

Features

- Frequency: 9~11GHz
- Gain: 22.5dB
- OP_{-3dB}: 45dBm
- Supply Voltage: +15V
- Built-in DC/DC converter

Typical Applications

- Microwave radio
- Telecommunication
- Test instrumentation

General Description

SAC1150 is a power amplifier module with a typical small signal gain of 22.5dB and a nominal OP_{-3dB} of +45dBm across the frequency range of 9 to 11GHz.

Image



Electrical Performance

$T_A=25^{\circ}\text{C}, V_D=15\text{V}, Z_0=50\Omega$

Parameter	Min.	Typ.	Max.	Units
Frequency Range	9~11			GHz
Small Signal Gain	20	22.5	27	dB
Noise Figure	—	10.5	—	dB
Output Power for 3 dB Compression (OP _{-3dB})	45	—	—	dBm
Input VSWR	—	1.5	2	:1
Output VSWR	—	1.5	2	:1
Reverse Isolation	—	-50	—	dB
Supply Voltage	15	—	16	V
Supply Current	—	—	8.5	A
Max Input Power	—	—	27	dBm
Non-Harmonics Spurious	—	62	—	dBc
Harmonics*	—	18	—	dBc

*At Pout=43.5dBm

**Load Standing Wave Ratios in excess of 2:1 may cause device damage

Mechanical Specifications

Parameter	
Input/Output	SMA-F/WR-90
Bias	Pin
Case Material	Aluminum alloy
Weight	445g
Cooling	External Heatsink, forced air required

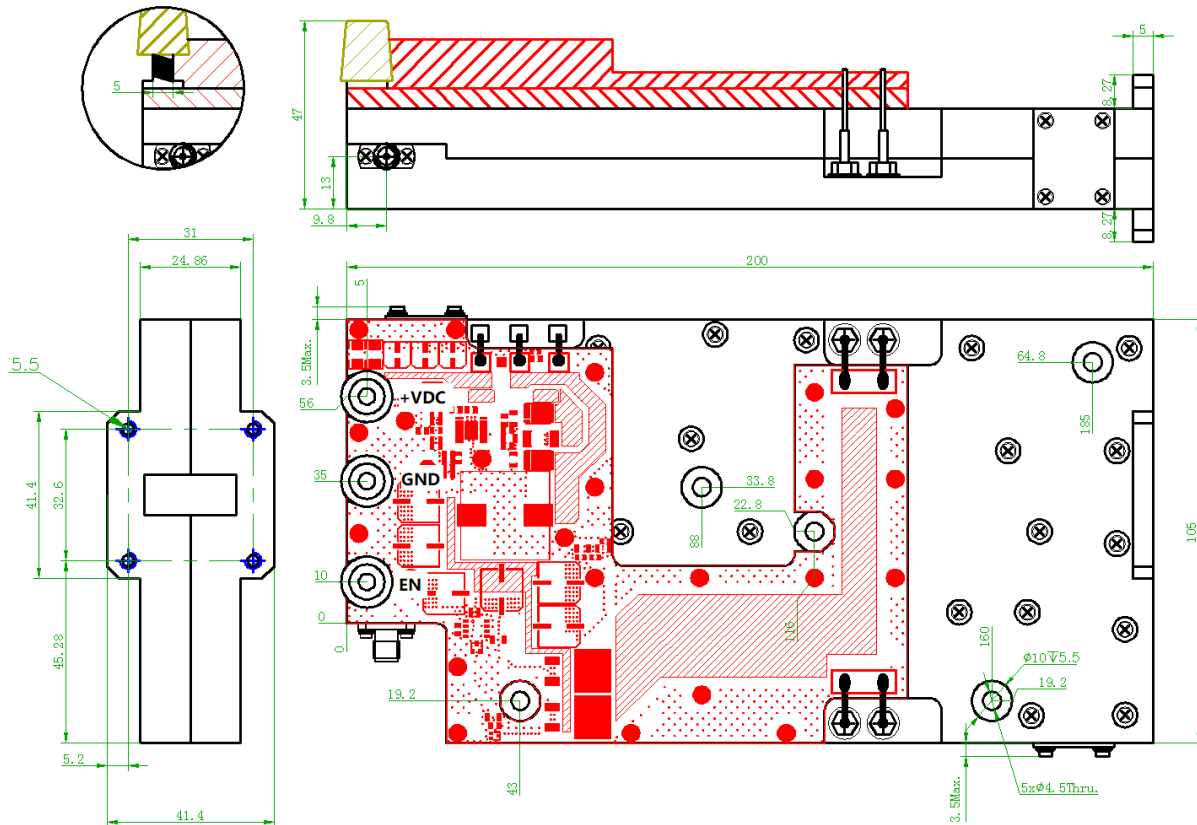
SAC1150

GaAs MMIC Power Amplifier Module 9~11GHz 45dBm

Rev 1.1

Mechanical Outline

All dimensions are in millimeters



Turn-on: Apply +VDC, Apply EN(0-0.3V→OFF/4-5V→ON), Apply RFIN signal.

Turn-off: Remove RFIN signal, Remove EN, Remove +VDC