

## Features

- Gain: 35dB Typical
- Noise Figure: 1.7dB Typical
- P1dB Output Power: +21dB m Typical
- Supply Voltage: +12V



## 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	0.1		1	1		3	GHz
Gain	30	36		30	35		dB
Gain Flatness		±1.0			±1.0		dB
Gain Variation Over Temperature (-40°C~+85°C)		±0.8			±0.8		dB
Noise Figure		1.0	1.8		1.7	2.5	dB
Input VSWR		1.8			1.5		dB
Output VSWR		1.8			1.5		dB
Output Power for 1 dB Compression (P1dB)	20	21		20	21		dBm
Saturated Output Power (Psat)		23			23		dBm
Output Third Order Intercept (OIP3)		37			37		dBm
Supply Current (I <sub>dd</sub> ) (V <sub>cc</sub> =+12V)		220	250		220	250	mA
Isolation S12		-65			-60		dB

Weight	1.2Max. ounces	Impedance	50ohms
Input / Output Connectors	SMA-Female	Material	Aluminum
Finish	Gold Plated	Package Sealing	Epoxy Sealed (Standard)
			Hermetically Sealed (Option with extra charge)

**SALUKI TECHNOLOGY INC. Ultra Wide Band Low Noise Amplifier 0.1GHz~3GHz**

**Absolute Maximum Ratings**

Operating Voltage	+15V
RF Input Power (RFIN)	-5dBm

**Biassing Up Procedure**

Step 1	Connect Ground Pin
Step 2	Connect input and output
Step 3	Connect +12V biasing

**Power OFF Procedure**

Step 1	Turn off +12V biasing
Step 2	Remove RF connection
Step 3	Remove Ground

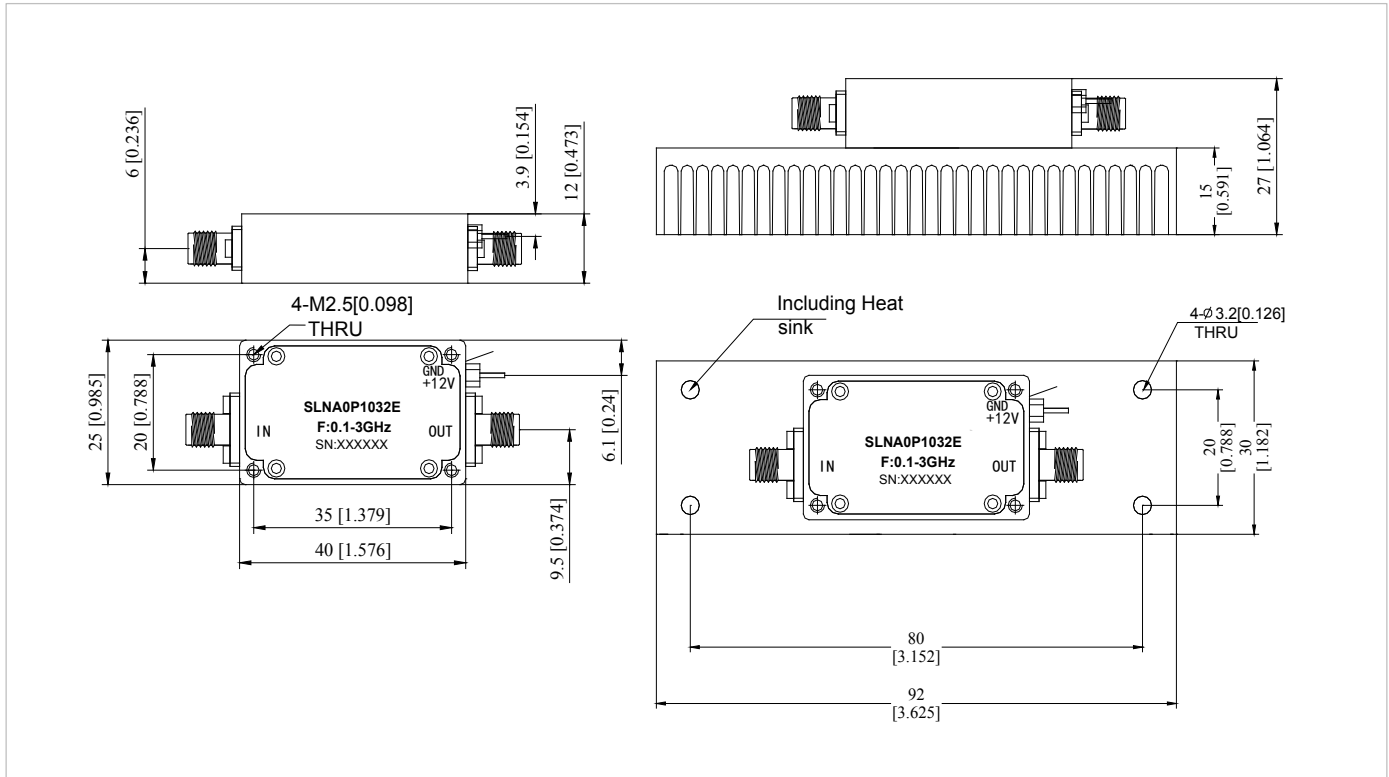
**Environmental Specifications**

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:**

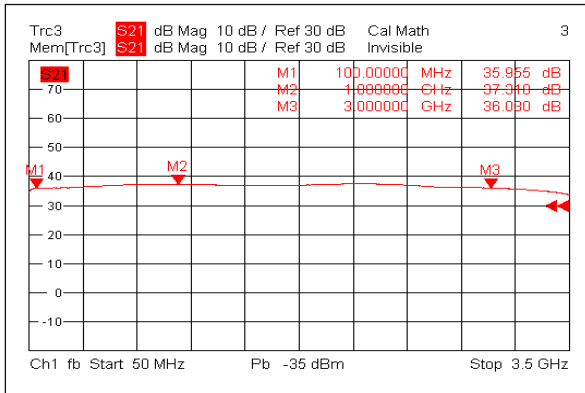
All Dimensions in mm (inches)

Heat Sink required during operation(Sold Separately)

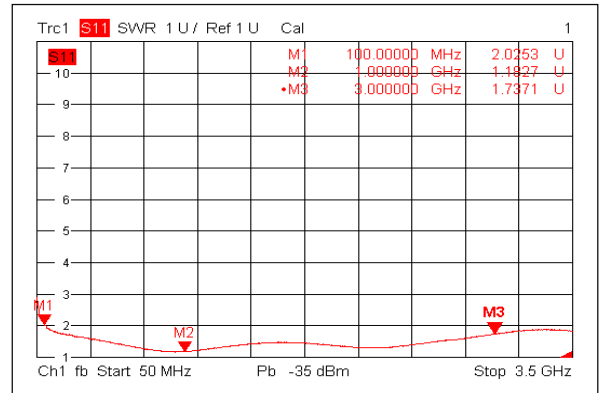


SALUKI TECHNOLOGY INC. Ultra Wide Band Low Noise Amplifier 0.1GHz~3GHz

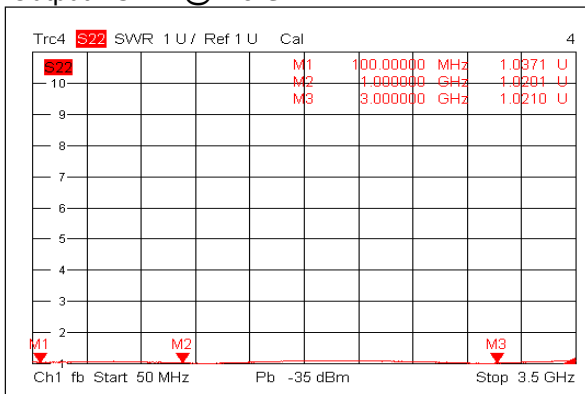
Gain @+25°C



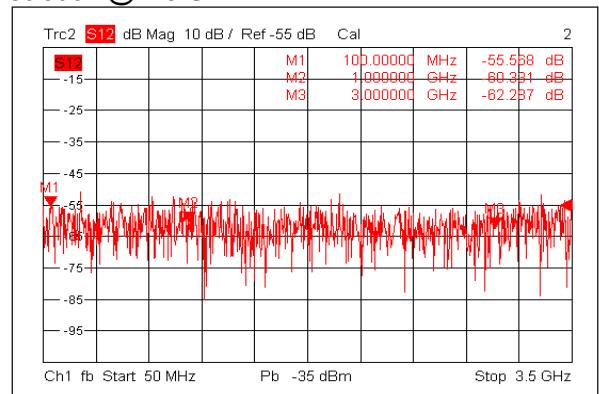
Input VSWR @+25°C



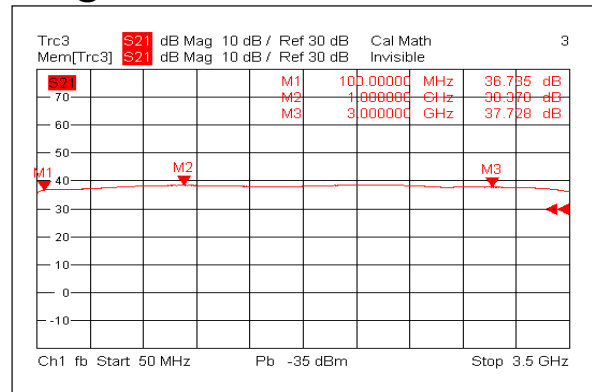
Output VSWR @+25°C



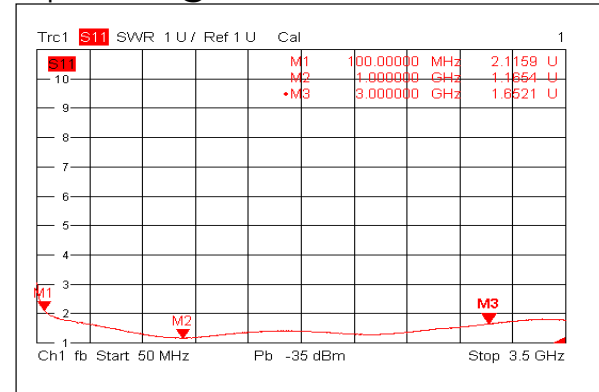
Isolation @+25°C



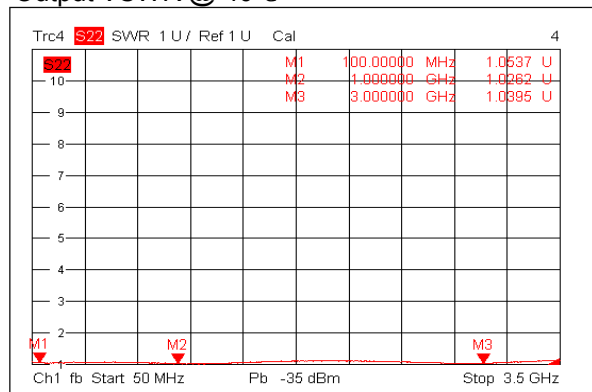
Gain @-40°C



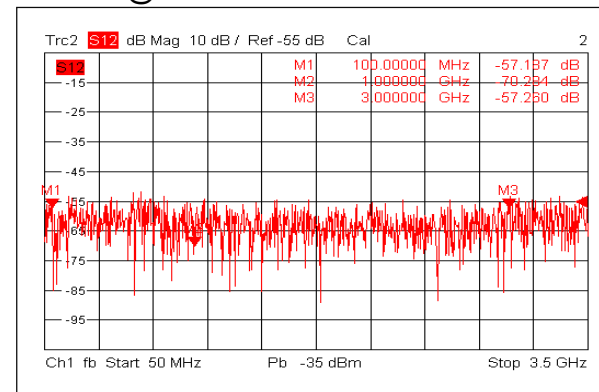
Input VSWR @-40°C



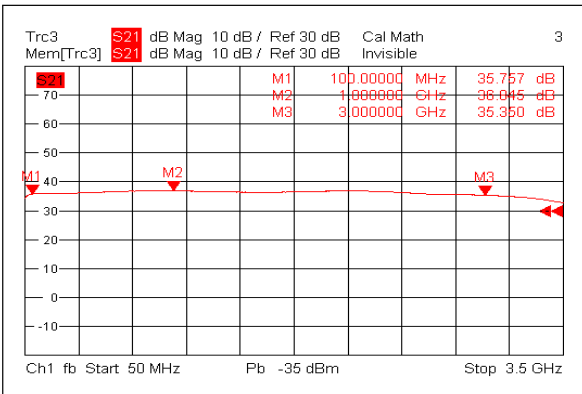
Output VSWR @-40°C



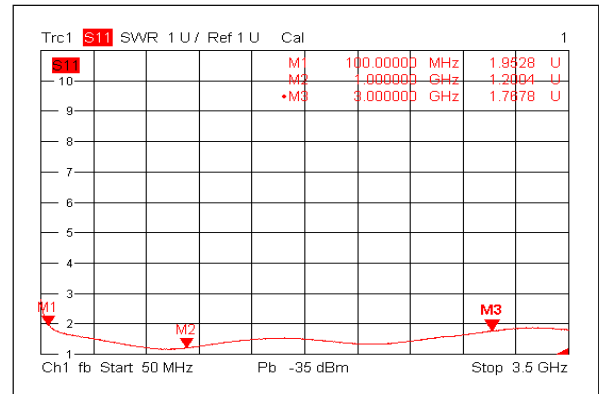
Isolation @-40°C



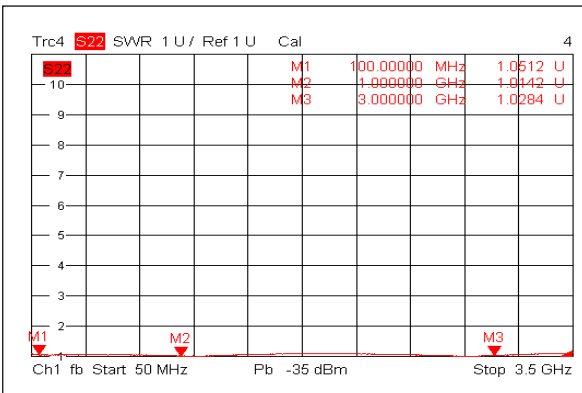
**SALUKI TECHNOLOGY INC.** Ultra Wide Band Low Noise Amplifier 0.1GHz~3GHz  
Gain @+85°C Input VSWR @+85°C



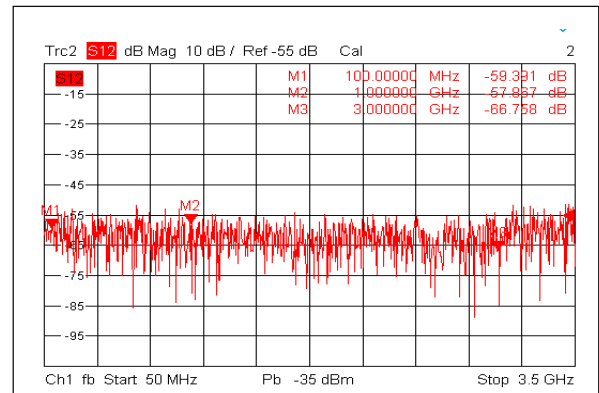
Output VSWR @+85°C



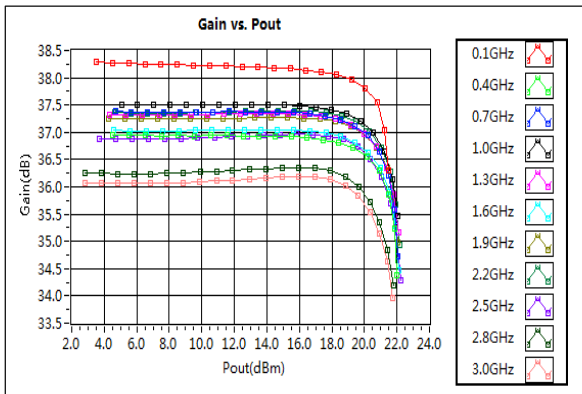
Isolation @+85°C



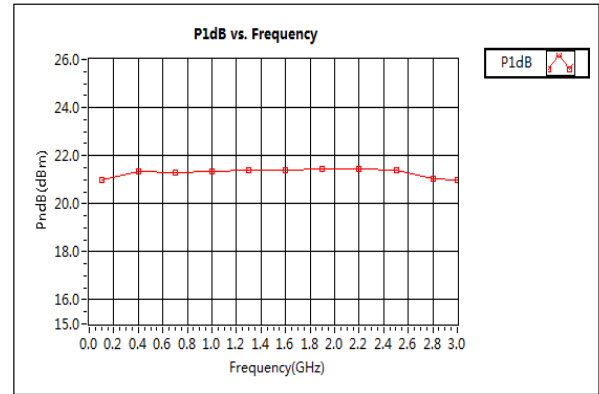
Gain vs. Output Power



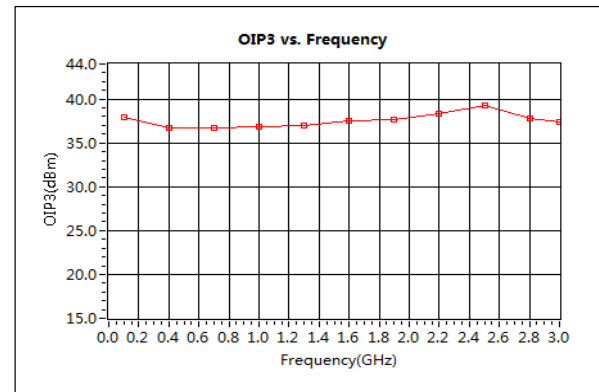
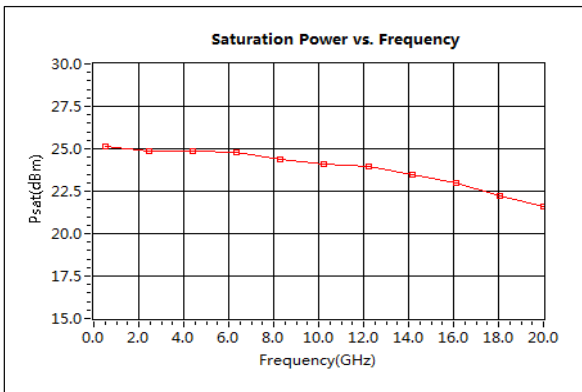
P1dB vs. Frequency



Saturation Power vs. Frequency



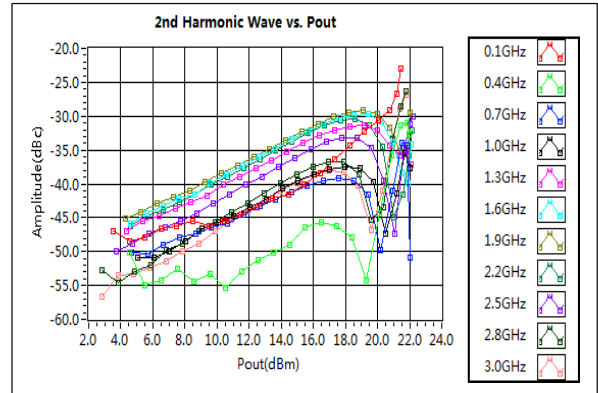
Output Third Order Intercept (IP3)



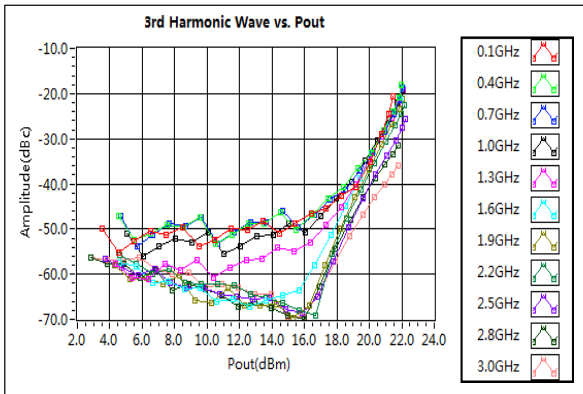
Noise Figure



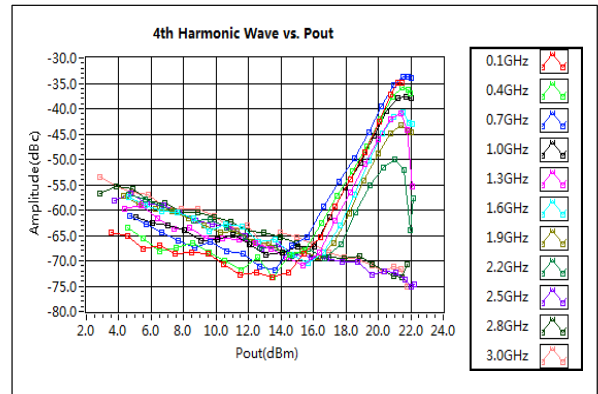
2nd Harmonic Wave Output Power



3rd Harmonic Wave Output Power



4th Harmonic Wave Output Power



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