



Ultra Wide Band Low Noise Amplifier 18GHz~26.5GHz

Features

- Gain: 60dB Typical
- Noise Figure: 2.5dB Typical
- P1dB Output Power: 15dBm Typical
- Supply Voltage: AC110V~220V



Typical Applications

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

RF Microwave & VSAT
Fiber Optics

Parameters	Min.	Typ.	Max.	Min.
Frequency Range	18		26.5	GHz
Gain	50	60		dB
Gain Flatness		±2.5		dB
Gain Variation Over Temperature (-40°C~+85°C)		±3.0		dB
Noise Figure		2.5	3.5	dB
Input VSWR		2.3		: 1
Output VSWR		2.5		: 1
1dB Point Compression (P1dB)	12	16		dBm
Saturated Output Power (Psat)		18		dBm
Output Third Order Intercept (OIP3)		26		dBm
Isolation S12		-65		dB
Supply Current(AC 110~220V)		50		mA

Weight	37.5 ounces (Max.)	Impedance	50ohms
Input /Output Connectors	2.92mm-Female	Material	Aluminum
Finish	Gray Paint		



Absolute Maximum Ratings

Operating Voltage	AC110~240V
RF Input Power(RFIN)	-45dBm

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

Biassing Up Procedure

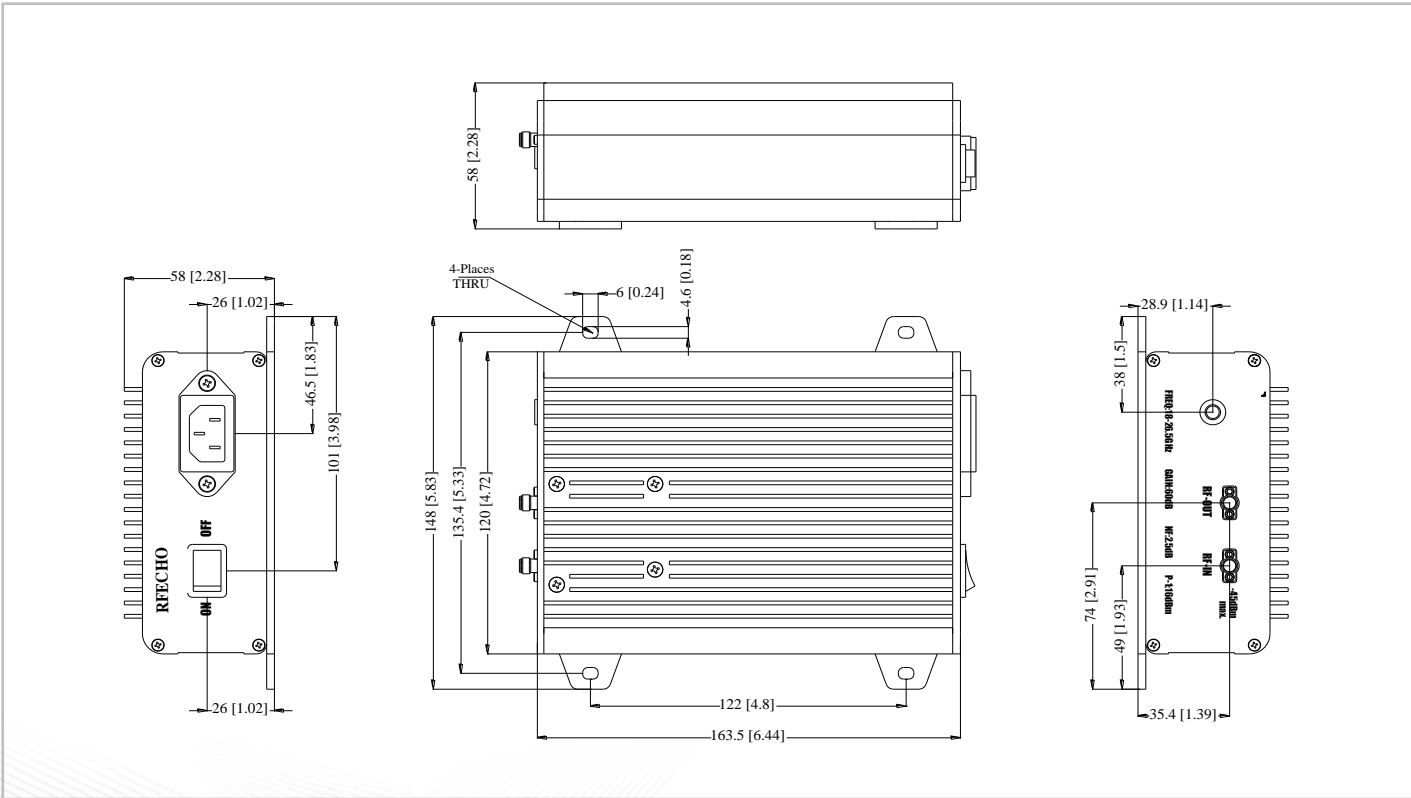
Step 1	Connect input and output with 50 Ohm source and load with in band return loss better than 10dB.
Step 2	Connect AC Plug
Step 3	Flip switch to "ON" position

Power OFF Procedure

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

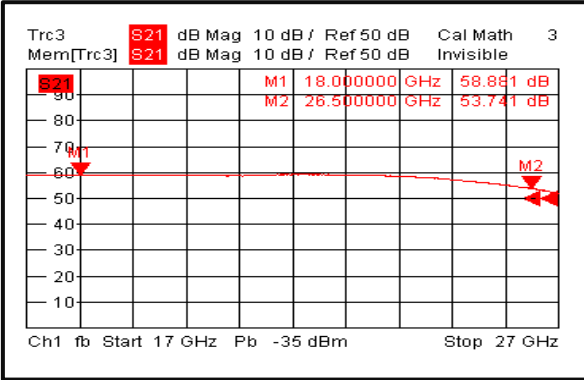
Outline Drawing:

All Dimensions in mm (inches)

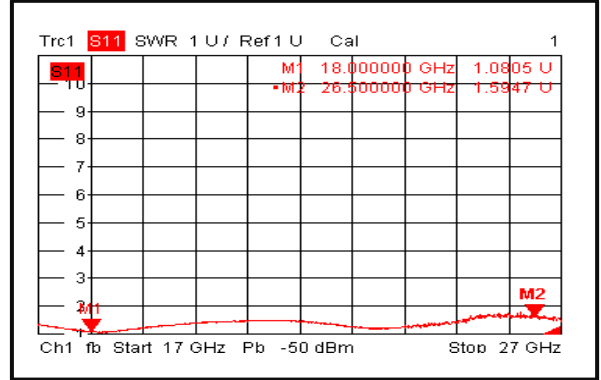




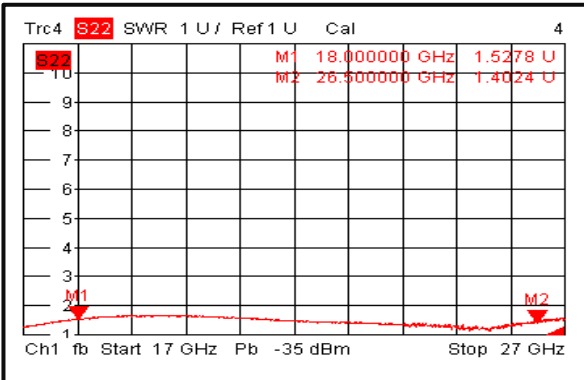
Gain @+25°C



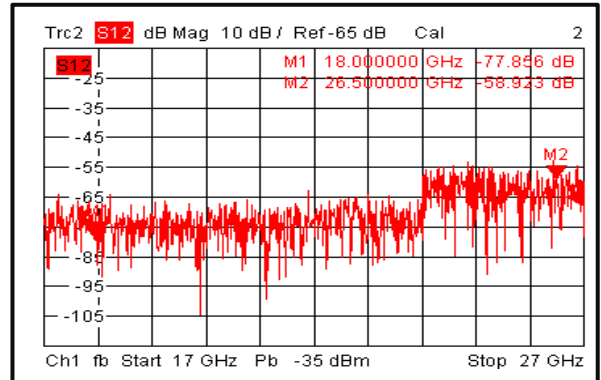
Input VSWR @+25°C



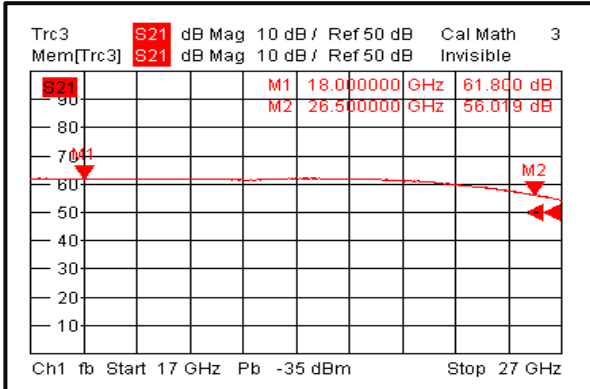
Output VSWR @+25°C



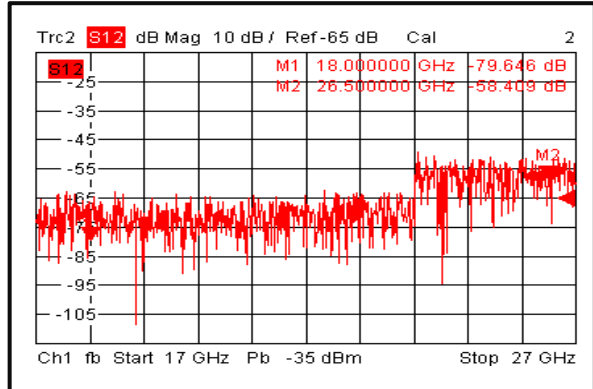
Isolation @+25°C



Gain @-40°C

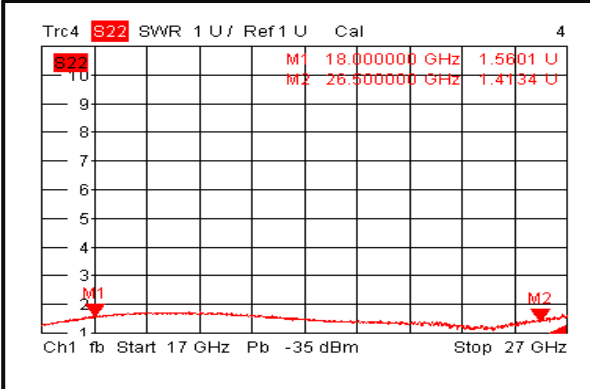


Input VSWR @-40°C

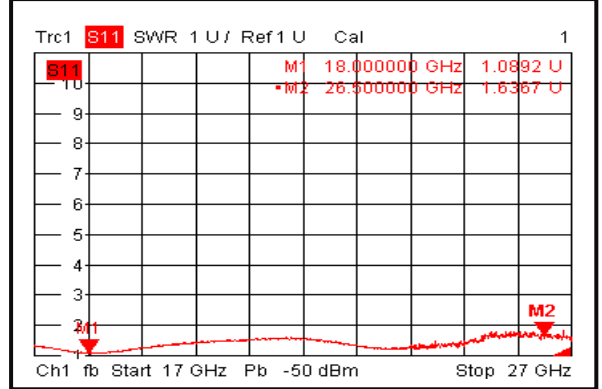




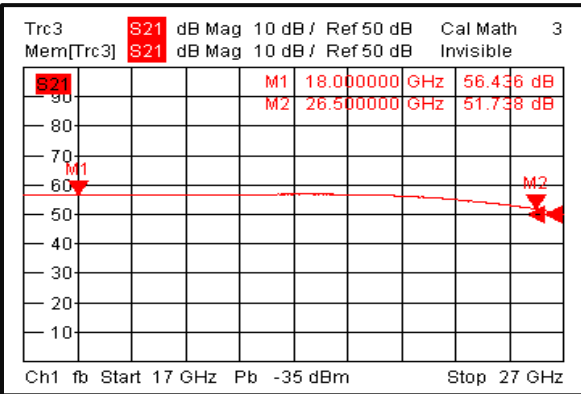
Output VSWR @-40°C



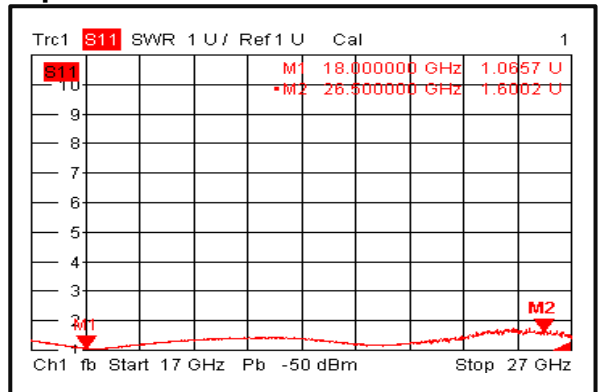
Isolation @-40°C



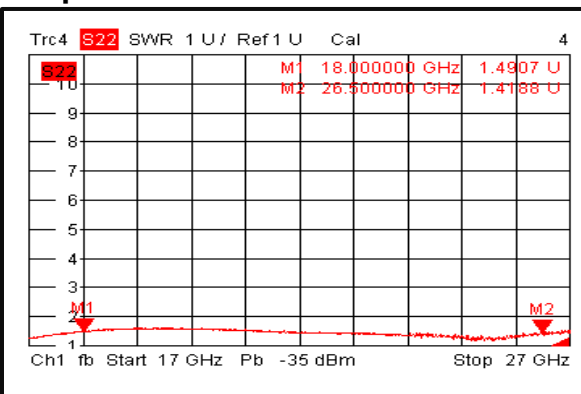
Gain @+85°C



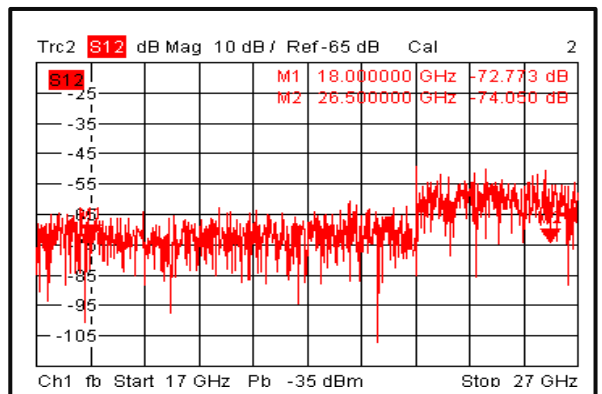
Input VSWR @+85°C



Output VSWR @+85°C

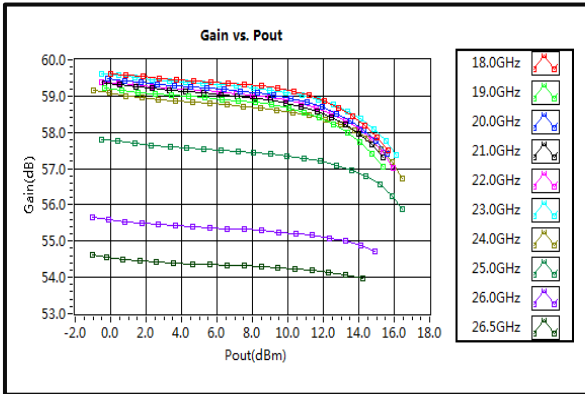


Isolation @+85°C

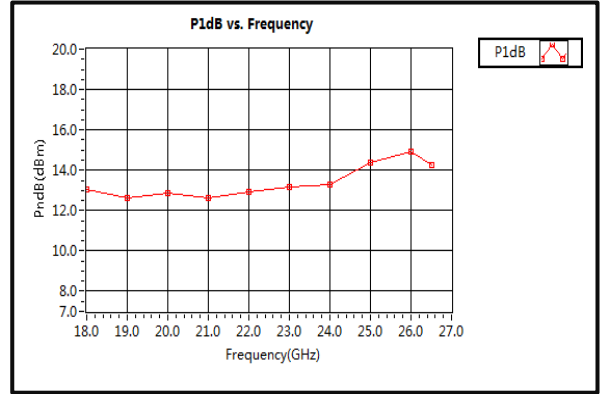




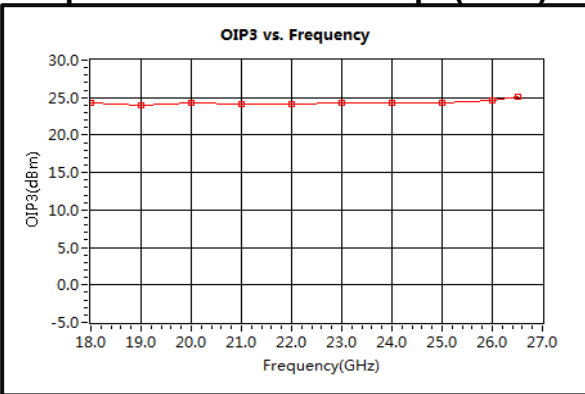
Gain vs. Output Power



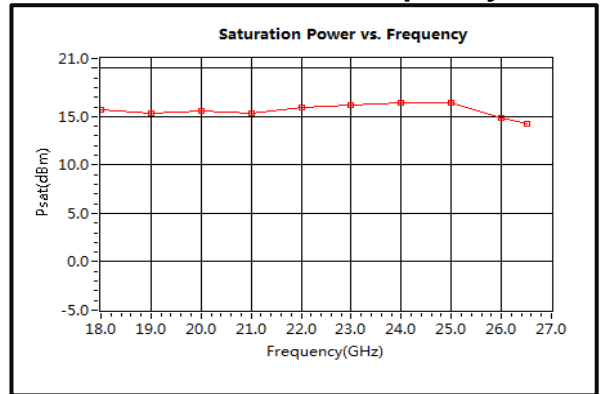
P1dB vs. Frequency



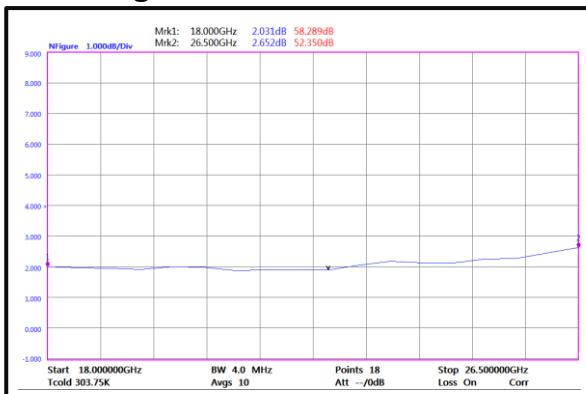
Output Third Order Intercept (OIP3)



Saturation Power vs. Frequency



Noise Figure



2nd Harmonic Wave Output Power

