

### Features

- Frequency: 0.1~18GHz
- Gain: 37dB
- OP-1dB: 14dBm
- Noise Figure: 1.8dB
- Supply Voltage: +8~+15V
- Size: 40.82mm×16.87mm×8.13mm

### Typical Applications

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

### General Description

SAC1428 is a low noise amplifier module with a typical small signal gain of 37dB and a nominal OP<sub>-1</sub>dB of 14dBm across the frequency range of 2 to 18GHz.

### Electrical Performance

| Parameter                                                  | Min.   | Typ. | Max. | Units |
|------------------------------------------------------------|--------|------|------|-------|
| Frequency Range                                            | 0.1~18 |      |      | GHz   |
| Gain                                                       | 35     | 37   | 39   | dB    |
| Gain Flatness                                              | —      | —    | ±2.0 | dB    |
| Noise Figure (@25°C)                                       | —      | 1.8  | 2.5  | dB    |
| Output Power for 1 dB<br>Compression (OP <sub>-1</sub> dB) | 13     | 14   | —    | dBm   |
| Input VSWR                                                 | —      | 1.6  | 2    | :1    |
| Output VSWR                                                | —      | 1.6  | 2    | :1    |
| Supply Voltage                                             | 8      | —    | 15   | V     |
| Supply Current                                             | —      | 150  | 170  | mA    |

### Absolute Maximum Ratings

|                     |        |                       |             |
|---------------------|--------|-----------------------|-------------|
| Maximum Input Power | +18dBm | Operation Temperature | -40°C~+85°C |
|---------------------|--------|-----------------------|-------------|

## Mechanical Outline

All dimensions are in millimeters

