



# Power Amplifier 160MHz~163MHz

## Features

- Gain: 51dB Typical
- P1dB Output Power: 45dBm Typical
- Supply Voltage: +28V @ 800mA
- 50 Ohm Matched Input / Output



## Typical Applications

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

RF Microwave & VSAT  
Fiber Optics

Parameter	Min.	Typ.	Max.	Units
Frequency Range	160		163	MHz
Gain	49	51		dB
Gain Flatness		±0.5	±1.0	dB
Gain Variation Over Temperature(-40°C ~+70°C)		±1.5	±2.5	dB
Input VSWR		1.2	1.5	:1
Output 1dB Compression Point (P1dB)	44	45		dBm
Saturated Output Power (Psat)		46		dBm
Supply Current (Vcc=+28V)		800	3000	mA
Isolation S12		-50		dB
The turn-on time ( TTL High @ 2V Min: AMP Biased ON )		2	5	us
The turn-off time ( TTL Low @ 0.8V Max: AMP Biased OFF )		2	5	us

Weight	40ounces	Impedance	50 ohms
Input / Output Connectors	SMA-Female	Material	Aluminum
Finish	Nickel Plated	Package Sealing	Epoxy Sealing (Standard)
			Hermetically Seal (Option with extra charge)



### Absolute Maximum Ratings

Operating Voltage	+28.5V
RF Input Power (RFIN)	+5dBm

### 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

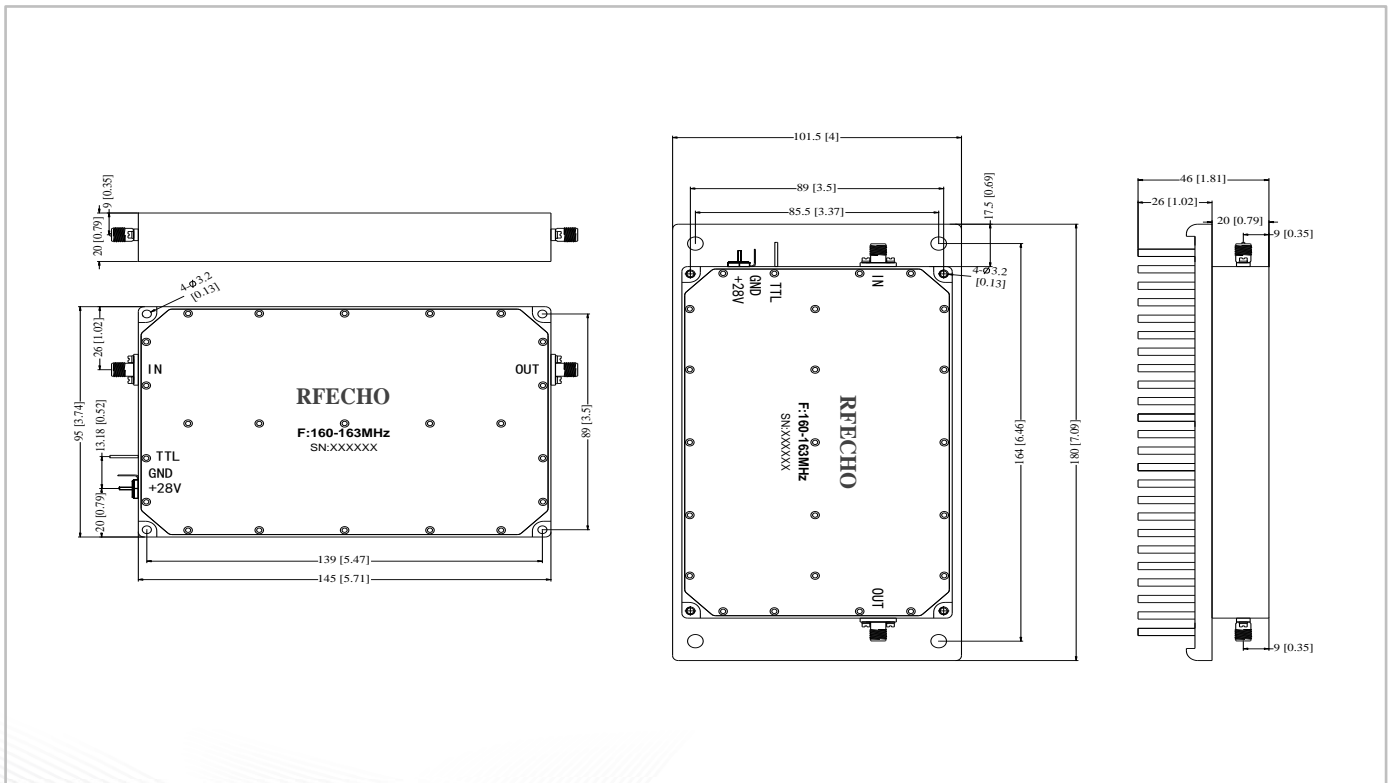
### Environmental Specifications

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:

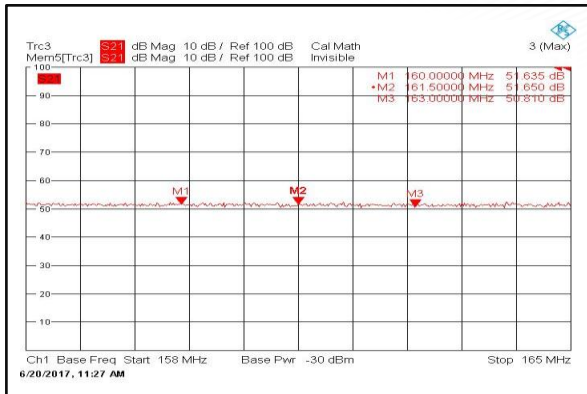
All Dimensions in mm (inches)

Heat Sink required during operation(Sold Separately)

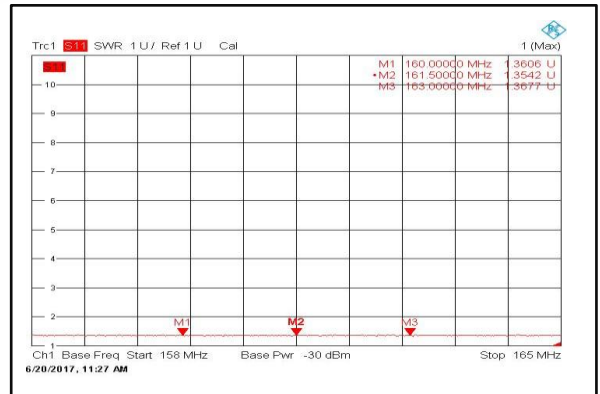




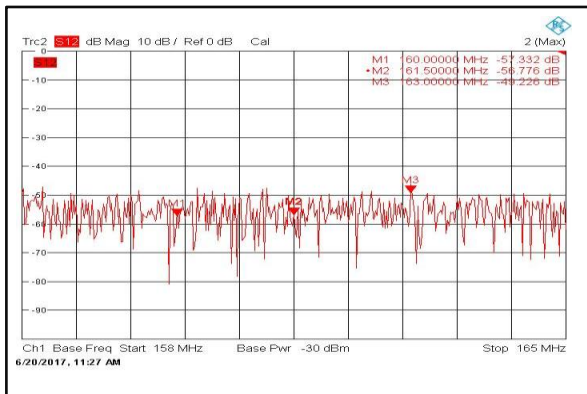
### Gain @+25°C



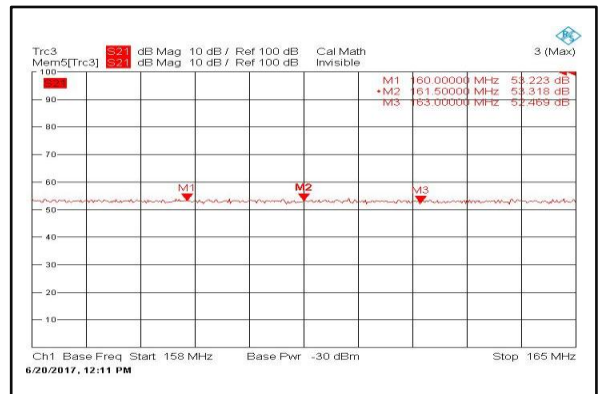
### Input VSWR @+25°C



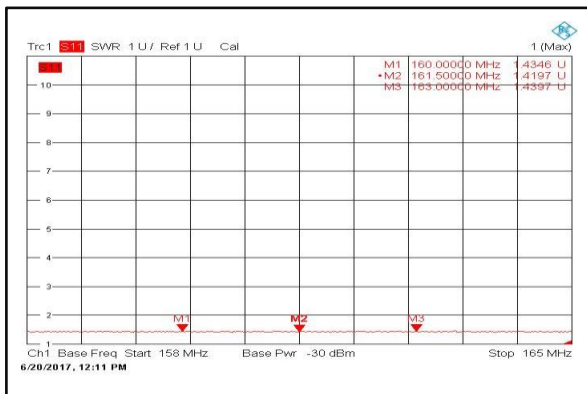
### Isolation @+25°C



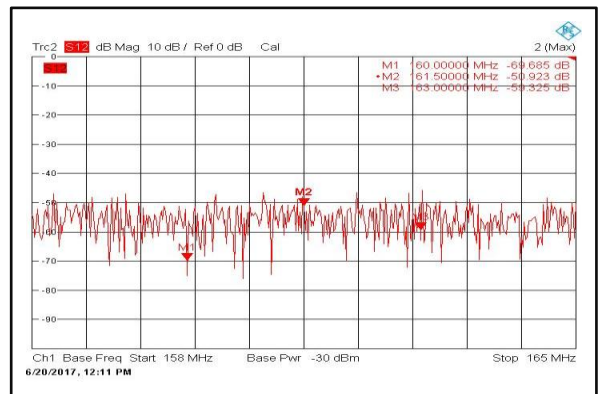
### Gain @-40°C



### Input VSWR @-40°C

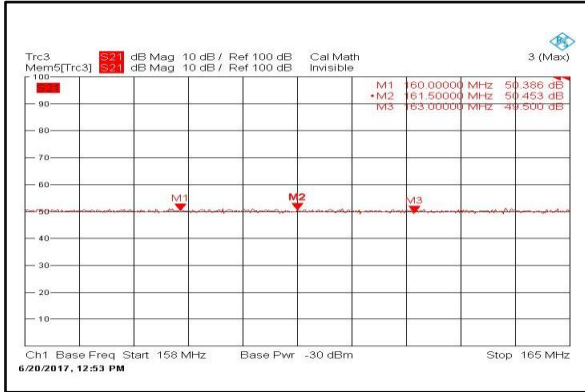


### Isolation @-40°C

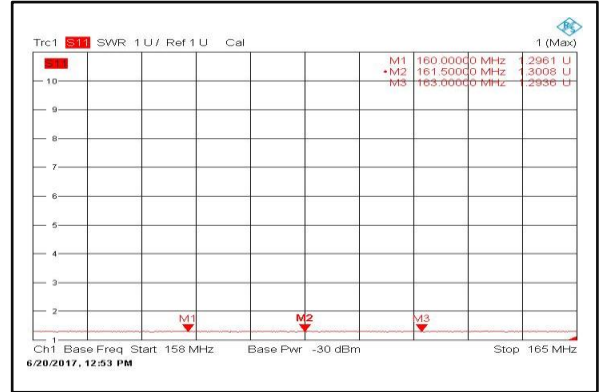




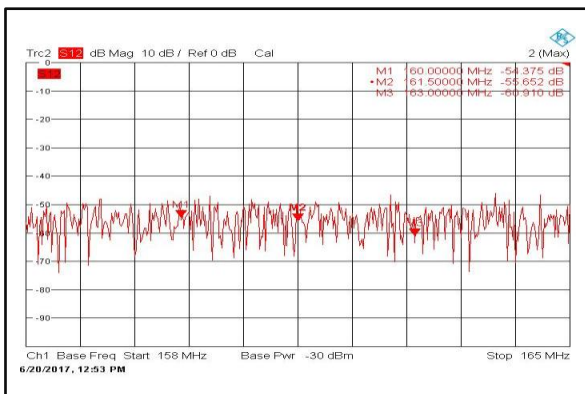
### Gain @+70°C



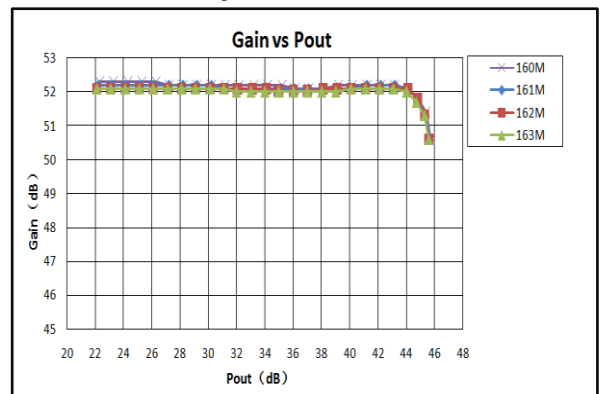
### Input VSWR @+70°C



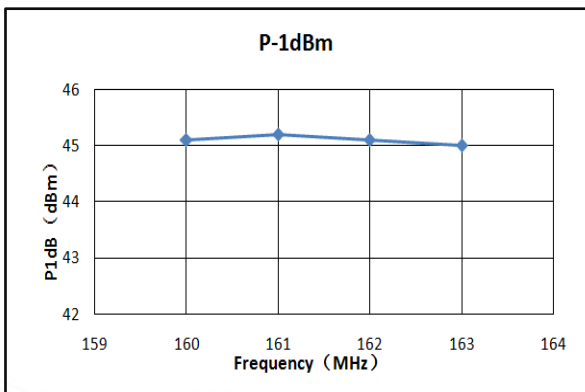
### Isolation @+70°C



### Gain vs. Output Power



### P1dB vs. Frequency



### Speed Time

