SAC1130

GaAs Low Noise Amplifier Module
30MHz～450MHz

Rev 1.0

Features

- Frequency: 30MHz～450MHz
- Gain: 30dB
- Noise Figure: 0.6dB
- Supply Voltage: 8V
- Size: 54mm×30mm×8mm

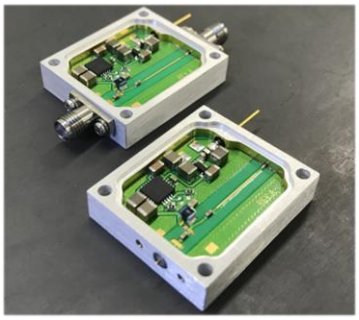
Typical Applications

- Microwave radio including point to point communication
- Telecommunication
- Weather radar
- Optical communication
- Test instrumentation
- SatCom
- VSAT
- Military and Aerospace

General Description

SAC1130 is a GaAs Low Noise Amplifier module with a typical small signal gain of 30 dB and a nominal $OP_{-1}dB$ of +18dBm across the frequency range of 30 to 450 MHz.

Image



Electrical Performance (T_A=25℃, V_D=8V, Z_0=50Ω)

Parameter	Min.	Typ.	Max.	Units
Frequency Range	30～450			MHz
Gain	26	30	33	dB
Noise Figure	—	0.6	0.7	dB
Output Power for 1 dB Compression ($OP_{-1}dB$)	15	18	—	dBm
Input Return Loss	—	-15	-18	dB
Output Return Loss	—	-13	-5	dB
Reverse Isolation	—	-45	—	dB
Supply Voltage	7	—	15	V
Supply Current	—	0.1	0.18	A

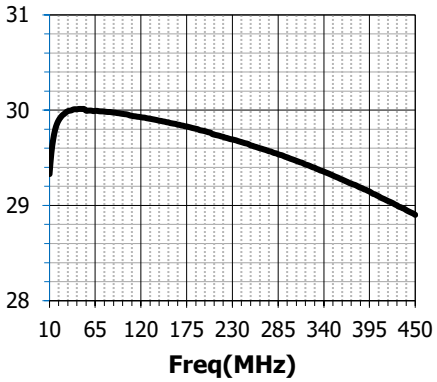
Mechanical Specifications

Parameter	
Input/Output	SMA/SMA
Bias	Pin/Case ground
Case Material	7050Aluminum alloy
Weight	85g

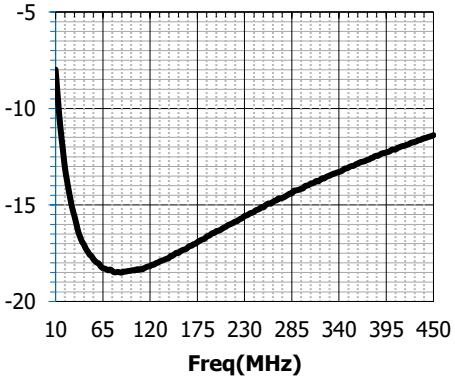
SuperApex, LLC
1580 S. Milwaukee Ave. Suite 405, Libertyville, IL 60048, USA
Tel: 1-847-505-8319, 1-847-573-9866
E-mail: sales@superapexco.com
Website: www.superapexco.com

Typical Performance Curve

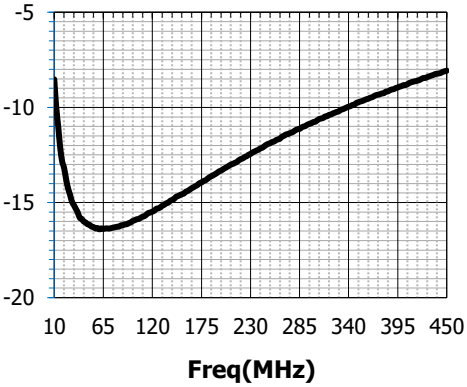
Gain (dB)



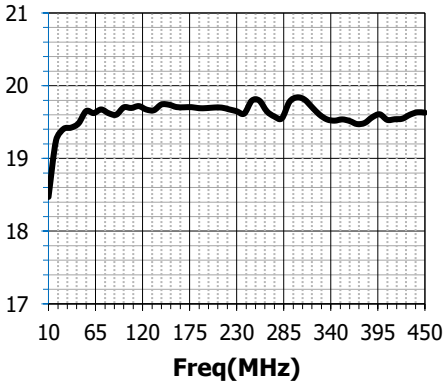
Input Return loss(dB)



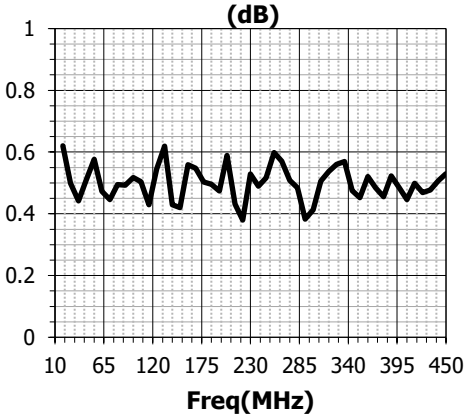
Output Return loss(dB)



Output P_{-1}dB(dBm)

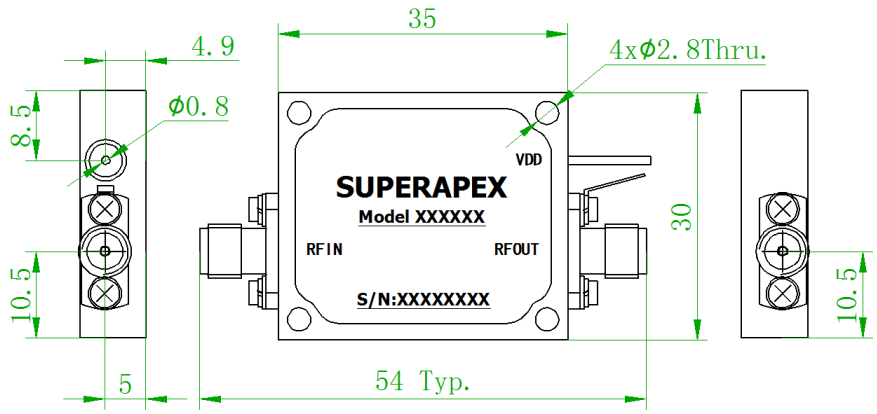


Noise Figure (dB)



Mechanical Outline

All dimensions are in millimeters



Note:

1. Other mechanical configurations are available under different model numbers
2. Two SMA Connectors are field-replaceable

Attention:

GaAs MMIC devices are susceptible to damage from Electrostatic Discharge. Proper precautions should be observed during handling, assembly and test.