



Wide Band Power Amplifier 0.7GHz~6GHz

Features

- Gain: 36dB
- Output power +41dBm typical
- Supply Voltage: +28V
- 50 Ohm Matched



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		3	3		6	GHz
Gain	33	36		33	36		dB
Gain Flatness		± 2.5			± 2.0		dB
Gain Variation Over Temperature (-40°C ~ +70°C)		± 1.5			± 1.5		dB
Input VSWR		1.3			1.4		: 1
Output Power for 1 dB Compression (P1dB)	40	41		40	41		dBm
Saturated Output Power (Psat)		42			42		dBm
Supply Current (Idd) (Vcc=+28V)		1200	3500		1200	3500	mA
Efficiency at P1dB		20			20		%
Isolation S12		-65			-60		dB

Weight	241.27ounces	Impedance	50 ohms
Input / Output Connectors	SMA-Female	Material	Aluminum
Finishing	Standard: Gold 40 micron; Nickel 220 micron thickness	Package Sealing	Epoxy Sealing (Standard)
	Option: Gold 80 micron; Nickel 180 micron thickness		Hermetically Sealed (Option with extra charge)



Absolute Maximum Ratings

Operating Voltage	+28V
RF Input Power (RFIN)	+15dBm

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

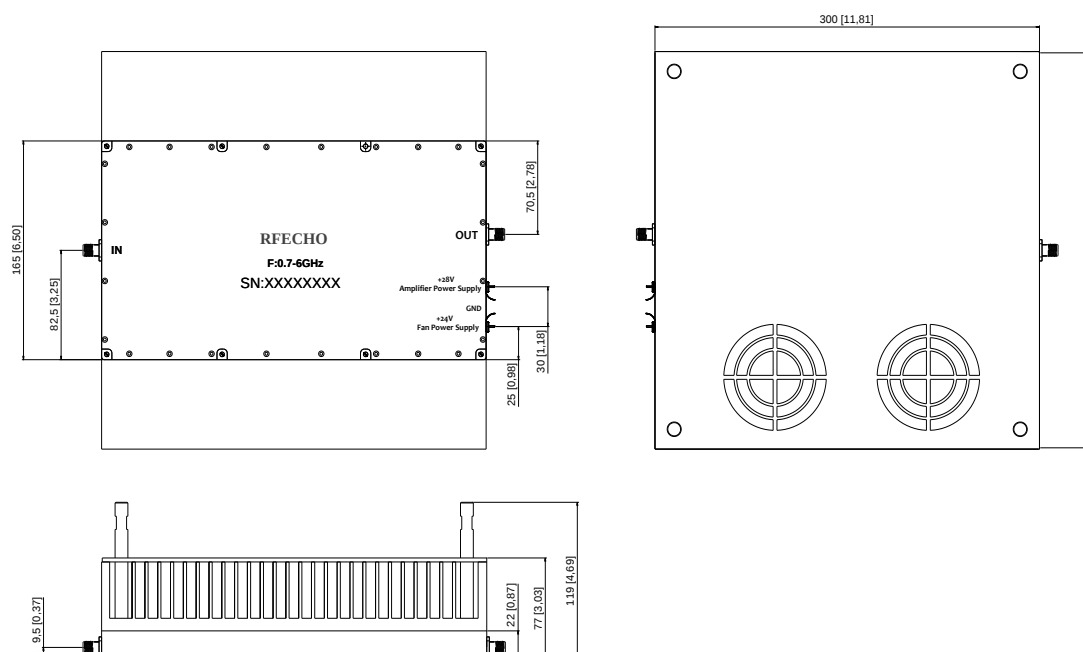
Environmental Specifications

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:

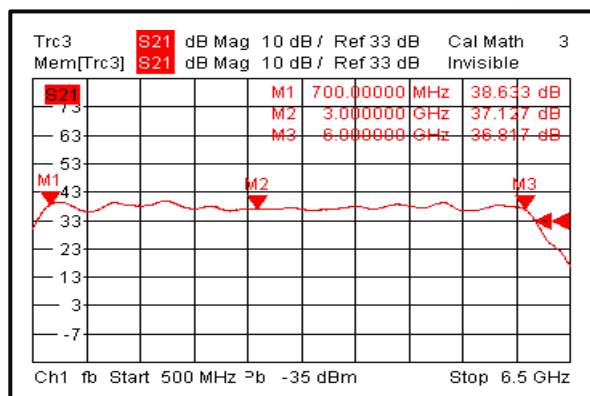
All Dimensions in mm (inches)

Heat Sink required during operation(Sold Separately)

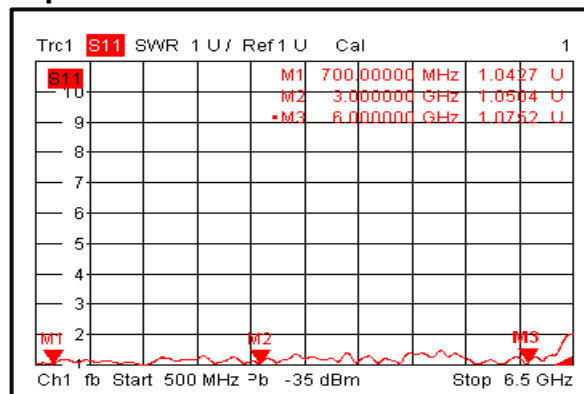




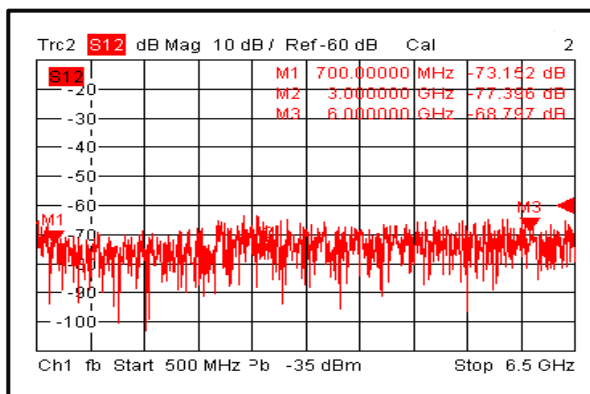
Gain



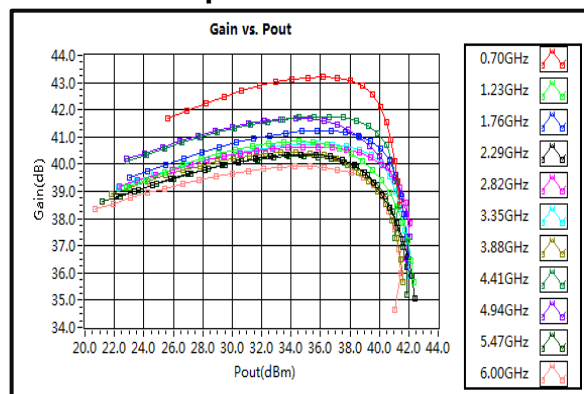
Input VSWR



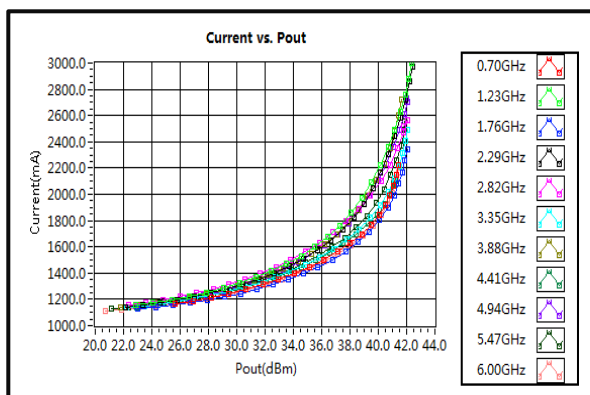
Isolation



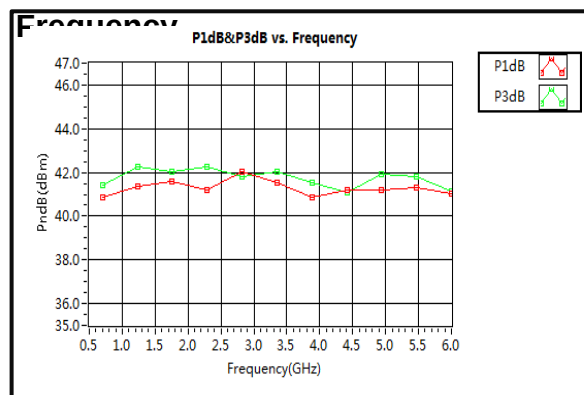
Gain vs. Output Power



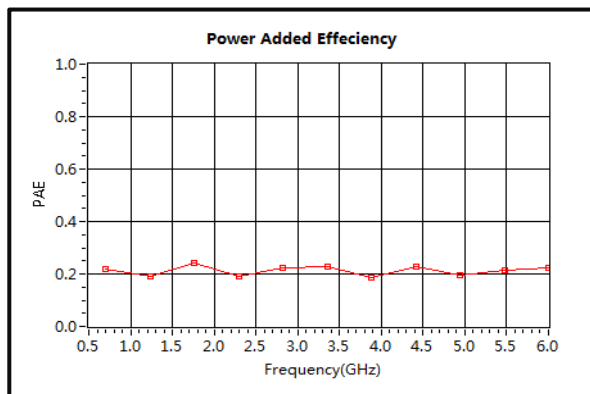
Current



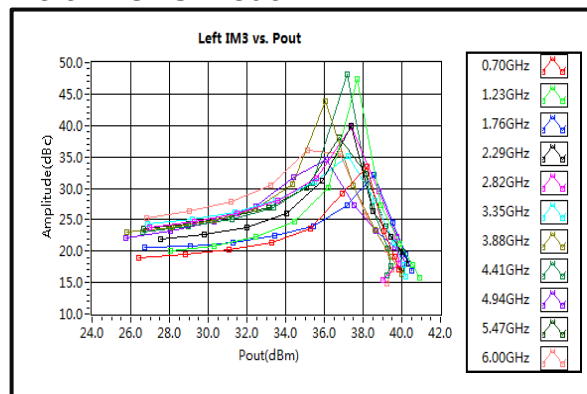
P1dB & P3dB vs.



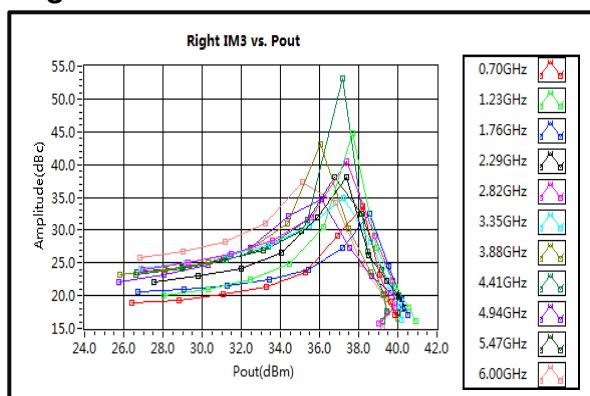
Power Added Efficiency



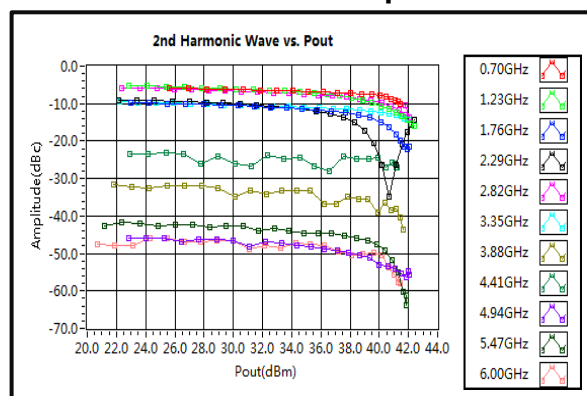
Left IM3 vs. Pout



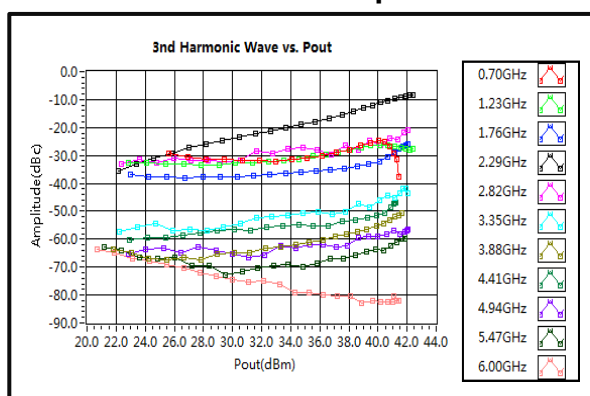
Right IM3 vs. Pout



2nd Harmonic Wave Output Power



3rd Harmonic Wave Output Power



4th Harmonic Wave Output Power

