

SAC3244Q4

GaAs MMIC Limiter
DC~8GHz 34dBm

Rev 1.0

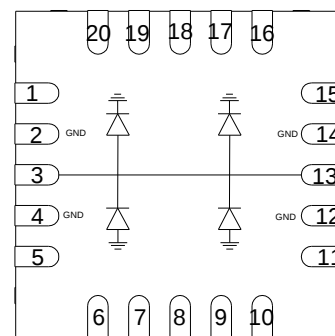
Features

- Frequency: DC~8GHz
- Insertion Loss: 0.5dB, $Z_0=50\Omega$
- CW Power Handling: 34dBm
- Flat Leakage Power: 22dBm
- Absorption Limiter

General Description

SAC3244Q4 is an absorption limiter with an operating frequency covering DC~8GHz in a 4mmX4mm surface mounted housing.

Functional Diagram



Electrical Performance

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

Parameter	Min.	Typ.	Max.	Units
Frequency Range	DC	—	8	GHz
Insertion Loss	—	0.5	0.8	dB
Input return loss	—	-20	-11	dB
Output return loss	—	-20	-11	dB
Flat Leakage Power *	—	22	26	dBm

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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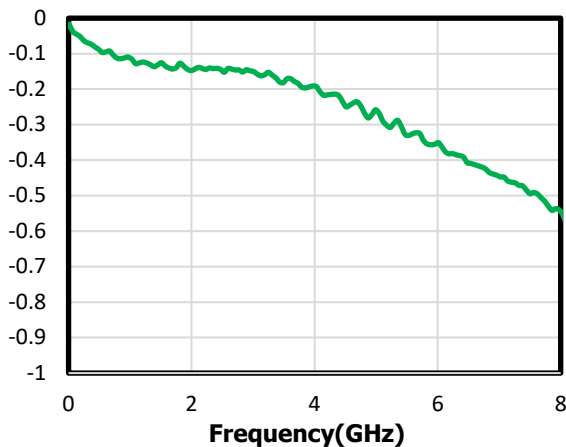
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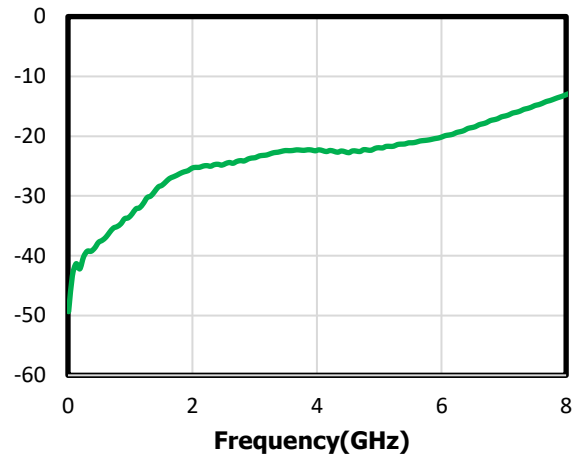
Typical Performance Curve

The following curves are taken from SAC3244Q4 evaluation board. De-embedding operation has been Implemented, CW, $T_{BASE}=+25^{\circ}\text{C}$

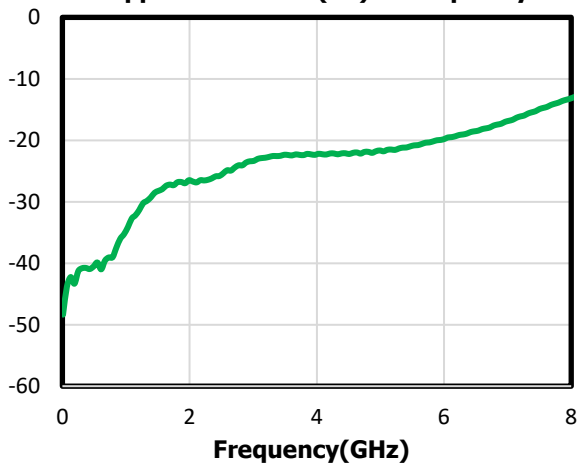
Insertion Loss(dB)vs.Frequency



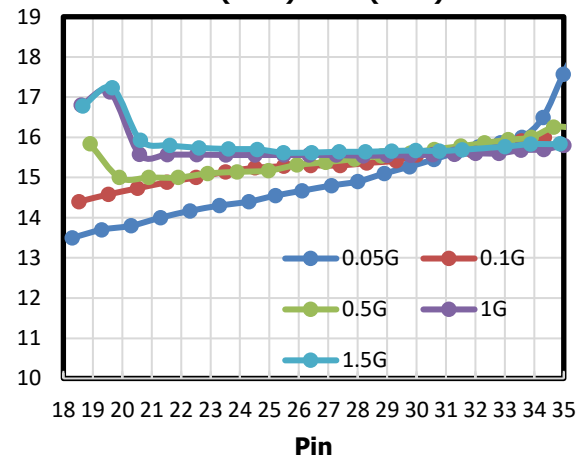
Input return loss(dB)vs.Frequency



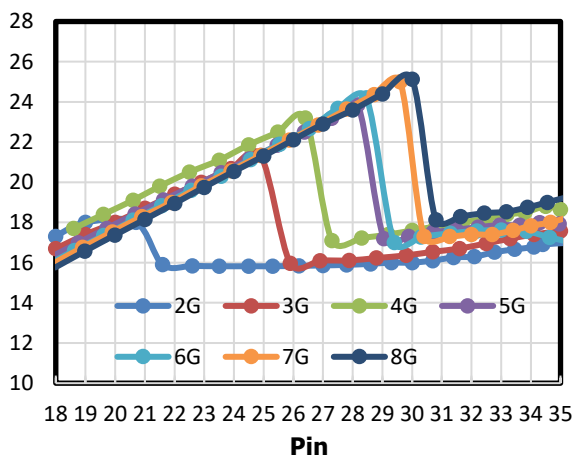
Oupput return loss(dB)vs.Frequency



Pout(dBm)vs.Pin(dBm)



Pout(dBm)vs.Pin(dBm)



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Revision History

Revision	Date	Comment
1.0	Sep 03, 2024	First Release

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