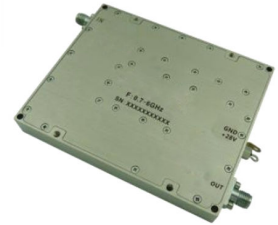




7W ACPR Emission Compressed Linear Power Amplifier 0.7GHz~6GHz

Features

- Gain: 40dB typical
- Output power +37dBm typical
- Supply Voltage: +28V @ 650mA
- 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		0.9	1		6	GHz
Gain	38	40	46	37	40	45	dB
Gain Flatness		± 1.5			± 1.5		dB
Gain Variation Over Temperature (-40°C~+85°C)		± 1.0			± 1.0		dB
Input Return Loss		13			13		dB
Output 1dB Compression Point (P1dB)	35	37		35	37		dBm
Saturated Output Power (Psat)		39			39		dBm
Isolation S12		-55			-55		dB
Supply Current (Vcc=+28V)		650	1500		650	1500	mA
Efficiency at P1dB		20			20		%

Weight	6.5 ounces (Max.)	Impedance	50ohms
Input / Output Connectors	SMA-Female	Material	Aluminum
Finish	Nickel Plated	Package Sealing	Epoxy Sealed (Standard)
			Hermetically Sealed (Option with extra charge)



Absolute Maximum Ratings

Operating Voltage	+24~29V
RF Input Power	+8dBm

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

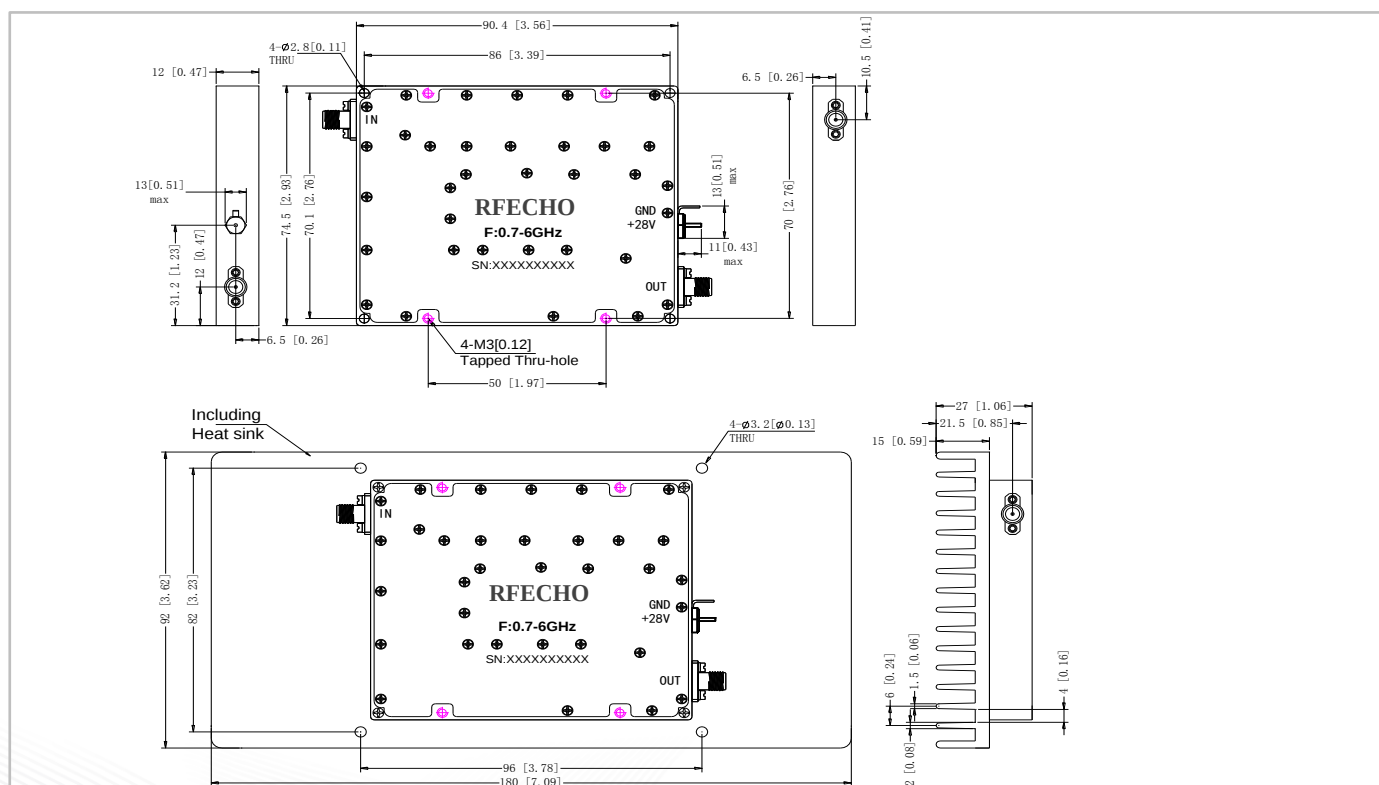
Environmental Specifications

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:

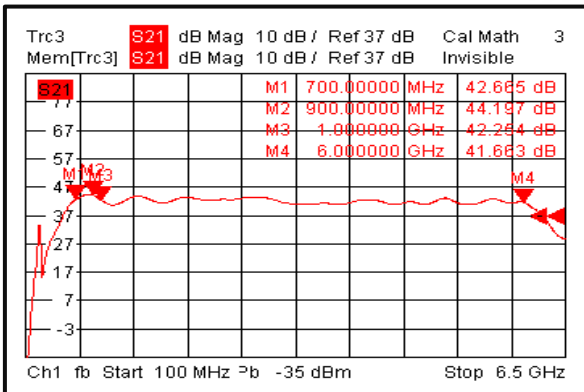
All Dimensions in mm (inches)

Heat Sink required during operation(Sold Separately)

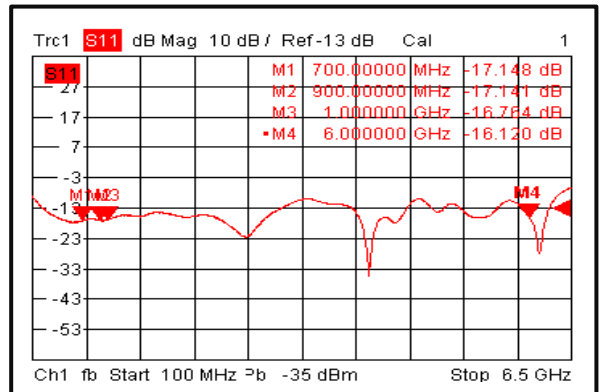




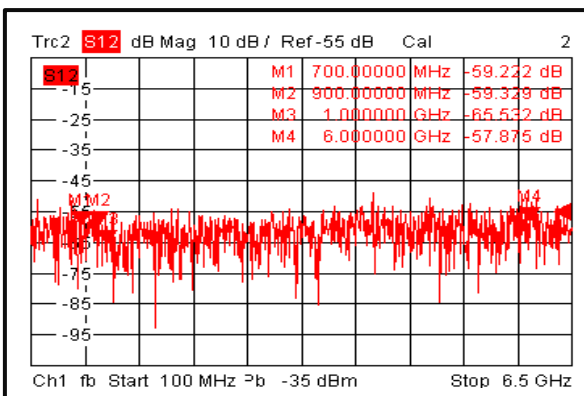
Gain@+25°C



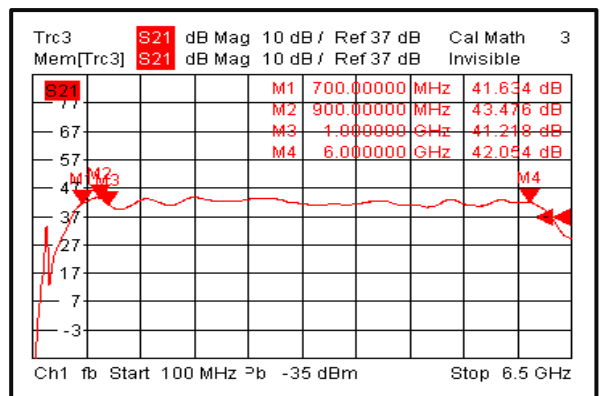
Input Return Loss@+25°C



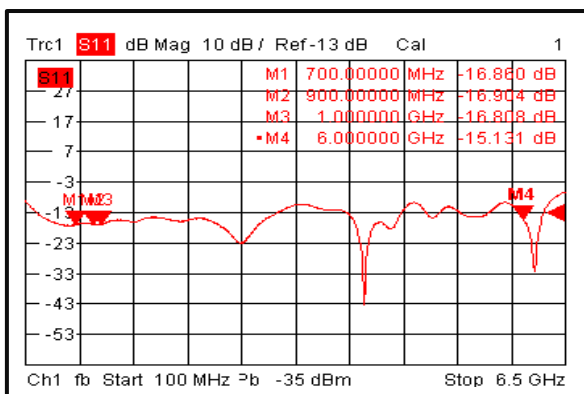
Isolation@+25°C



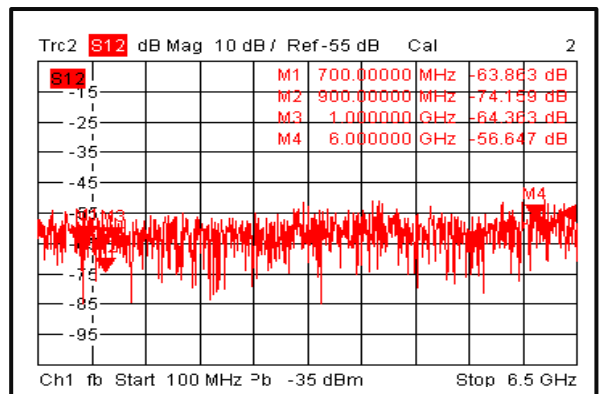
Gain@-40°C



Input Return Loss@-40°C

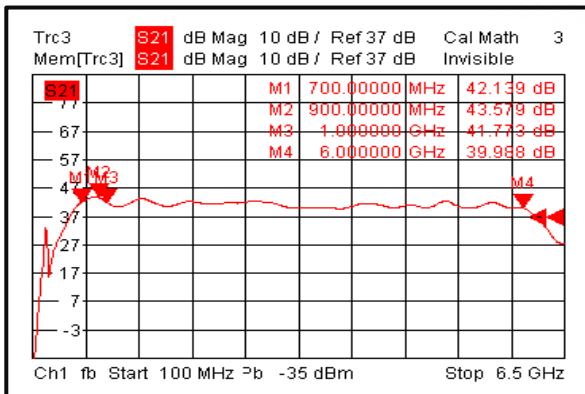


Isolation@-40°C

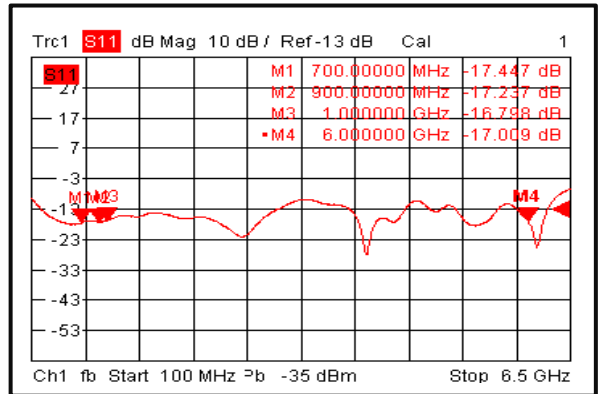




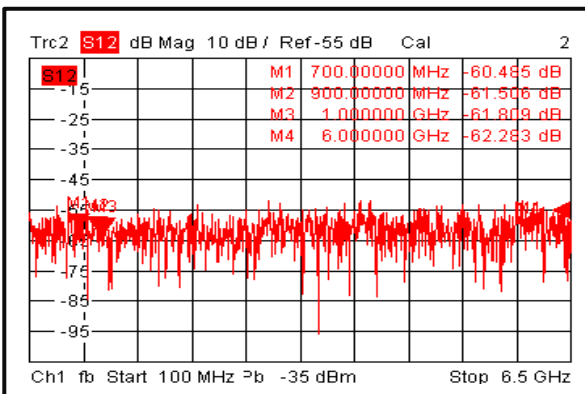
Gain@+85°C



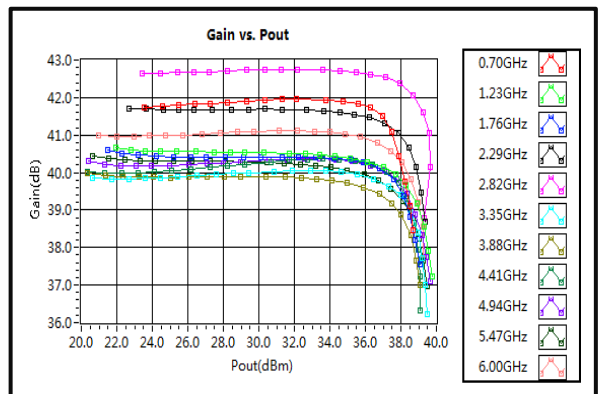
Input Return Loss@+85°C



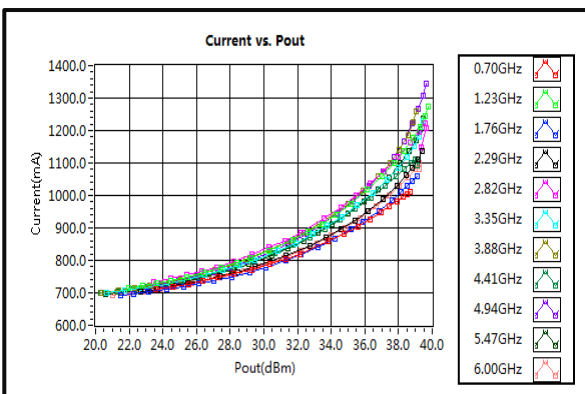
Isolation@+85°C



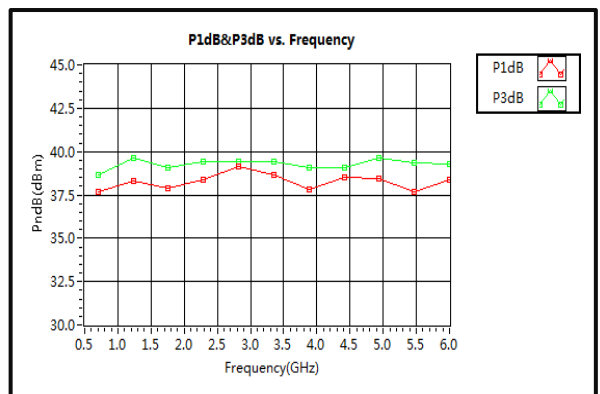
Gain vs. output power



Current

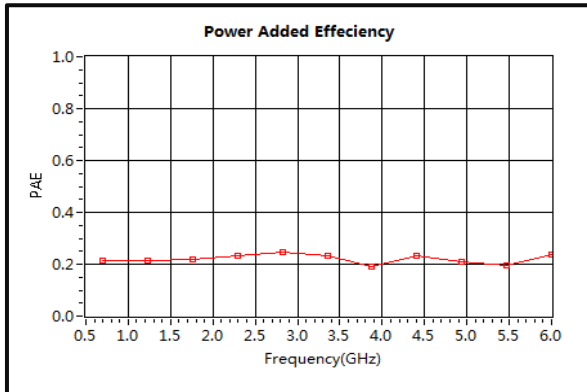


P1dB & P3dB vs. Frequency

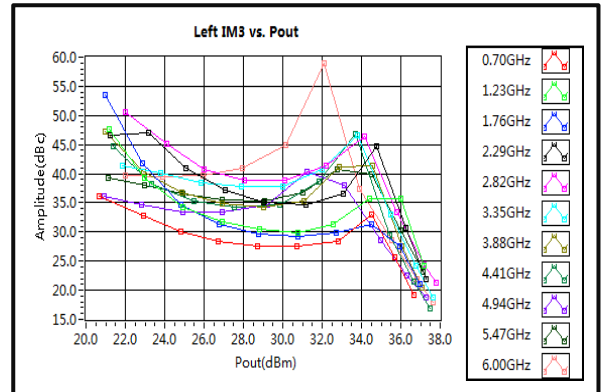




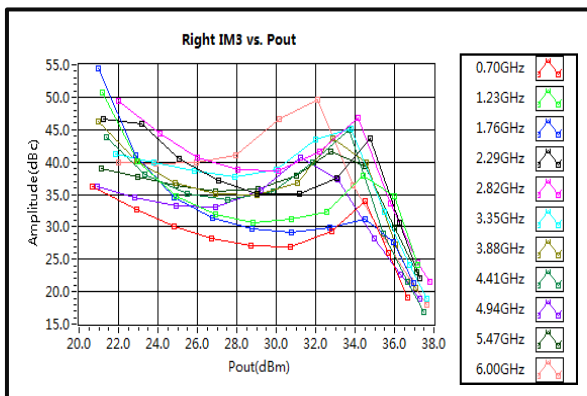
Power Added Efficiency



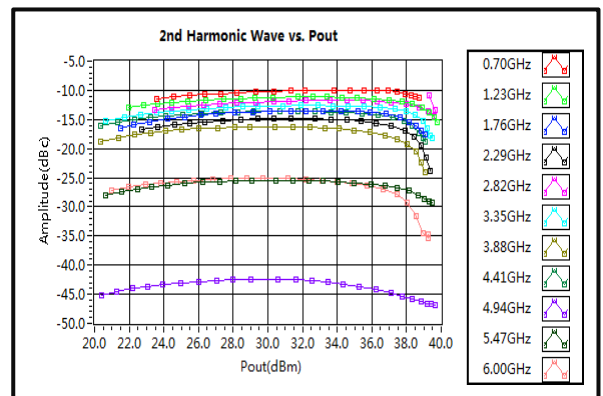
Left IM3 vs. Pout



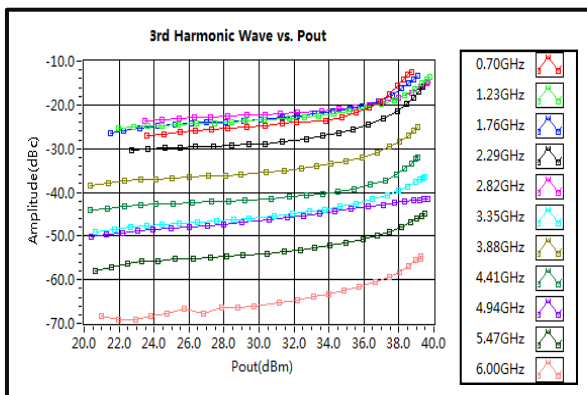
Right IM3 vs. Pout



2nd Harmonic Wave output Power



3rd Harmonic Wave output Power



4th Harmonic Wave output Power

