

**Features**

- Wide Band AC Low Noise Amplifier
- Gain 35dB Typical
- P1dB Output Power 14dBm Typical
- Supply Voltage 110/220 VAC
- 50 Ohm Matched Input / Output


**Typical Applications**

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

 RF Microwave & VSAT  
 Fiber Optics

Parameters	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	18		26	26		40	GHz
Gain	30	35		32	35		dB
Gain Flatness		±0.5	±1.0		±1.0	±2.0	dB
Gain Variation Over Temperature (-40°C~+85°C)		±1.5			±2.0		dB
Noise Figure		2.5	3.8		2.5	3.8	dB
Input VSWR		2.3	2.8		2.3	2.8	: 1
Output VSWR		1.5	2.0		1.5	2.0	: 1
Output 1dB Compression Point (P1dB)	8	10		10	14		dBm
Saturated Output Power (Psat)		13			16		dBm
Output Third Order Intercept (OIP3)		23			26		dBm
Isolation S12		-60			-60		dB
Supply Current (AC=220V)		60			60		mA

Weight	39.5 Max.ounces	Impedance	50ohms
Input /Output Connectors	2.92mm-Female	Material	Aluminum
Finishing	Gray Paint		

## Wide Band AC-Low Noise Amplifier 18GHz~40GHz

### Absolute Maximum Ratings

Supply Voltage	110V to 240V AC
RF Input Power(RFIN)	-15dBm

**Note:** Maximum RF input power is defined to protect the amplifier from damage.

Input power may be increased at the users own risk to achieve the full output power of the amplifier. Please reference gain and power curves and monitor the temperature.

### 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

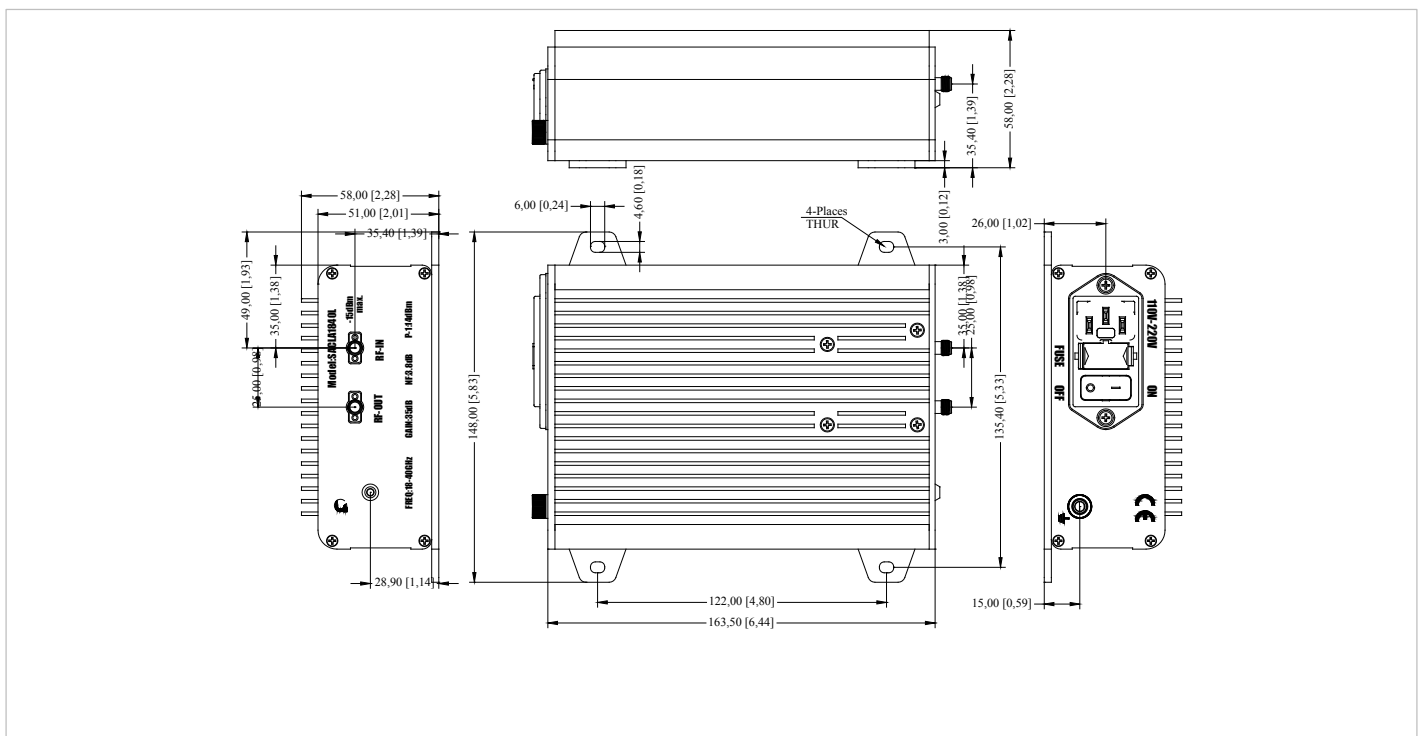
Step 1	Flip switch to "OFF" position
Step 2	Remove AC Plug
Step 3	Remove RF Connection

### Environmental Specifications

Operational Temperature	-40°C~+85°C(Case Temperature)
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

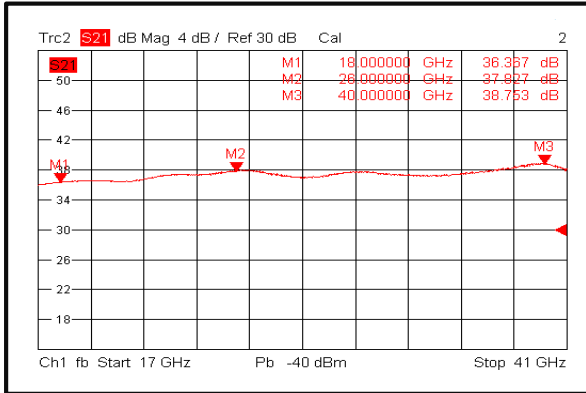
### Outline Drawing:

All Dimensions in mm (inches)

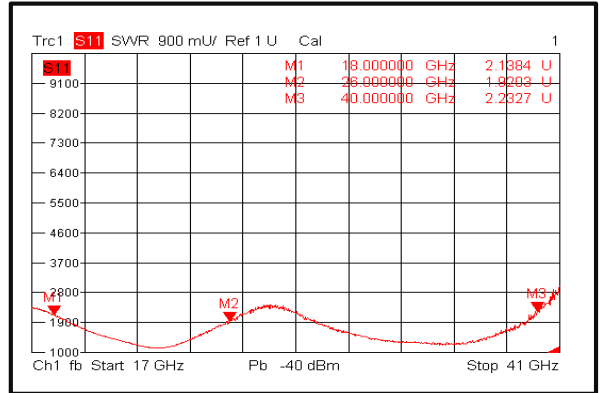


Wide Band AC-Low Noise Amplifier 18GHz~40GHz

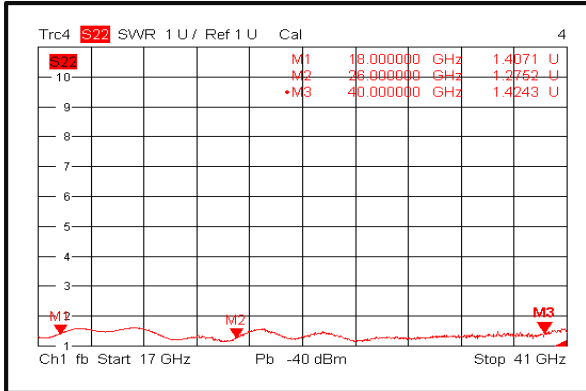
Gain



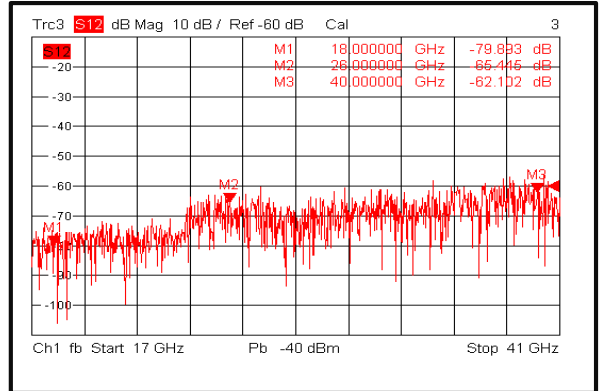
Input VSWR



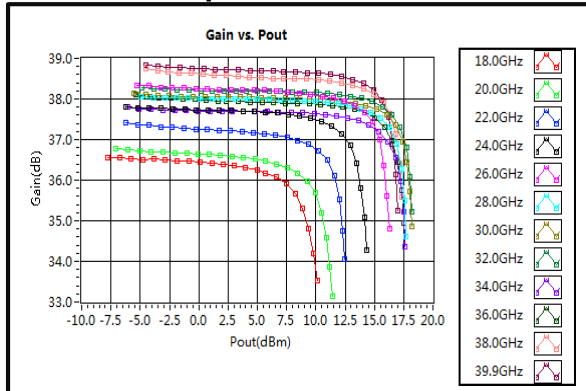
Output VSWR



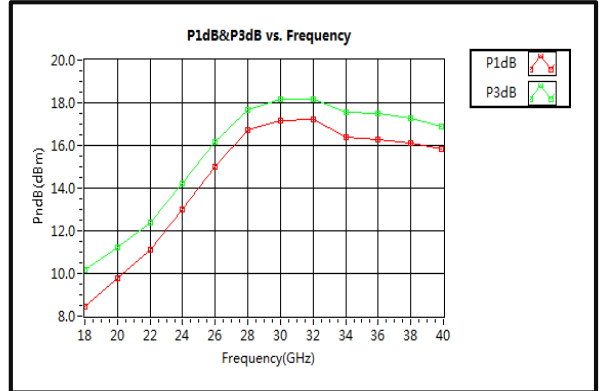
Isolation



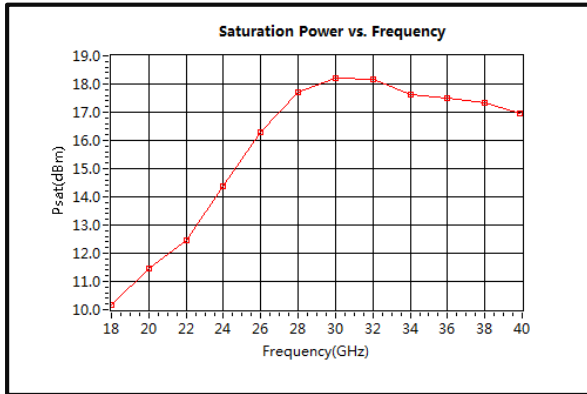
Gain vs. Output Power



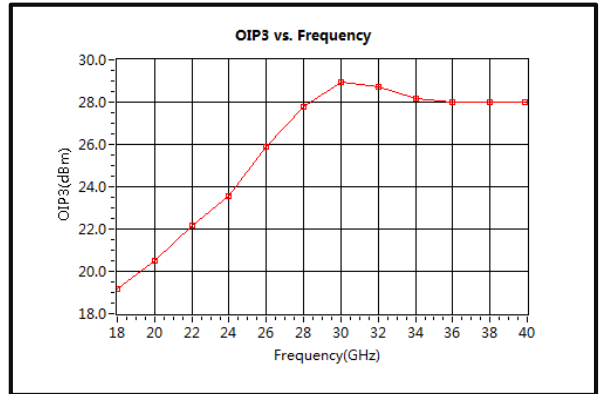
P1dB & P3dB vs. Frequency



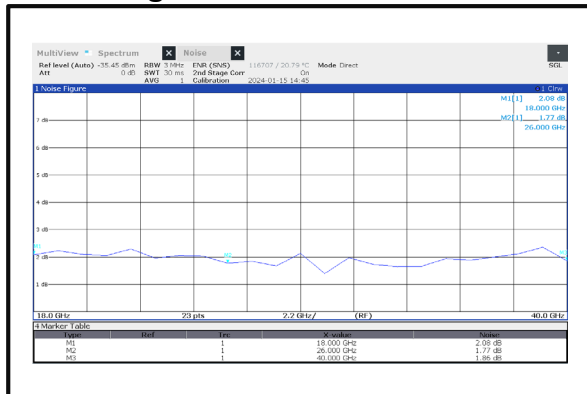
**Saturation Power vs. Frequency**



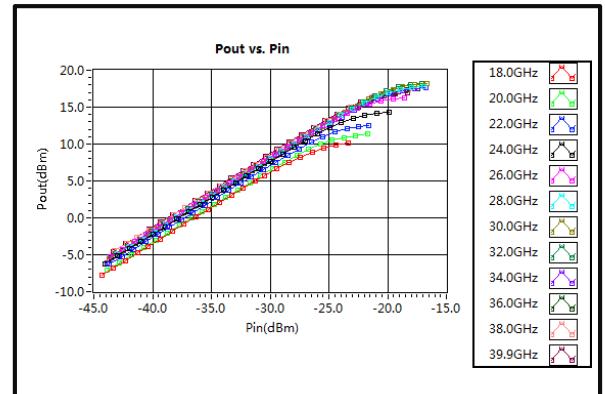
**Output Third Order Intercept (OIP3)**



**Noise Figure**



**Pout vs. Pin**



Saluki and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice. Visit [www.salukitec.com](http://www.salukitec.com) for additional data sheets and product information.