

Features

- Frequency: 7.5~9GHz
- Gain: 50dB
- OP_{-1dB}: 11dBm
- Noise Figure: 0.8dB
- Supply Current: 100mA
- Hermetic Laser Sealing

Typical Applications

- Microwave radio
- Telecommunication
- Test instrumentation

General Description

SAC1165-R-1 is a low noise amplifier module with a typical small signal gain of 50dB and a nominal OP_{-1dB} of +11dBm across the frequency range of 7.5 to 9GHz.

SAC1165-R-1 is integrated with SUPERAPEX proprietary low noise GaAs MMIC amplifier chip, high frequency microelectronic assembly techniques, and high reliability design to realize optimum low noise figure, wideband operation.

Electrical Performance

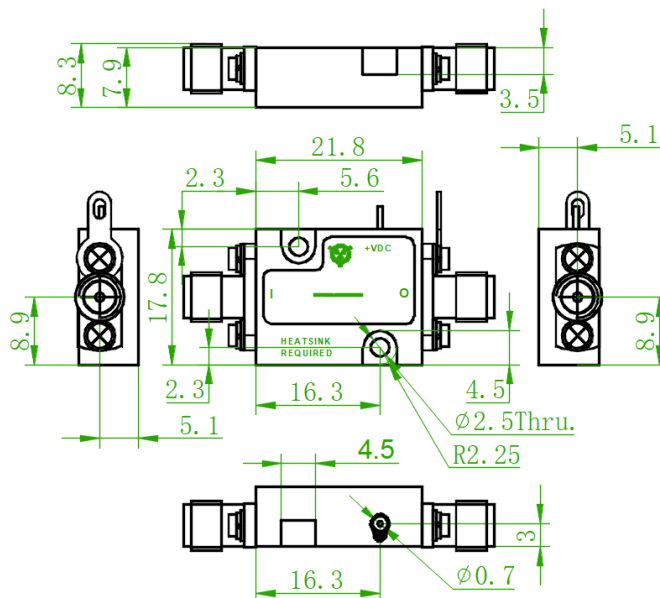
T_A=25°C, I_D=100mA, Z_O=50Ω

Parameter	Min.	Typ.	Max.	Units
Frequency Range	7.5~9			GHz
Gain	45	50	—	dB
Gain Flatness	—	±1.0	±2	dB
Noise Figure	—	0.8	0.85	dB
Output Power for 1 dB Compression (OP _{-1dB})	10	11	—	dBm
Output IP ₃	18	20	—	dBm
Input VSWR	—	1.4	2.0	:1
Output VSWR	—	1.4	2.0	:1
Supply Voltage	7	—	15	V
Supply Current	—	100	150	mA

Mechanical Specifications

Parameter	
Input/Output	SMA(F) Field-replaceable
Bias	Pin/Case ground
Case Material	4047 Aluminum alloy
Weight	11g

Outline Drawing(mm)



Typical Performance Curve

