

## Features

- Frequency: 3.750~8.250GHz
- Gain: 42~46dB
- OP-1dB: 13dBm
- Noise Figure: 1.0dB
- Supply Voltage: +7~+15V
- Size: 16.3×17.8×7.3mm

## Typical Applications

- Radar and ECM VSAT
- RF/ Microwave Radio
- Military and Space
- Test and Measurement

## General Description

SAC1409 is a low noise amplifier module with a typical small signal gain of 42~46dB and a nominal OP-1dB of +13dBm across the frequency range of 3.750 to 8.250GHz.

## Electrical Performance

| Parameter                                     | Min.        | Typ. | Max. | Units |
|-----------------------------------------------|-------------|------|------|-------|
| Frequency Range                               | 3.750~8.250 |      |      | GHz   |
| Gain                                          | 42          | —    | 46   | dB    |
| Gain Flatness                                 | —           | ±1.0 | —    | dB    |
| Noise Figure                                  | —           | 0.9  | 1.1  | dB    |
| Output Power for 1 dB<br>Compression (OP-1dB) | 13          | —    | —    | dBm   |
| Input VSWR                                    | —           | 1.5  | 2.0  | :1    |
| Output VSWR                                   | —           | 1.7  | 2.0  | :1    |
| Supply Voltage                                | 7           | —    | 15   | V     |
| Supply Current                                | —           | 150  | —    | mA    |

## Absolute Maximum Ratings

|                     |              |                       |             |
|---------------------|--------------|-----------------------|-------------|
| Maximum Input Power | +20dBm       | Operating Temperature | -45°C~+85°C |
| Storage Temperature | -55°C~+125°C |                       |             |

# SAC1409

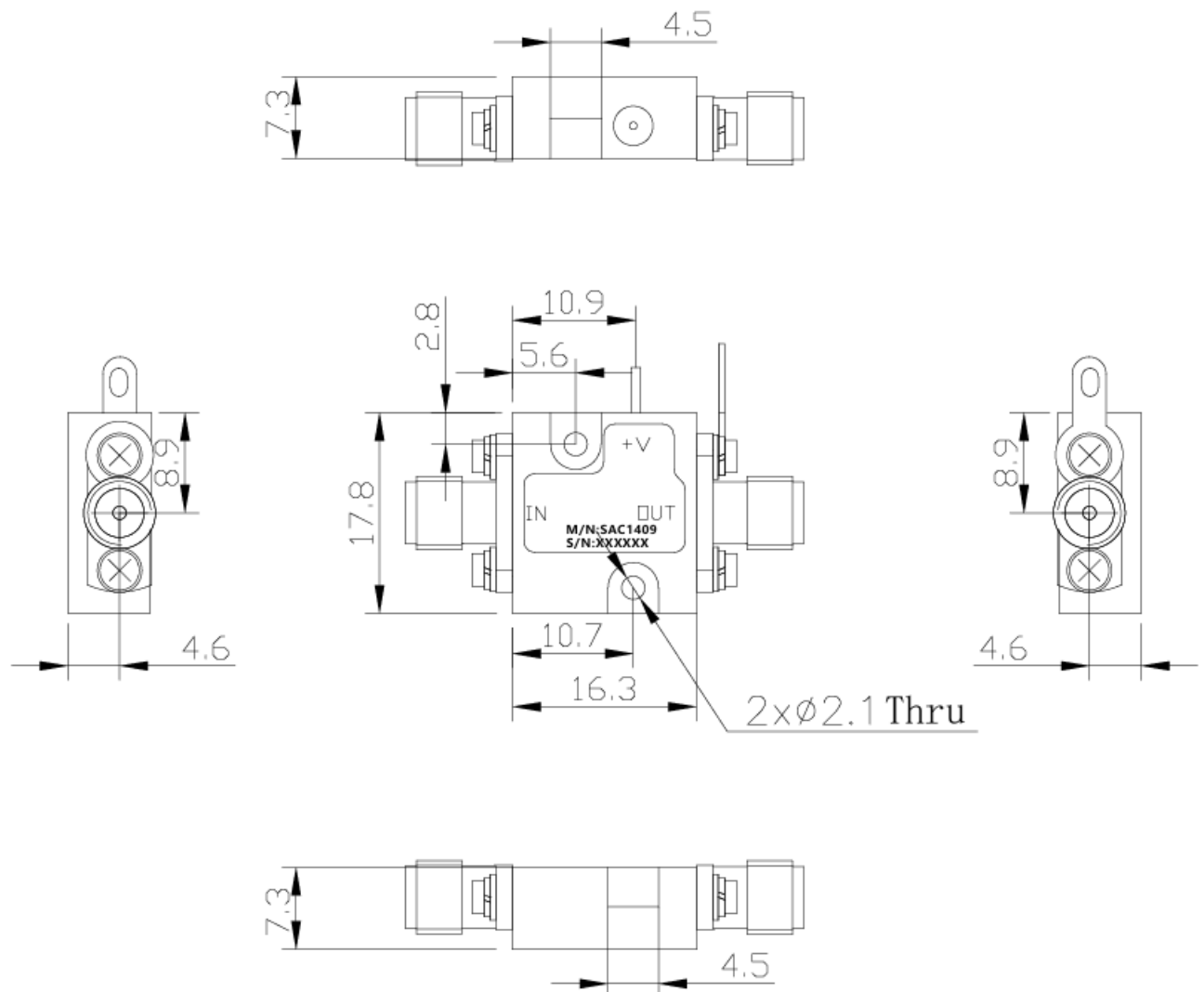


GaAs MMIC Low Noise Amplifier Module  
3.750~8.250GHz NF=1.0dB

Rev 1.0

## Mechanical Outline

All dimensions are in millimeters



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