

Features

- Frequency:37.5~40.5GHz
- Gain:40dB
- OP_{-1dB}:11dBm
- Noise Figure: 2.7dB
- Supply Current:150mA
- Hermetic Laser Sealing
- Size:2.427in×0.75in×0.58in

Typical Applications

- Microwave radio
- Telecommunication
- Test instrumentation
- Military

General Description

SAC1235 is a low noise amplifier module with a typical small signal gain of 40dB and a nominal OP_{-1dB} of +11dBm across the frequency range of 37.5 to 40.5GHz.

SAC1235 is integrated with SUPERAPEX proprietary low noise GaAs MMIC amplifier chip, high frequency micro electronic assembly techniques, and high reliability design to realize optimum low noise figure, wideband operation.

Electrical Performance (T_A=25°C,I_D=150mA,Z₀=50Ω)

Parameter	Min.	Typ.	Max.	Units
Frequency Range	37.5~40.5			GHz
Gain	38	40	45	dB
Gain Flatness	—	±1.0	±1.5	dB
Noise Figure	—	2.7	3.0	dB
Output Power for 1 dB Compression (OP _{-1dB})	10	11	—	dBm
Output IP ₃	—	20	—	dBm
Input VSWR	—	1.5	2.2	:1
Output VSWR	—	1.5	2.0	:1
Supply Voltage	+12	—	+15	V
Supply Current	—	150	200	mA

Mechanical Specifications

Parameter	
Input	WR28 waveguide
Output	2.92mm-SMA(F) Field-replaceable
Bias	Pin /Case ground
Case Material	7050 Aluminum alloy
Weight	<250g

Absolute Maximum Ratings

Maximum Input Power	+20dBm	Maximum Supply Voltage	+20V
Operating Temperature	-20°C ~+85°C	Storage Temperature	-45°C ~+85°C

Mechanical Outline

All dimensions are in inch

