

SAC3807

GaAs MMIC Power Divider
8~12GHz

Rev 2.1

Features

- Frequency: 8~12GHz
- Insertion Loss: $\leq 0.8\text{dB}@12\text{GHz}$
- Input/Output VSWR: $\leq 1.3:1$
- Die Size: 1.0mm \times 1.25mm \times 0.1mm

Typical Applications

- EW
- Cellular Infrastructure
- SATCOM
- Beamforming Modules
- Test Equipment and Sensors

General Description

SAC3807 is a GaAs MMIC 2-Way 0° power divider which operates between 8~12GHz, with insertion loss 0.8dB and output VSWR 1.3:1.

The chip offers full passivation for increased reliability and moisture protection.

Electrical Performance ($T_A=25^\circ\text{C}$, $Z_0=50\Omega$)

Parameter	Symbol	Condition's	Min.	Typ.	Max.	Units
Frequency Range	f	$Z_{in}=Z_{out}=50\Omega$ $T_A=+25^\circ\text{C}$	8	—	12	GHz
Insertion Loss	IL		—	—	-0.9	dB
Amplitude Unbalance	IP		—	± 0.05	—	dB
Input VSWR	VSWR		—	—	1.3	:1
Output VSWR			—	—	1.3	:1
Isolation	ISO		-23	—	—	dB

Absolute Maximum Ratings

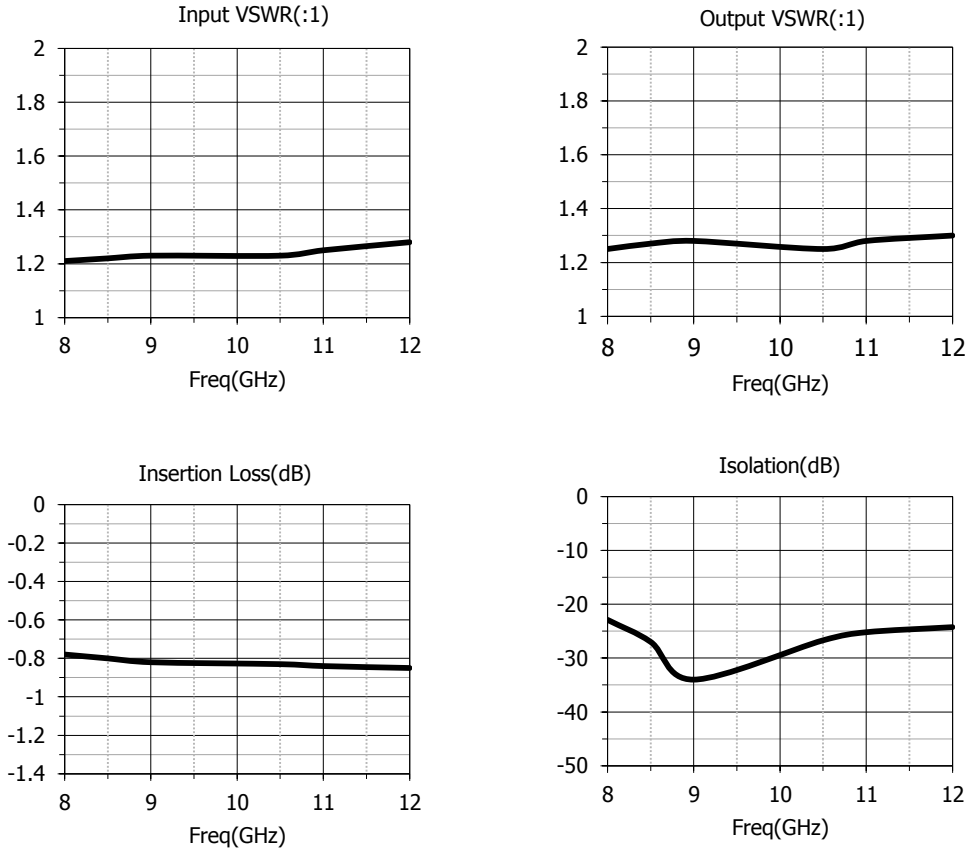
Maximum Input Power	+22dBm	Operating Temperature	-55°C~+85°C
Channel temperature	150°C	Storage Temperature	-65°C~+150°C

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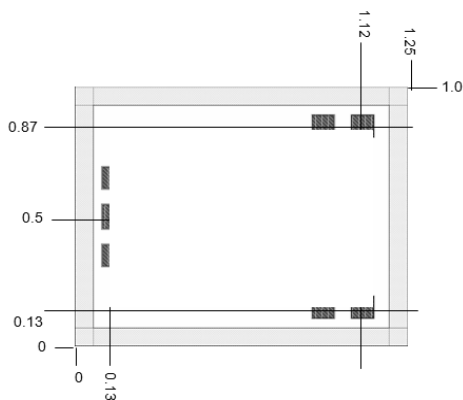
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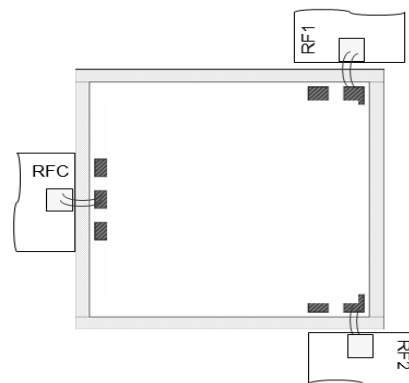
Typical Performance Curve



Die Outline (all dimensions in mm)



Assembly Drawing



Attention:

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