

## Features

- Gain: 31dB Typical
- Noise Figure: 2.5dB Typical
- P1dB Output Power: +26dBm Typical
- Supply Voltage: +12 V
- 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                               | 0.01 |      | 10   | 10   |      | 18   | GHz   |
| Gain  | 27   | 31   |      | 25   | 27   |      | dB    |
| Gain Flatness                                 |      | ±2.0 |      |      | ±2.0 |      | dB    |
| Gain Variation Over Temperature (-40°C~+85°C) |      | ±1.0 |      |      | ±1.0 |      | dB    |
| Noise Figure                                  |      | 2.5  | 5.5  |      | 3.0  | 4.5  | dB    |
| Input VSWR                                    |      | 1.4  |      |      | 1.5  | 1.8  | :1    |
| Output VSWR                                   |      | 1.6  |      |      | 1.8  | 2.1  | :1    |
| Output 1dB Compression Point (P1dB)           | 24   | 26   |      | 20   | 22   |      | dBm   |
| Saturated Output Power (Psat)                 |      | 27   |      |      | 24   |      | dBm   |
| Output Third Order Intercept (OIP3)           |      | 35   |      |      | 28   |      | dBm   |
| Supply Current (Vcc=+12V)                     |      | 320  | 500  |      | 320  | 500  | mA    |
| Isolation S12                                 |      | -60  |      |      | -60  |      | dB    |

|                           |             |                 |                                     |
|---------------------------|-------------|-----------------|-------------------------------------|
| Weight                    | 1.06ounces  | Impedance       | 50ohms                              |
| Input / Output Connectors | SMA-Female  | Material        | Aluminum                            |
| Finish                    | Gold Plated | Package Sealing | Hermetically Sealed (Laser Sealed ) |

**Absolute Maximum Ratings**

|                   |       |
|-------------------|-------|
| Operating Voltage | +15V  |
| RF Input Power    | +3dBm |

**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         |

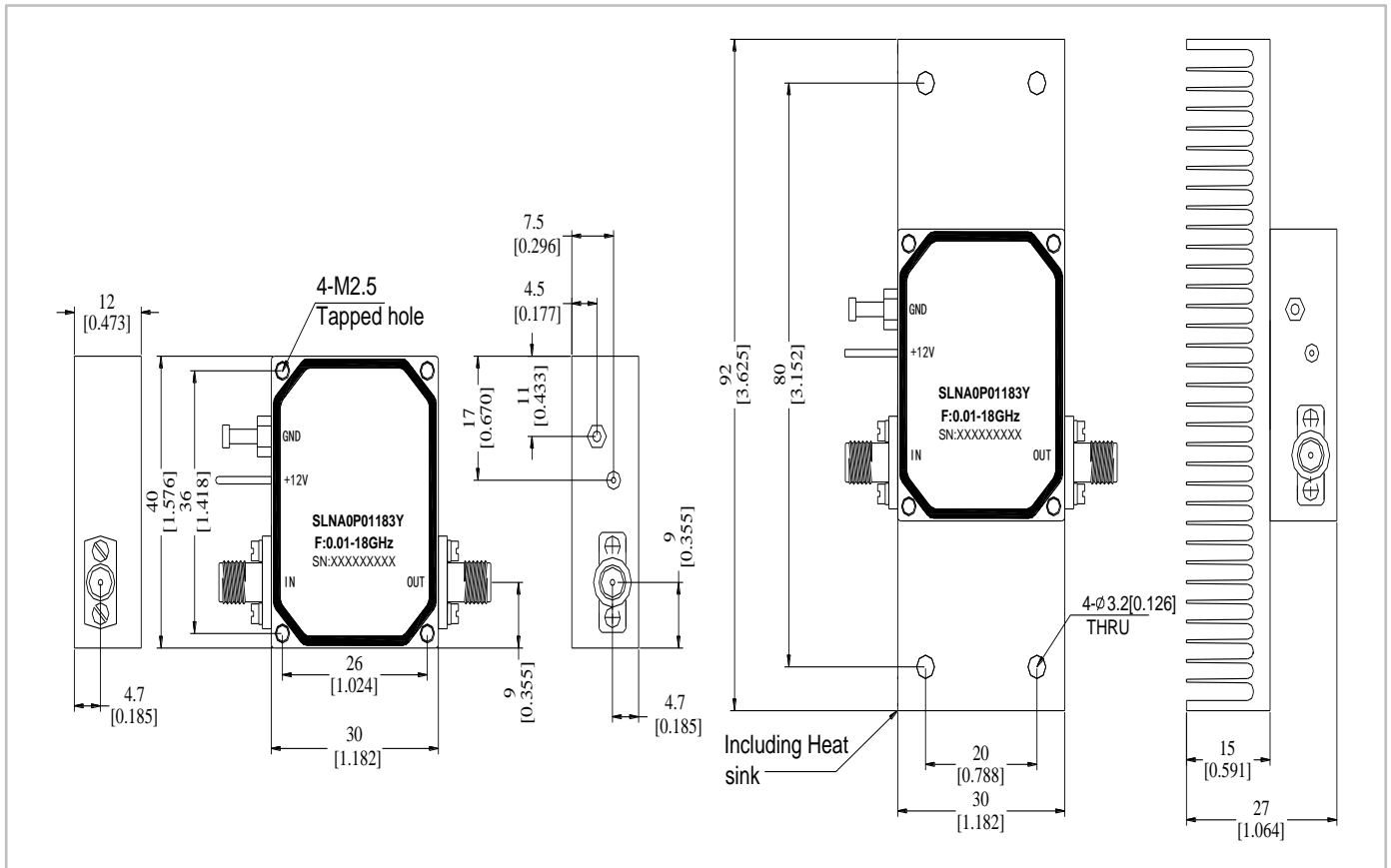
**Environmental Specifications**

|                         |  |
|-------------------------|--|
| 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:**

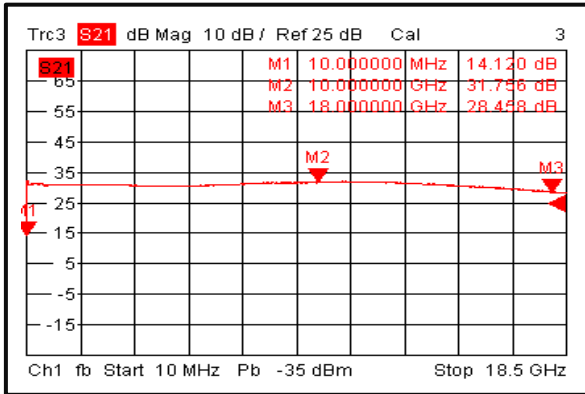
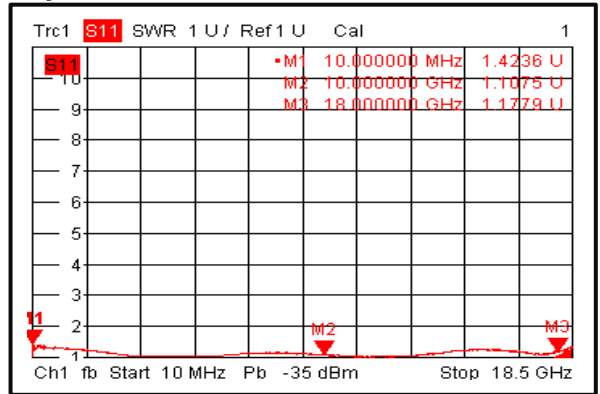
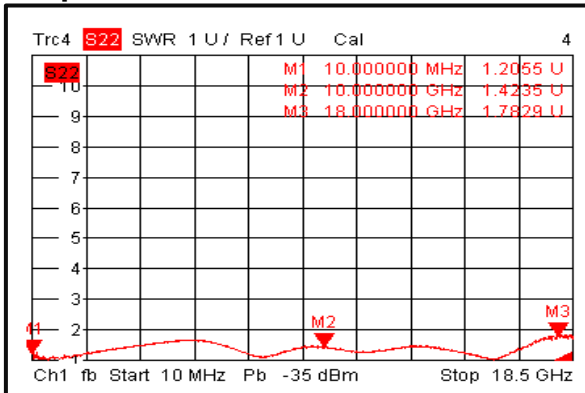
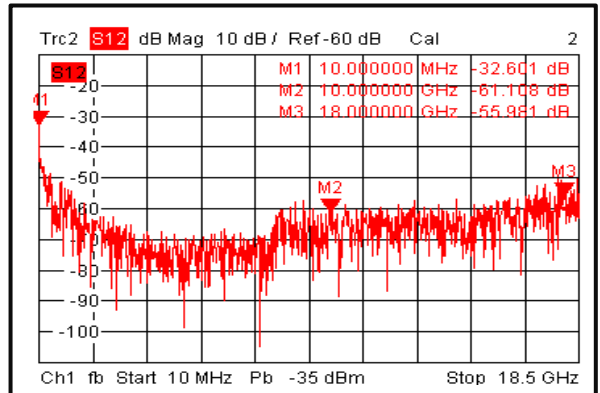
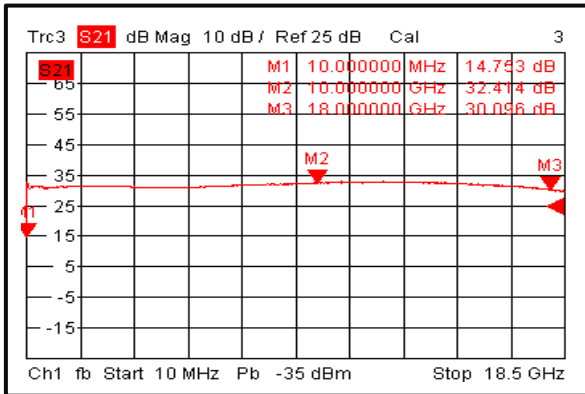
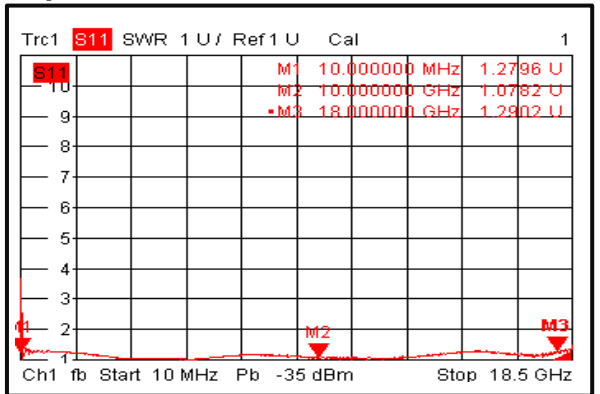
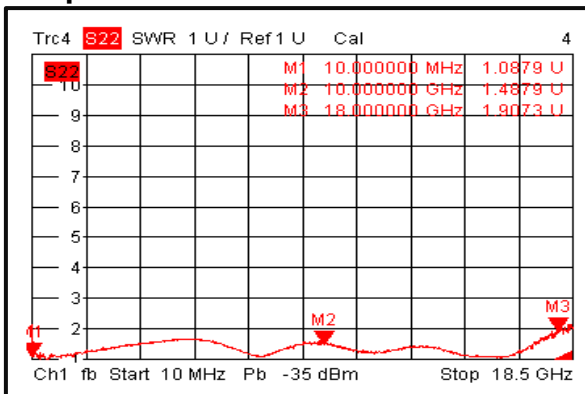
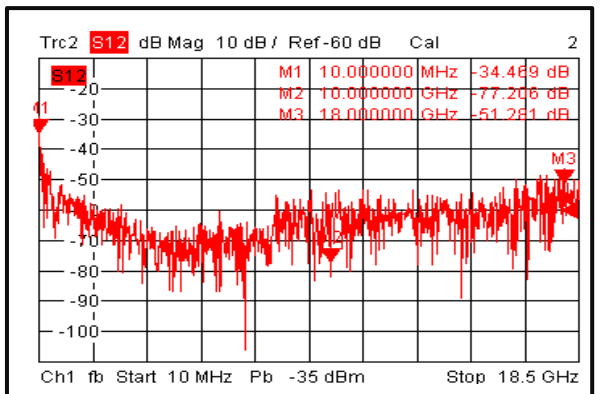
All Dimensions in mm (inches)

Heat Sink required during operation(Sold Separately)



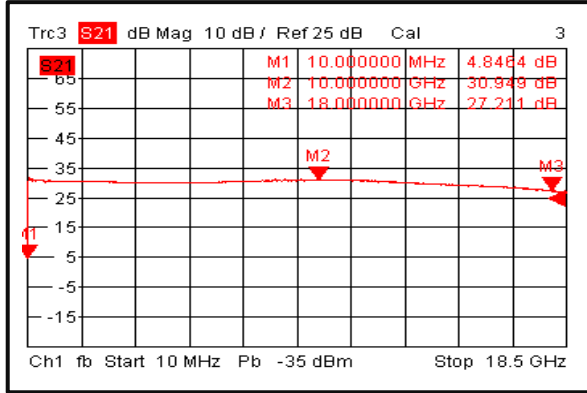
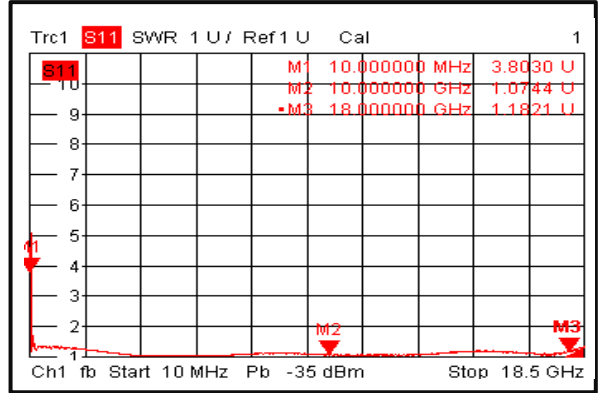
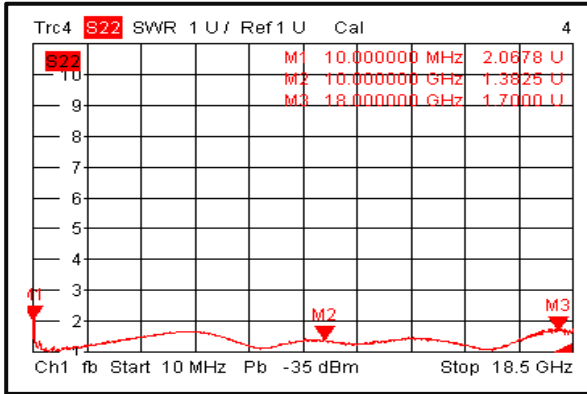
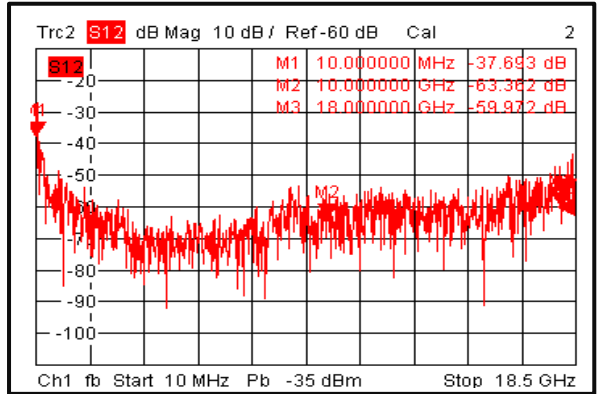
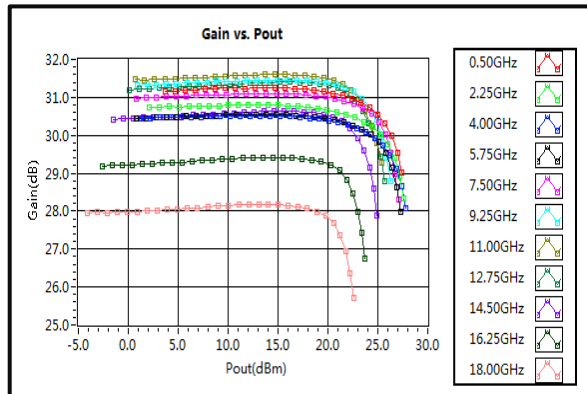
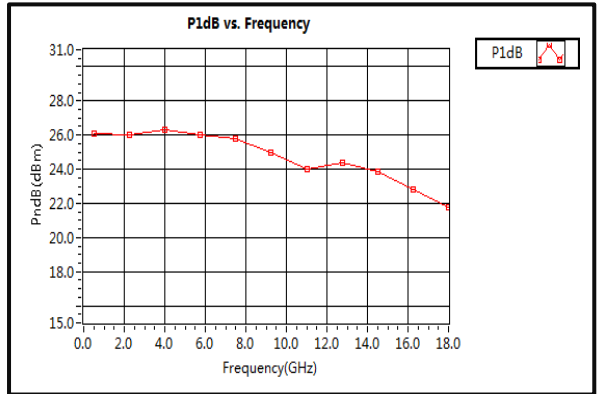
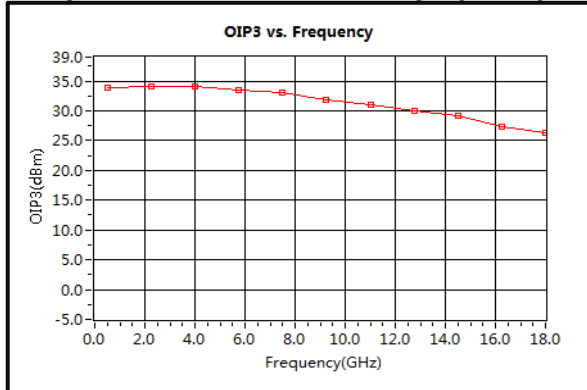
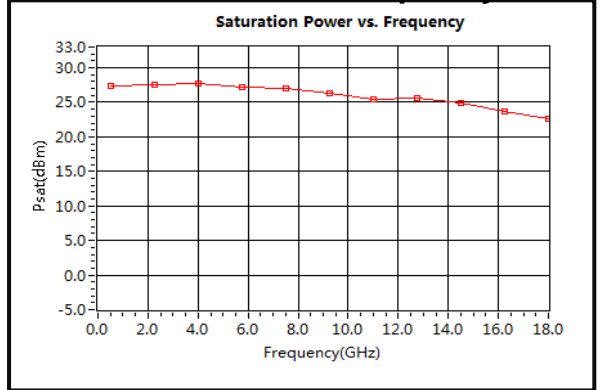
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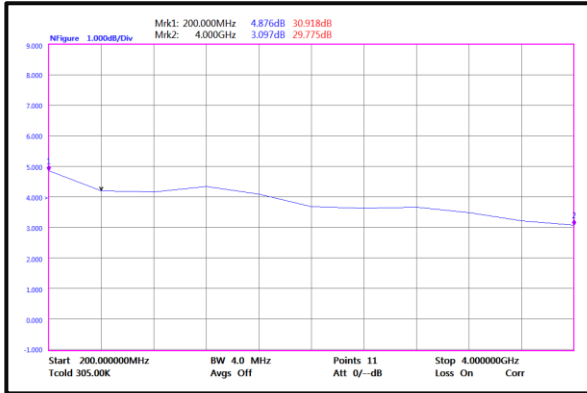
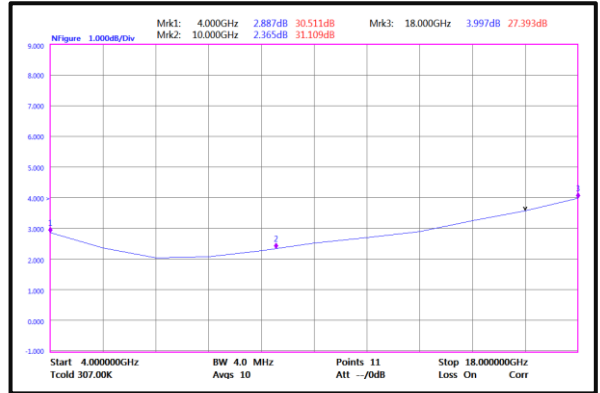
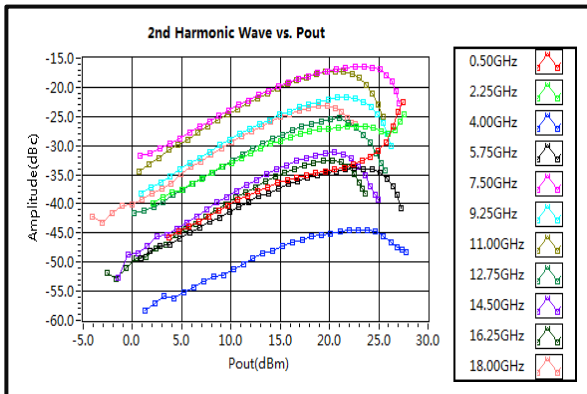
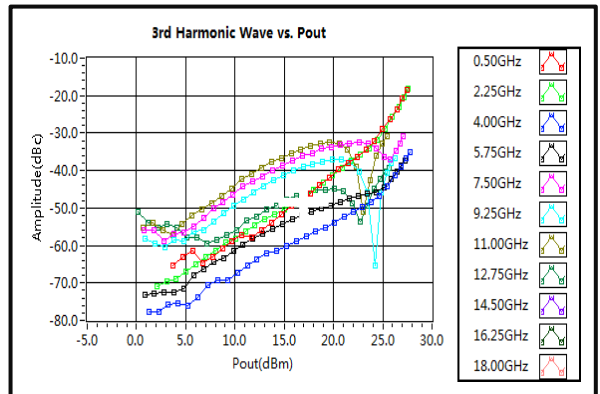
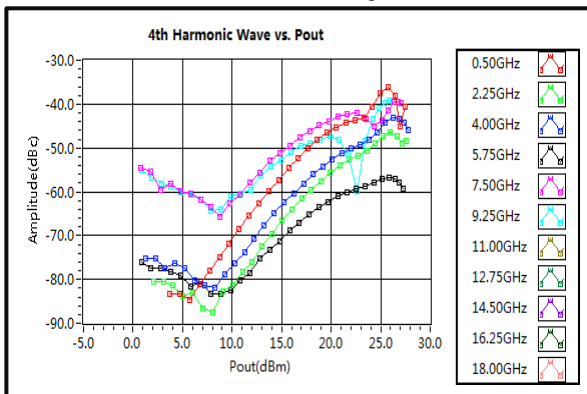
Hermetically Sealed Ultra Wide Band Low Noise Amplifier 0.01GHz-18GHz

**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.**

Hermetically Sealed Ultra Wide Band Low Noise Amplifier 0.01GHz-18GHz

**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(200MHz-4GHz)**

**Noise Figure(4GHz-18GHz)**

**2nd Harmonic Wave Output Power**

**3rd Harmonic Wave Output Power**

**4th Harmonic Wave Output Power**


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