



Wide Band Solid State Power Amplifier AC 110V/220V 18GHz~28GHz

Features

- Gain: 35dB Typical
- P1dB Output Power: 34dBm Typical
- 50 Ohm Matched Input / Output
- 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.	Typ.	Max.	Units
Frequency Range	18		23	23		28	GHz
Gain	31	35		30	34		dB
Gain Flatness		±2.5			±2.5		dB
Gain Variation Over Temperature		±2.0			±2.0		dB
Input VSWR		1.6			1.6		: 1
Output 1dB Compression Point (P1dB)	30	32		30	32		dBm
Saturated Output Power (Psat)		34			34		dBm
Isolation S12		-50			-50		dB
Supply Current (Idd) (AC=110~220V)	/						mA

Weight	185.89ounces	Impedance	50ohms
Input / Output Connectors	2.92mm-Female	Material	Aluminum
Finish	Gray Painted		



Absolute Maximum Ratings

Operating Voltage	AC110~220V
RF Input Power(RFIN)	+2dBm

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

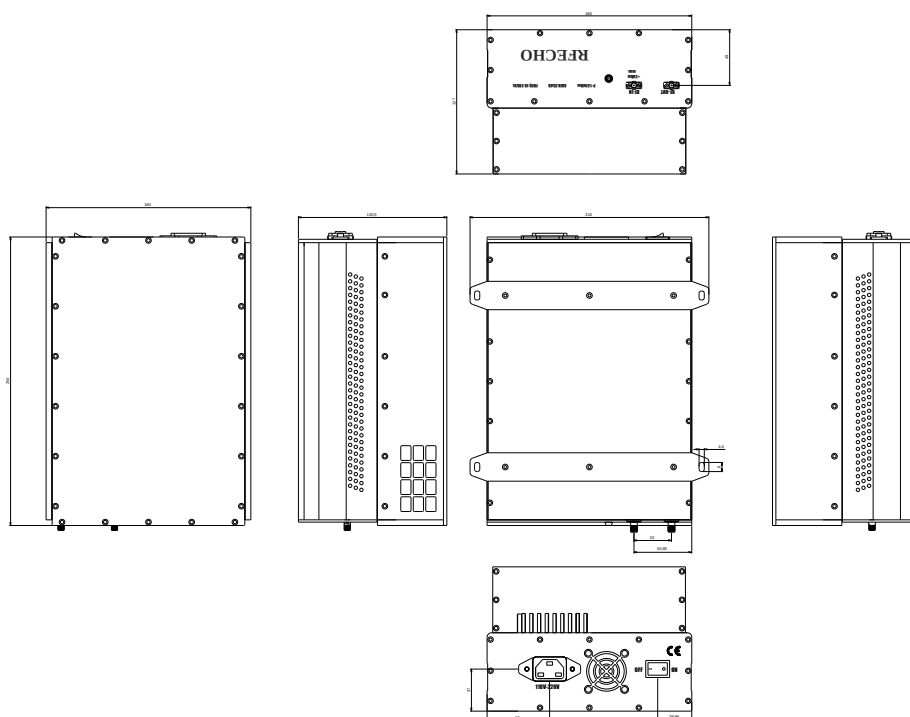
Step 1	Flip switch to "OFF" position
Step 2	Remove AC Plug
Step 3	Remove RF Connection

Environmental Specifications

Operational Temperature	-40°C~+85°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

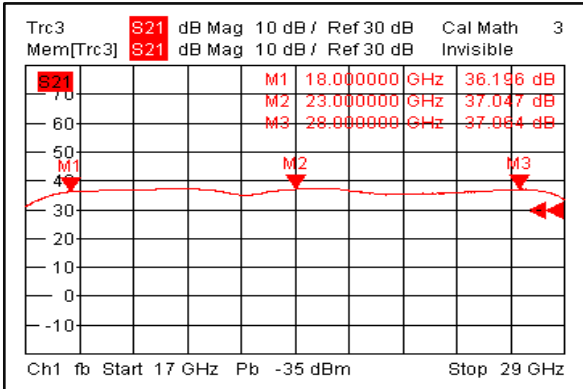
Outline Drawing:

All Dimensions in mm (inches)

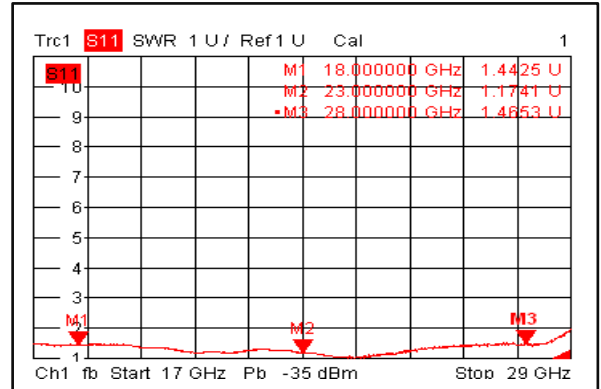




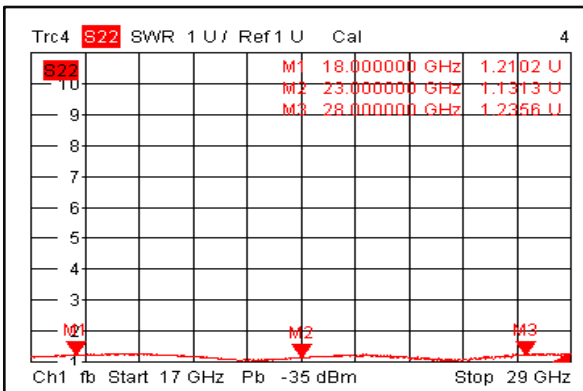
Gain



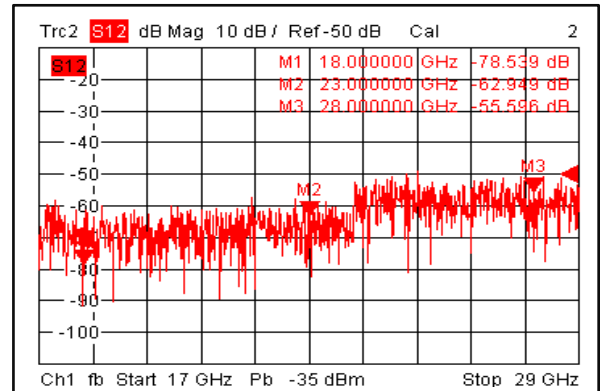
Input VSWR



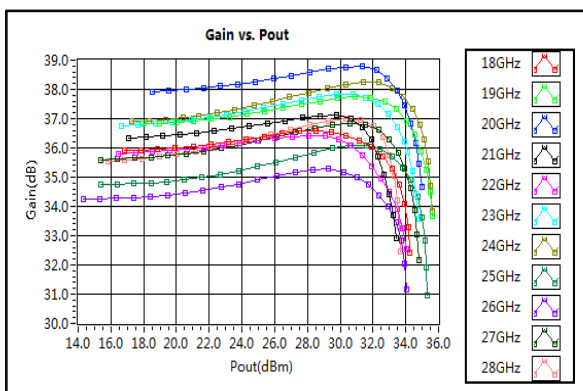
Output VSWR



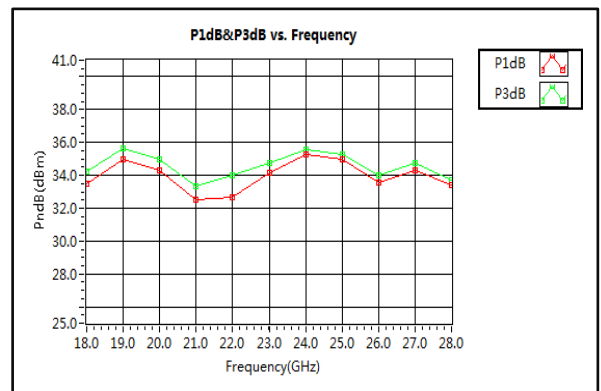
Isolation



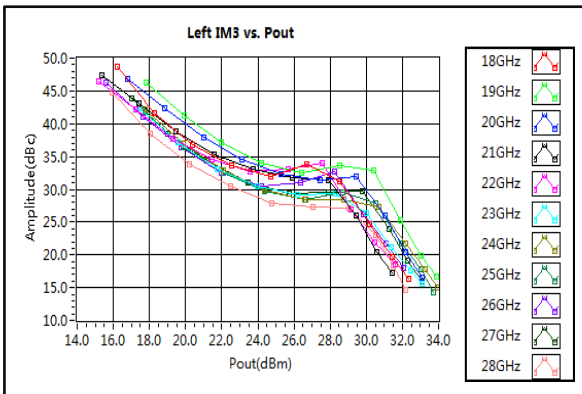
Gain vs. Output Power



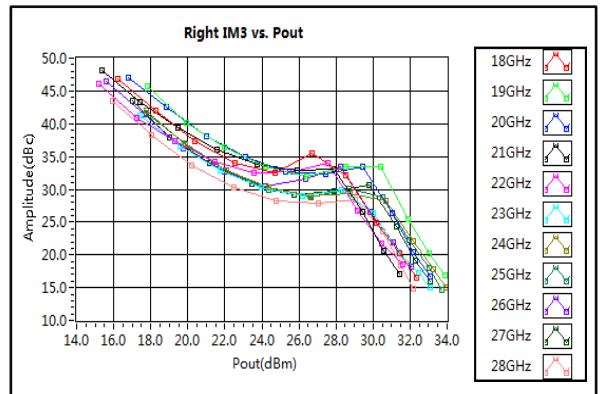
P1dB & P3dB vs. Frequency



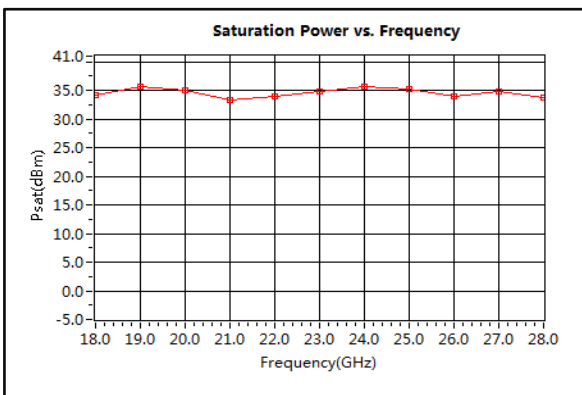
Left IM3 vs. Pout



Right IM3 vs. Pout



Saturated Power vs. Frequency



2nd Harmonic Wave Output Power

