



## Features

- Wide Bandwidth
- High Gain
- Low Noise

## Applications

Military Communications

Radar

Instrumentation

Communication Systems

Space Systems

Test &amp; Measurement

## Description

Broadband Low-Noise Amplifier with a frequency range covering 20 MHz to 6 GHz. The product provides a gain of 20 dB to 25 dB and an in-band noise figure of 3.5 dB. It is powered by a single +12 V supply. Both the RF interface and power supply interface are SMA female.

## Technical Specifications

| Item                          | Technical Specification                   |
|-------------------------------|-------------------------------------------|
| Operating Frequency           | 0.02~ 6 GHz                               |
| Gain                          | 20 dB ~ 25 dB(at room temperature)        |
| Input VSWR                    | <2                                        |
| Output VSWR                   | <2                                        |
| Noise Figure                  | ≤ 3.5 dB                                  |
| Output 1 dB Compression Point | 17 dBm @ 2 GHz / 15 dBm @ 6 GHz           |
| Power Consumption             | ≤ 1.0 W                                   |
| Operating Voltage             | +12 V                                     |
| Operating Temperature         | -40 °C ~ +75 °C                           |
| Storage Temperature           | -50 °C ~ +105 °C                          |
| Outline Dimensions (L×W×H)    | 39 mm × 32 mm × 15 mm (tolerance ±0.2 mm) |

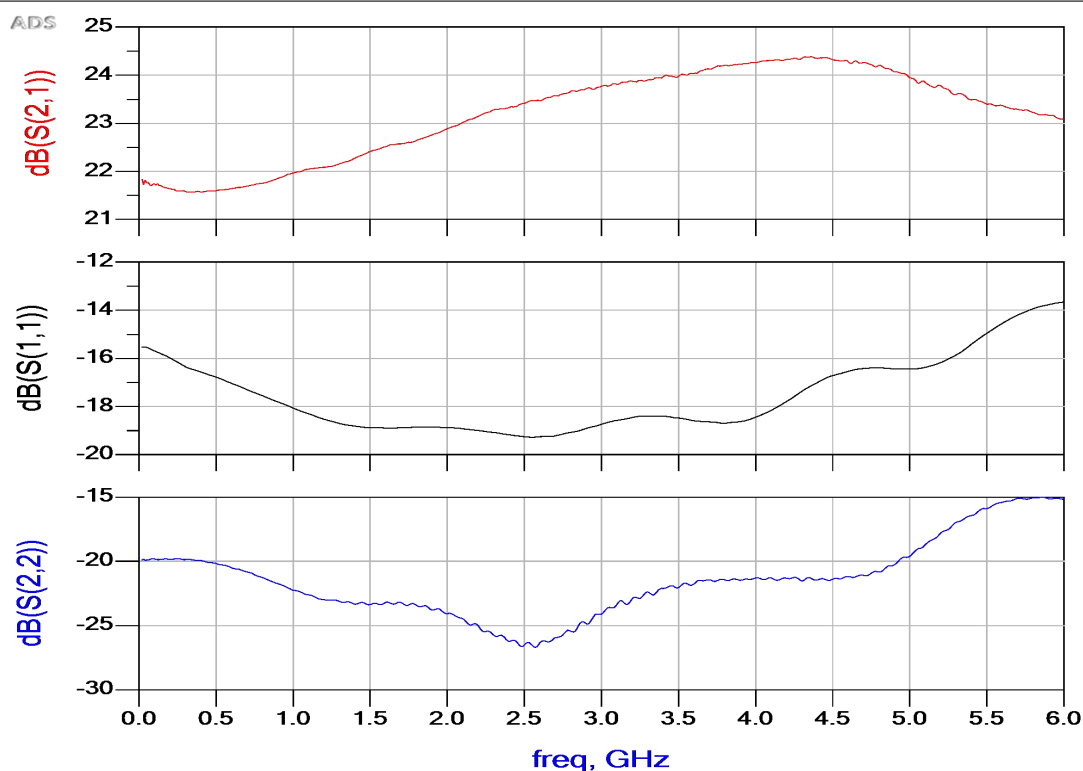


| Item                  | Technical Specification      |
|-----------------------|------------------------------|
| RF Interface          | SMA-Female                   |
| Power Interface       | SMA-Female                   |
| Housing Coating       | Natural conductive oxidation |
| Circuit Board Coating | Conformal coating            |
| ESD Protection Level  | $\geq 8000$ V                |

**Notes:**

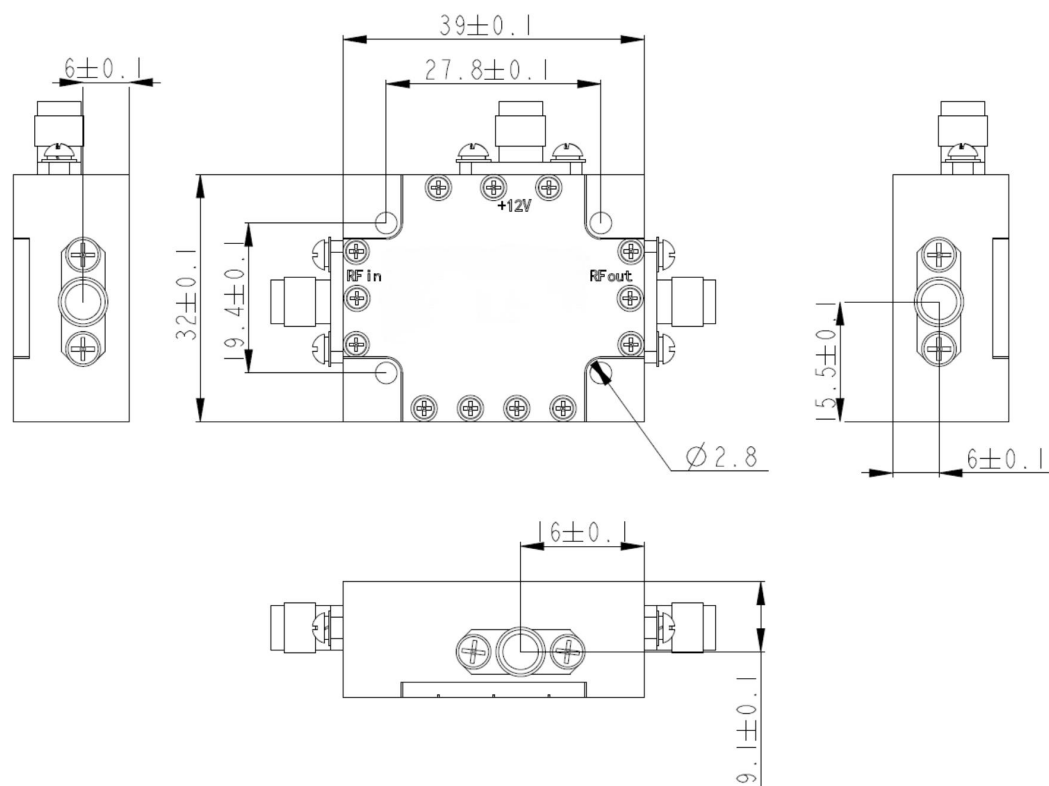
Values at 25°C, sea level.

## Typical Performances



S-parameters Curve

Outline Drawing:



- NOTES:**
- 1.UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
  - 2.ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.
  - 3.DIMENSIONS ARE IN mm.

|                                                                                                                                                     |                              |           |                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------|---------------------------------------------------------------------------------------|
|  <div>西安星航通信科技有限公司<br/>XI'AN SATNAVCOM TECHNOLOGY CO., LTD.</div> | PART NAME                    |           |                                                                                       |
|                                                                                                                                                     | Wideband Low-Noise Amplifier |           |                                                                                       |
|                                                                                                                                                     | JL.2.806.0003                | REV       | DATE                                                                                  |
|                                                                                                                                                     |                              | V1.0      | 2026.4.9                                                                              |
| Tel: +86-28-86985015                                                                                                                                |                              | SCALE 1:1 |  |
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