

Features

- Frequency: 5.4~5.9GHz
- Gain: 28dB
- OP_{-1dB}: 12dBm
- Noise Figure: 0.8dB
- Supply Current: 37mA@5V
- Hermetic Laser Sealing
- Size: 20mm×17.8mm×7.9mm

Typical Applications

- Microwave radio
- Telecommunication
- Test instrumentation
- Military

General Description

SAC1252 is a low-noise amplifier (LNA) module featuring a typical small signal gain of 28dB and a nominal OP_{-1dB} of +12dBm across the frequency range of 5.4 to 5.9GHz.

SAC1252 integrates SUPERAPEX's proprietary low-noise GaAs MMIC amplifier chip, employs high-frequency microelectronic assembly techniques, and incorporates a high-reliability design to achieve optimum low noise figure, wideband operation.

Picture



Electrical Performance (T_A=25°C, I_D=37mA, Z₀=50Ω)

Parameter	Min.	Typ.	Max.	Units
Frequency Range	5.4~5.9			GHz
Gain	27	28	30	dB
Gain Flatness	–	±0.1	±0.3	dB
Noise Figure	–	0.8	1.0	dB
Output Power for 1 dB Compression (OP _{-1dB})	10	12	–	dBm
Output IP ₃	26	28	–	dBm
Input VSWR	–	1.3	1.5	:1
Output VSWR	–	1.3	1.5	:1
Supply Voltage	5	8	10	V
Supply Current	–	37	60	mA

Mechanical Specifications

Parameter	
Input/Output	SMA(F) Field-replaceable
Bias	Pin /Case ground
Case Material	7050 Aluminum alloy
Weight	25g

Absolute Maximum Ratings

Maximum Input Power	+18dBm	Operating Temperature	-55°C~+85°C
Channel Temperature	+150°C	Storage Temperature	-55°C~+150°C

Mechanical Outline

All dimensions are in millimeters

