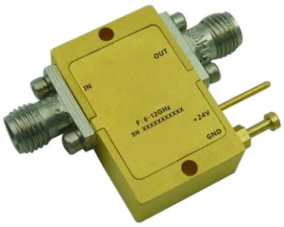
Wide Band Solid State Power Amplifier AC 110V/220V 6GHz~18GHz



Features

- High Output Power 32dBm typical.
- High peak to average handling capability.
- High linearity and low noise figure.
- Convenient AC Power Input. (AC 110V/220V)
- Integrated Heat Sink and Fan.

Typical Applications

- Microwave Radio and VSAT.
- Telecom Infrastructure.

Parameters	Min.	Typ.	Max.	Min.
Frequency Range	6		18	GHz
Gain	30	35		dB
Gain Flatness		±3.0	±4.0	dB
Gain Variation Over Temperature		±1.0	±1.5	dB
Noise Figure		3.0	5.5	dB
Input VSWR		1.6	2.0	: 1
Output VSWR		1.8	2.5	: 1
Output 1dB Compression Point (P1dB)	28	32		dBm
Saturated Output Power (Psat)		33.5		dBm
Output Third Order Intercept (OIP3)		43		dBm
Isolation S12		-55		dB
Supply Current (Idd) (AC=110~220V)		/		mA

Weight	40 ounces	Impedance	50ohms
Input / Output Connectors	SMA-Female	Material	Aluminum
Finish	Gray Painted		

Absolute Maximum Ratings

Operating Voltage	AC110~220V
RF Input Power(RFIN)	+5dBm

Biasing Up Procedure

Step 1	Connect input and output with 50 Ohm source and load with in band return loss better than 10dB.
Step 2	Connect AC Plug
Step 3	Flip switch to “ON” position

Power OFF Procedure

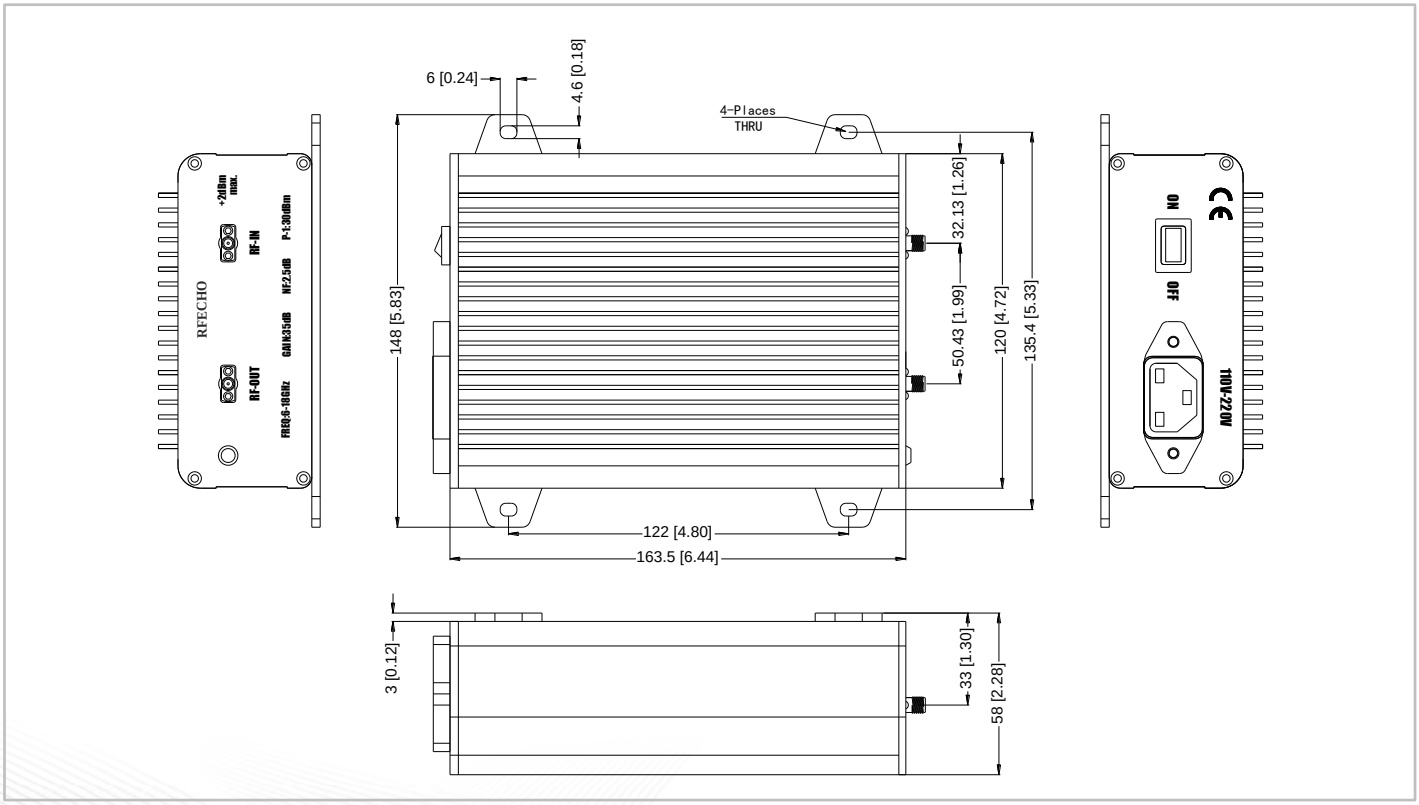
Step 1	Flip switch to “OFF” position
Step 2	Remove AC Plug
Step 3	Remove RF Connection

Environmental Specifications

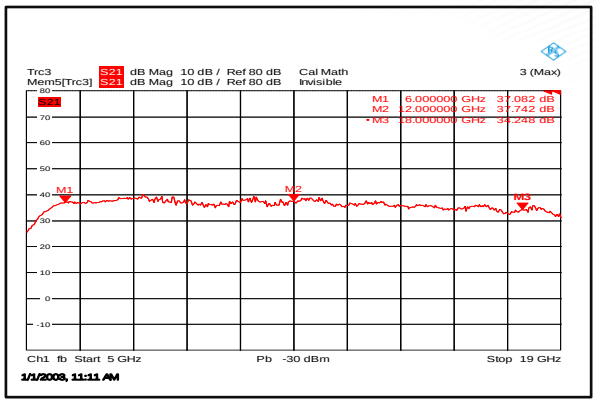
Operational Temperature	-40ºC~+85ºC
Storage Temperature	-50ºC~+105ºC
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35ºc, 95%RH at 40ºc
Shock	20G for 11msec half sine wave,3 axis both directions

Outline Drawing:

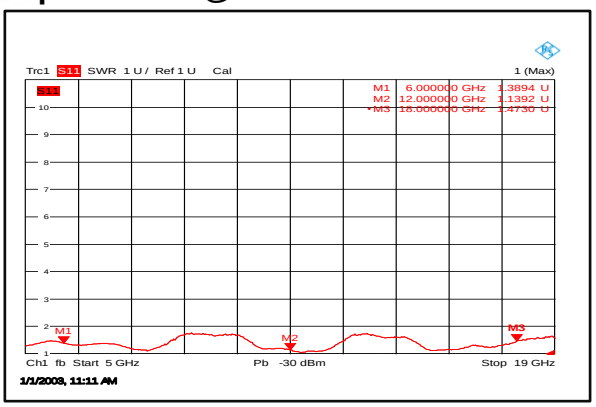
All Dimensions in mm (inches)



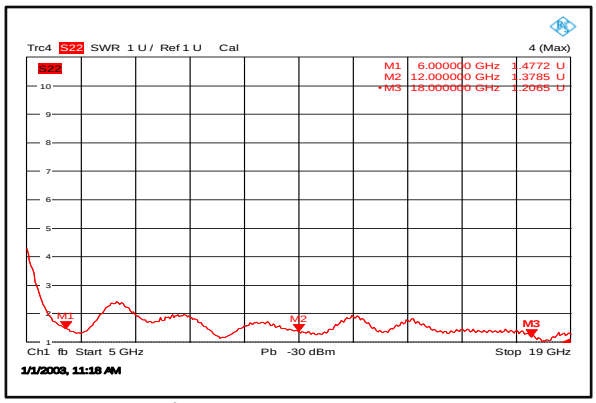
Gain @+25℃



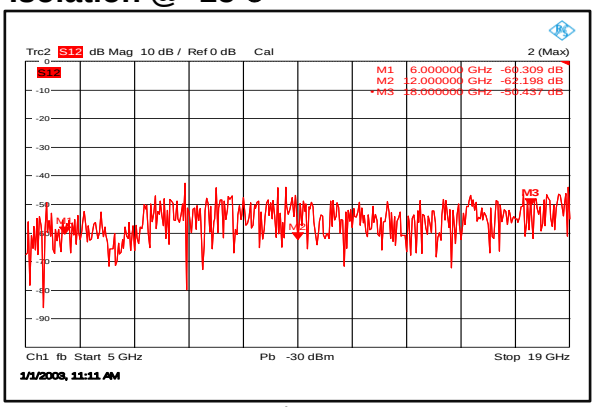
Input VSWR @+25℃



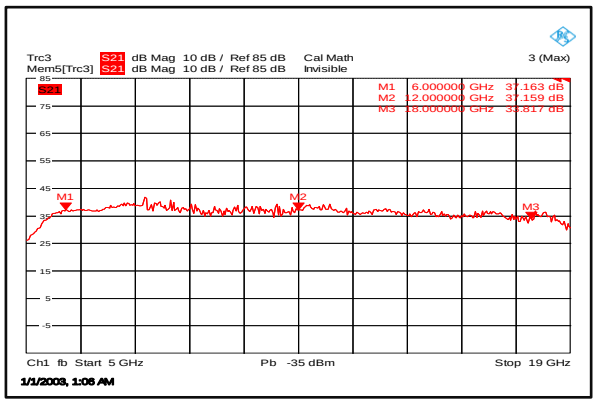
Output VSWR @+25℃



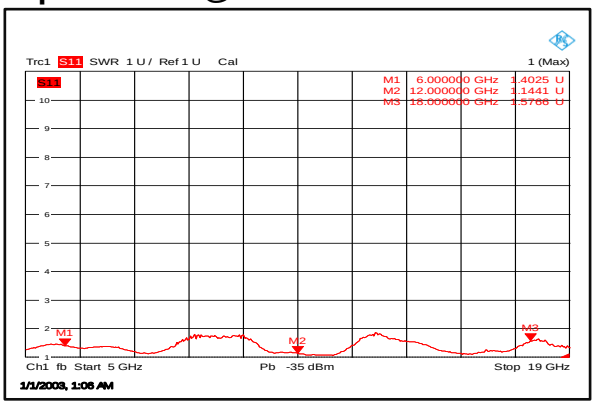
Isolation @+25℃



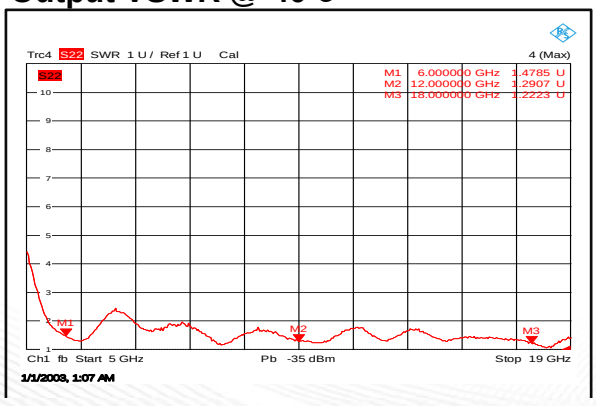
Gain @-40℃



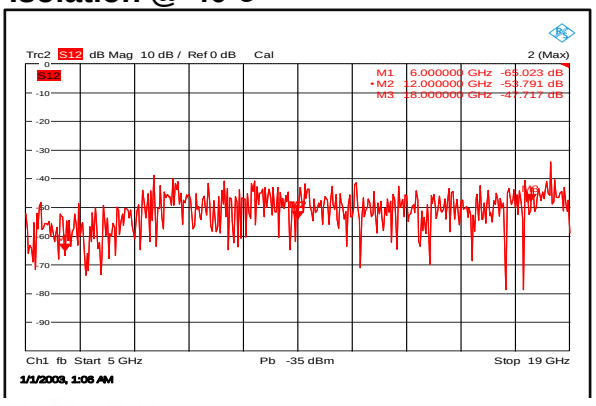
Input VSWR @-40℃



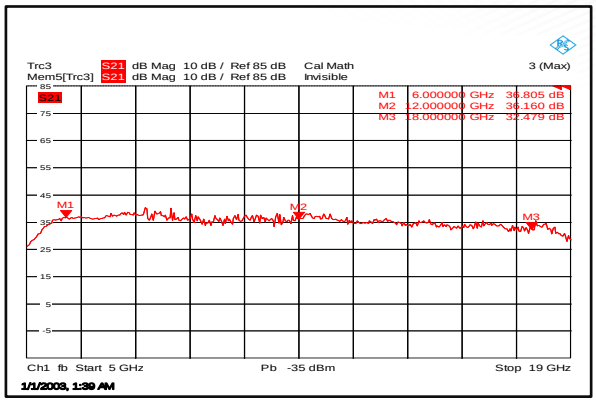
Output VSWR @-40℃



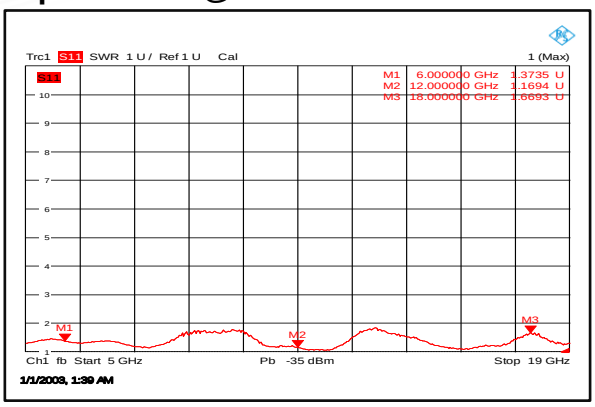
Isolation @-40℃



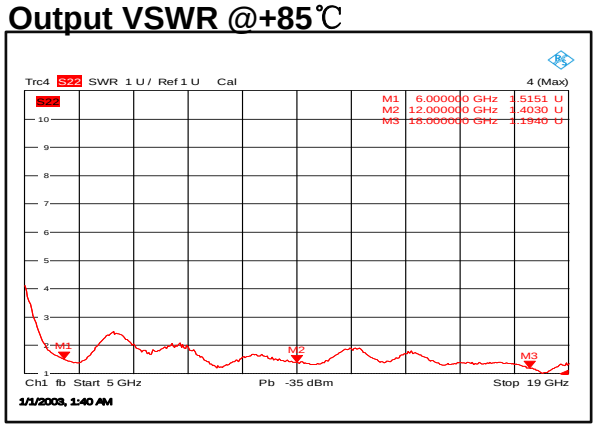
Gain @+85℃



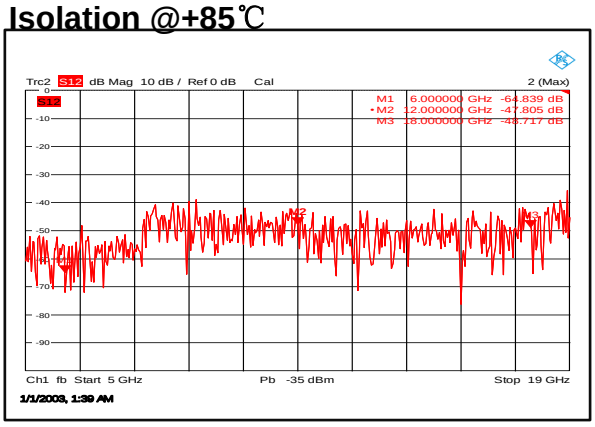
Input VSWR @+85℃



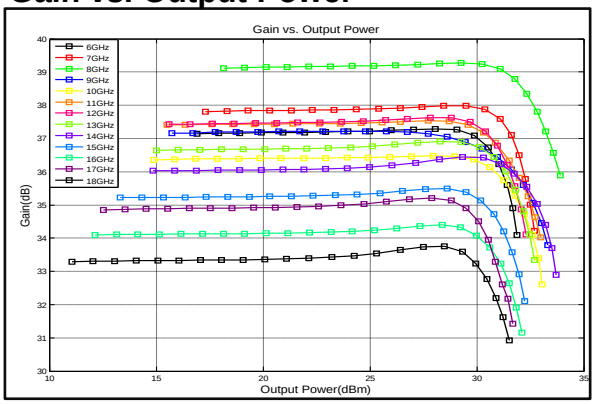
Output VSWR @+85℃



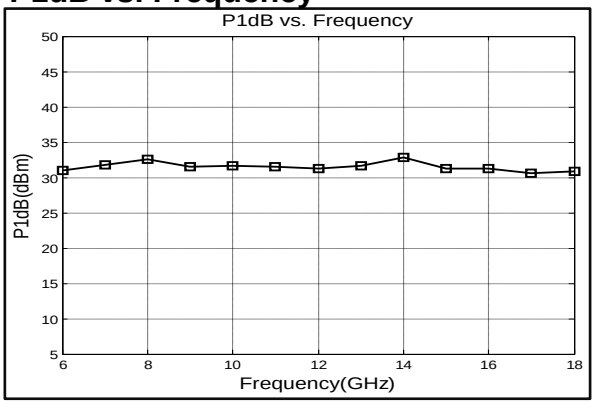
Isolation @+85℃



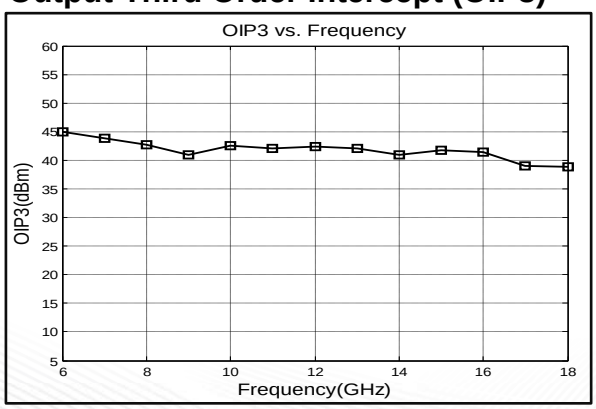
Gain vs. Output Power



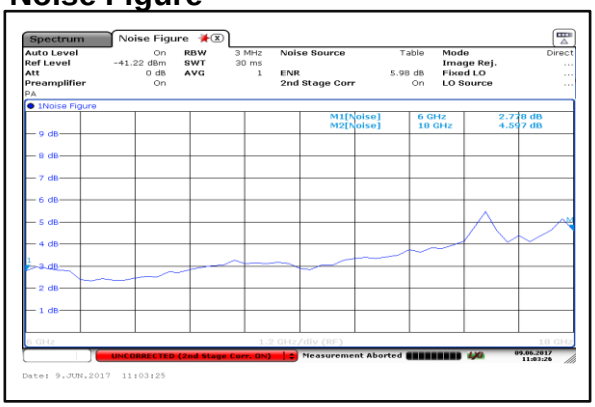
P1dB vs. Frequency



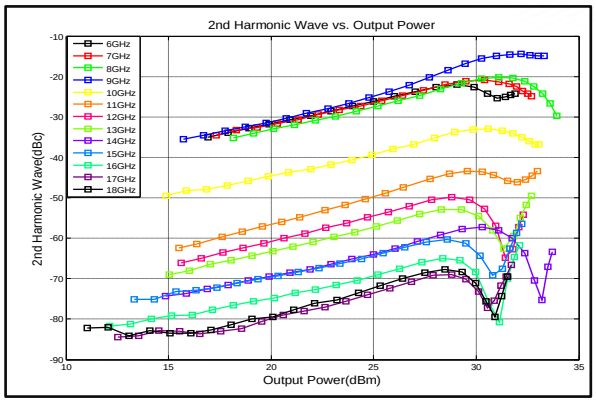
Output Third Order Intercept (OIP3)



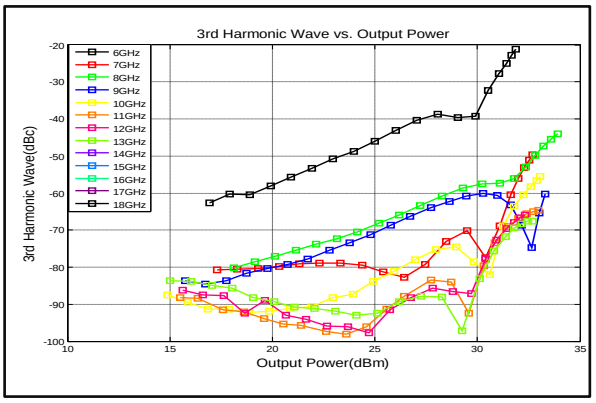
Noise Figure



2nd Harmonic Wave output Power



3rd Harmonic Wave output Power



4th Harmonic Wave output Power