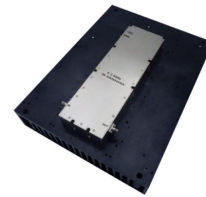




Wide Band Power Amplifier 2GHz~6GHz

Features

- Gain: 47dB Typical
- Psat Output Power: 47dBm Typical
- Supply Voltage: +28V / 9000mA Typical
- 50 Ohm Matched



Typical Applications

- Wireless Infrastructure
- 5G communication
- Test and measurement Instrument

RF Microwave & VSAT
Fiber Optics

032-0ACPA00700600D

Parameter	Min.	Typ.	Max.	Units
Frequency Range	2		6	GHz
Small Signal Gain	42	47		dB
Gain Flatness		±5	±7	dB
Input VSWR			2	:1
Output 1dB Compression Point (P1dB)		45		dBm
Saturated Output Power (Psat)	45	47		dBm
Supply Current (Idd) (Vcc=+28V)		9000	13000	mA
Efficiency at P1dB	10	18		%

Weight	≤180 ounces	Impedance	50Ohms
Input / Output Connectors	SMA-Female	Material	Aluminum
Finish	Standard: Nickel 220 micron thickness	Package Sealing	/
	Option: Nickel 180 micron thickness		

Pin Assignments Of J1	
Pin A1	+28V
Pin A2	Gnd
Pin 1-Pin5	NC

Pin Assignments Of J2			
Pin 3	Over Tempature Alert,Output TTL High	Pin4、 5	GND
Pin7	Reset/Enable(short TTL Pulse)	Pin 1、 2、 6、 7、 9	NC
Pin 8	Over Current Alert,Output TTL High		



Absolute Maximum Ratings

Operating Voltage	+29V
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

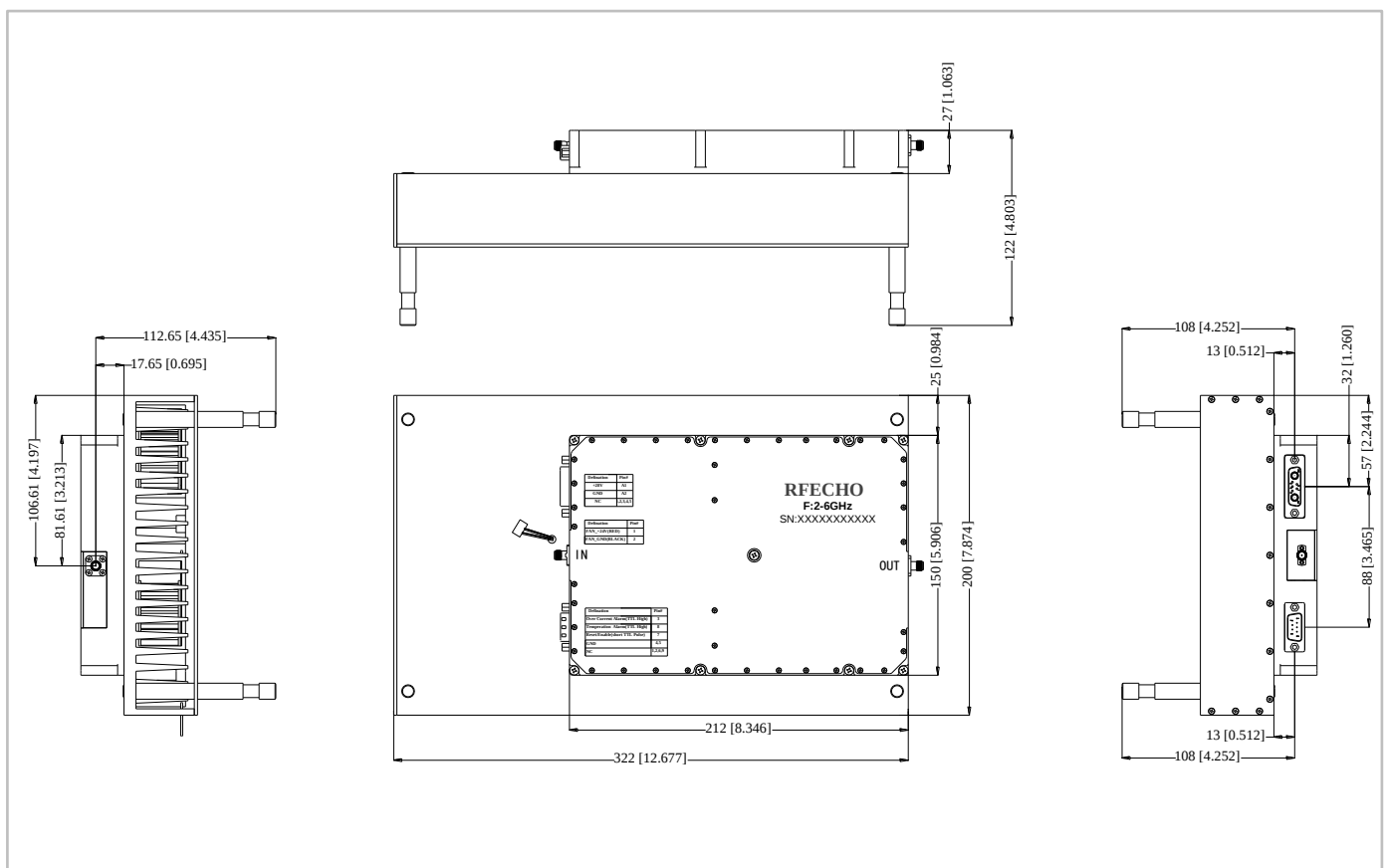
Environmental Specifications

Operational Temperature	-40°C~+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:

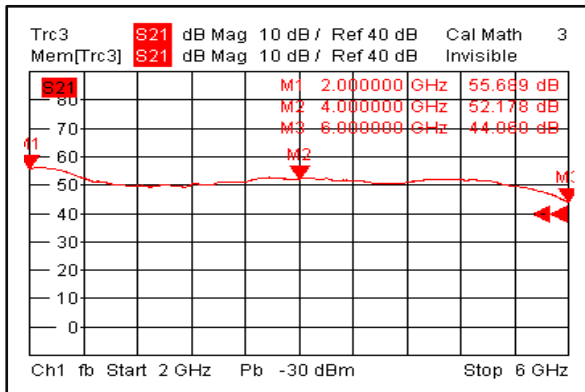
All Dimensions in mm (inches)

Heat Sink required during operation(Sold Separately)

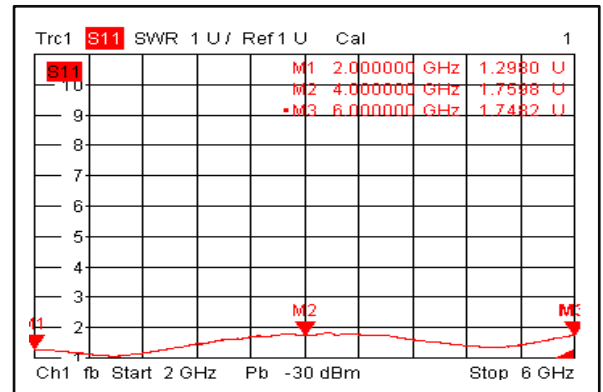




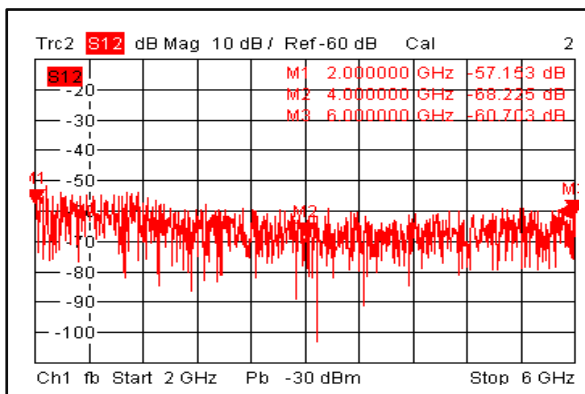
Gain



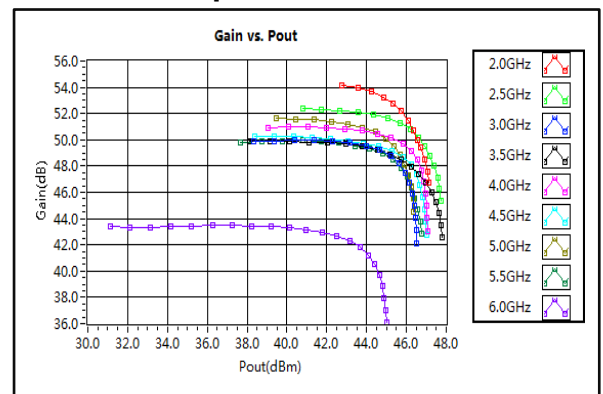
Input VSWR



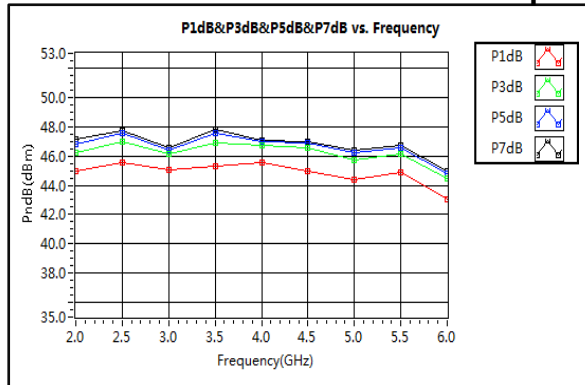
Isolation



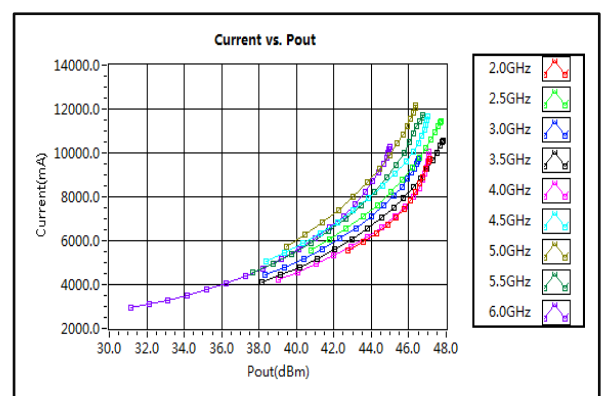
Gain vs. Output Power



P1dB&P3dB&P5dB&P7dB vs. Frequency

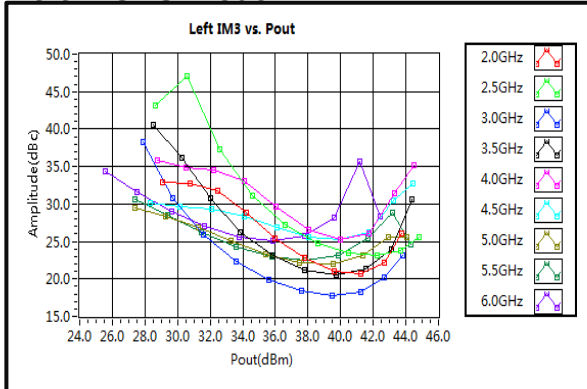


Current

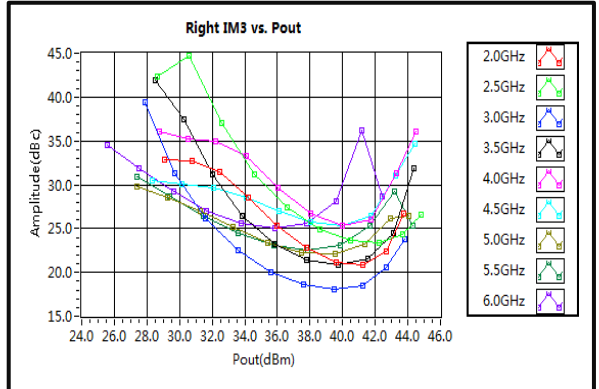




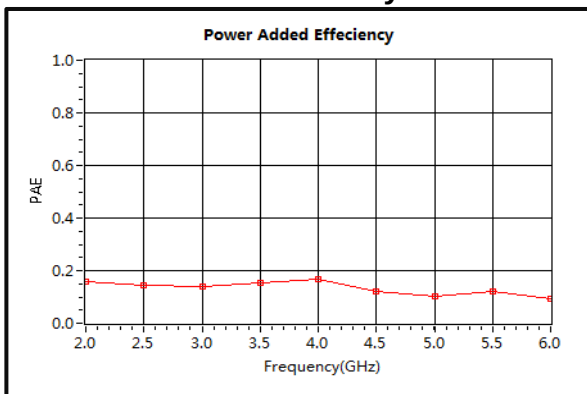
Left IM3 vs. Pout



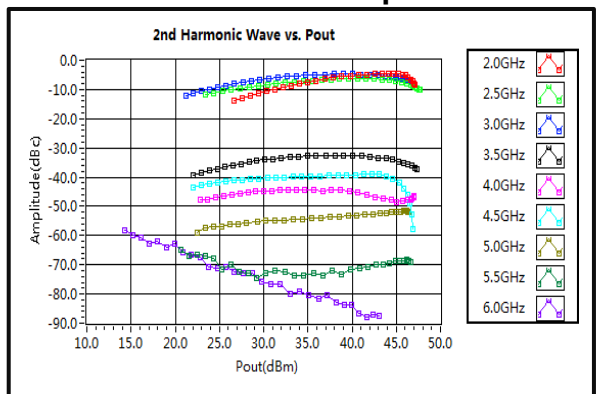
Right IM3 vs. Pout



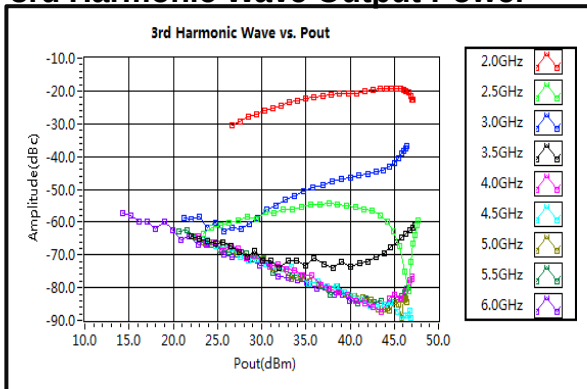
Power Added Efficiency



2nd Harmonic Wave Output Power



3rd Harmonic Wave Output Power



4th Harmonic Wave Output Power

