

# SAC3240

GaAs MMIC Limiter  
2GHz~6GHz 36dBm

Rev 1.0

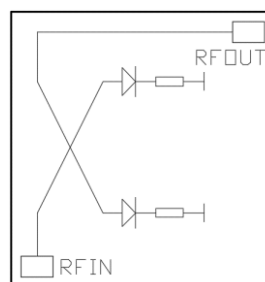
## Features

- Frequency: 2GHz~6GHz
- Insertion Loss: 0.8dB,  $Z_0=50\Omega$
- CW Power Handling: 36dBm
- Flat Leakage Power: 18dBm
- Absorption Limiter

## Description

SAC3240 is a fully integrated absorption limiter. It is a passive device; The limiter can handle 36dBm CW power with a low flat leakage of 18 dBm.

## Functional Diagram



## Electrical Specifications

$T_{BASE}=25^{\circ}\text{C}$ ,  $Z_0=50\Omega$ , CW

Parameter	Min.	Typ.	Max.	Units
Frequency	2	—	6	GHz
Insertion Loss	—	0.8	1.2	dB
CW Power Handling	—	—	36	dBm
VSWR <sub>i</sub>	—	1.4	1.8	: 1
VSWR <sub>o</sub>	—	1.4	1.8	: 1
Flat Leakage Power *	—	19	22.5	dBm
3dB Recovery Time **	—	26	—	nS

\*\*Pin=33dBm, 1% DC, T=1mS, f=4GHz

\*Pin=36dBm

## Absolute Maximum Ratings

CW Incident Power	+37dBm	Operating Temperature ( $T_{BASE}$ )	-55°C~+85°C
Junction Temperature	175°C	Storage Temperature	-55°C~+150°C

### SuperApex, LLC

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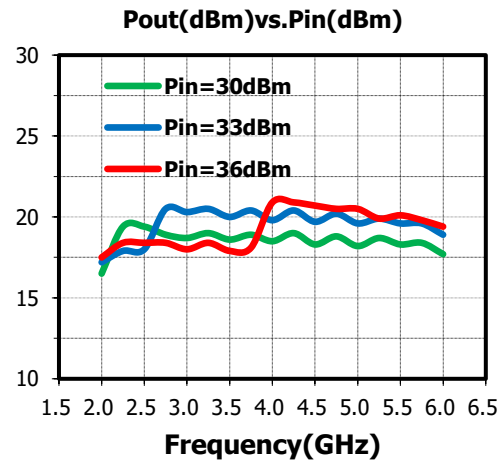
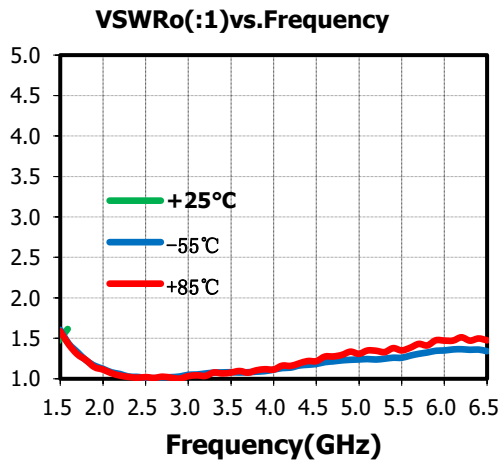
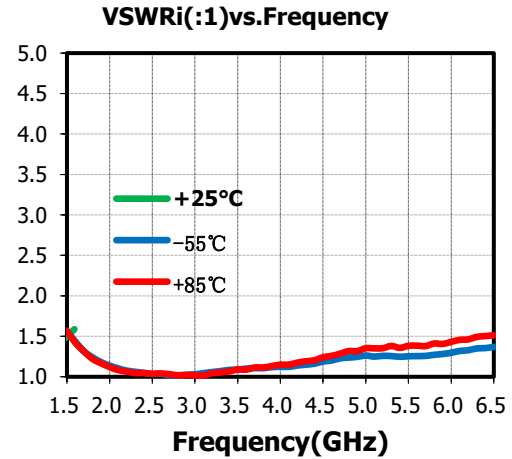
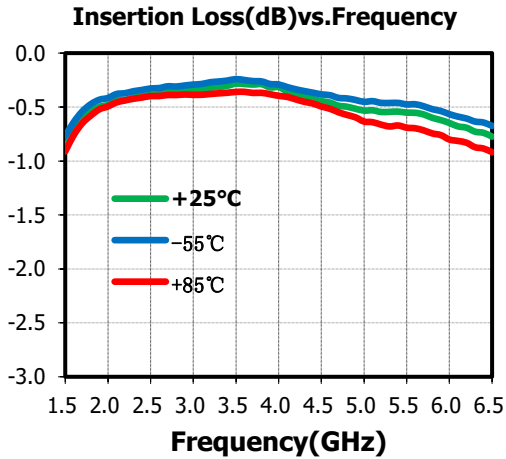
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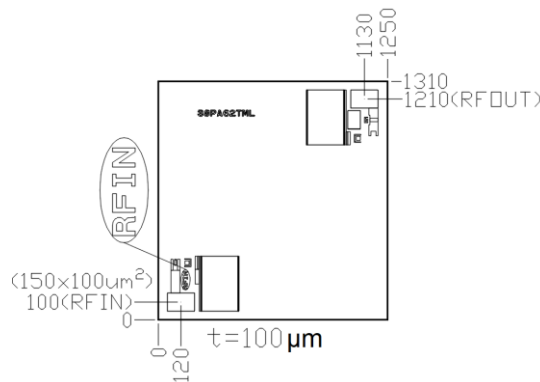
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## Typical Performance Curve

The following curves are taken from SAC3240 evaluation board. De-embedding operation has been implemented, CW,  $T_{BASE} = +25^{\circ}C$



## Die Outline Drawing (All dimensions in $\mu m$ )



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## Attention:

1. The back of bare chip is RF and DC ground,
2. GaAs MMIC devices are susceptible to damage from Electrostatic Discharge. Proper precautions should be observed during handling, assembly and test,
3. RF input and RF output ports are DC Coupled.

## Revision History

Revision	Date	Comment
1.0	2024-05-31	First Release

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