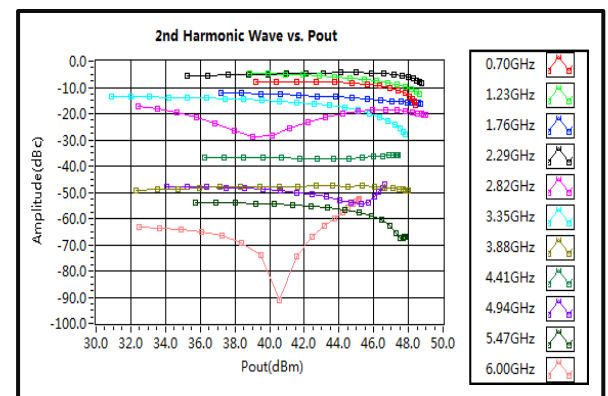
Right IM3 vs. Pout



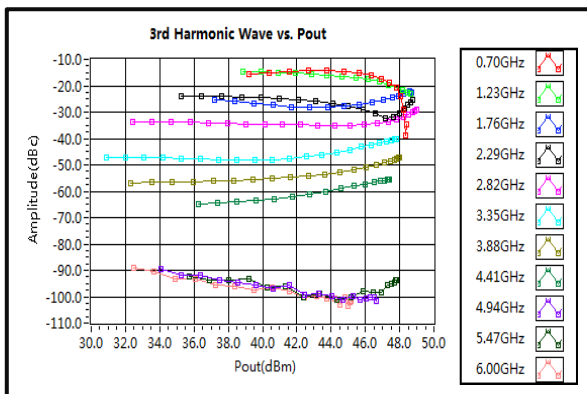
Power Added Efficiency



2nd Harmonic Wave Output Power



3rd Harmonic Wave Output Power



4th Harmonic Wave Output Power

