

## Features

- Frequency: 1~18GHz
- Insertion Loss: 1.8dB typ.
- Input/Output VSWR: 1.4:1 TYP.
- Package Size: 4mm x4mm x1.3mm

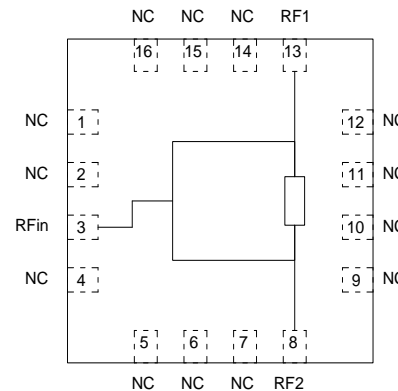
## Typical Applications

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

## General Description

SAC3809Q4 is a GaAs MMIC 2-Way 0° power divider which operates between 1~18GHz with insertion loss 1 dB and VSWR 1.4:1.

## Functional Diagram



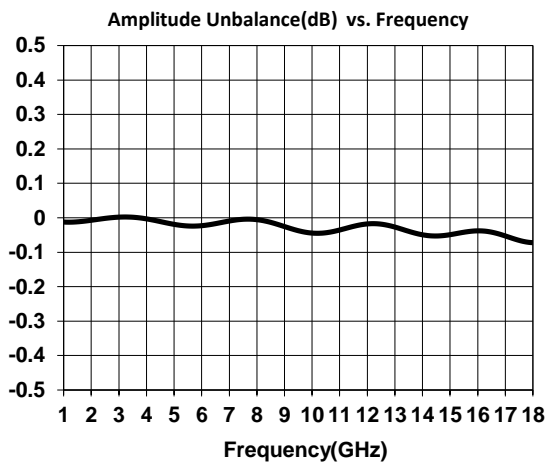
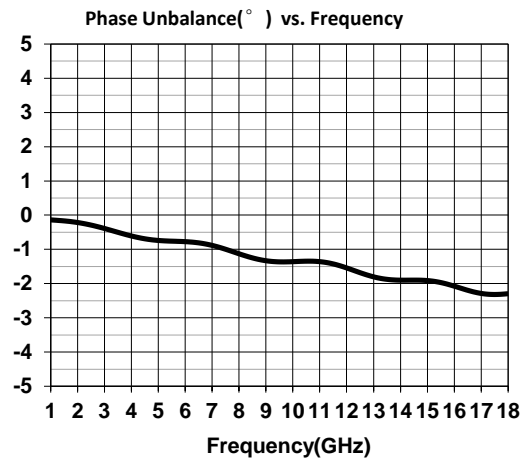
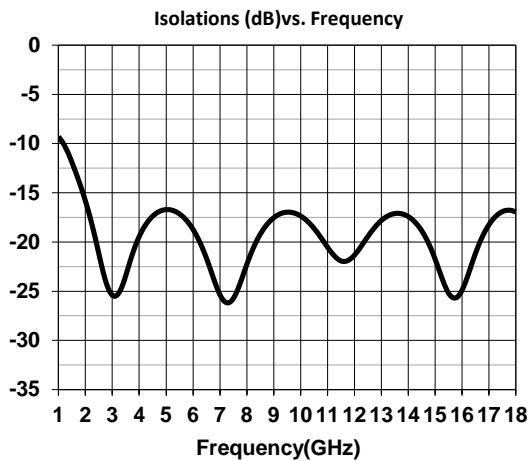
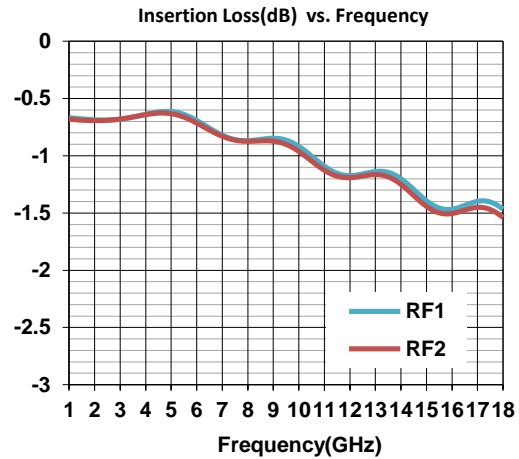
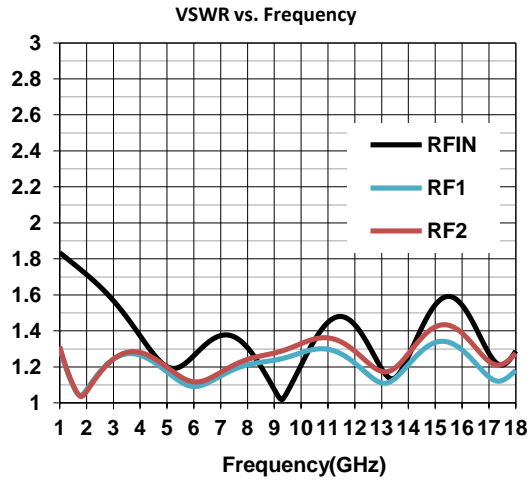
## Electrical Performance ( $T_A=25^\circ\text{C}, Z_0=50\Omega$ )

Parameter	Symbol	Condition's	Min.	Typ.	Max.	Units
Frequency Range	f	Z <sub>in</sub> =Z <sub>out</sub> =50Ω T <sub>A</sub> =+25°C	1	—	18	GHz
Insertion Loss	IL		—	-1	-1.8	dB
Amplitude Unbalance	AU		—	±0.1	—	dB
Phase Unbalance	PU		—	±1.5	—	°
RFC VSWR	VSWR		—	1.4	1.9	:1
RF1,RF2 VSWR			—	1.4	1.6	:1
Isolation	ISO		—	20	—	dB

## Absolute Maximum Ratings

Maximum Input Power	+27dBm	Operating Temperature	-55°C~+85°C
		Storage Temperature	-65°C~+150°C

## Typical Performance Curve

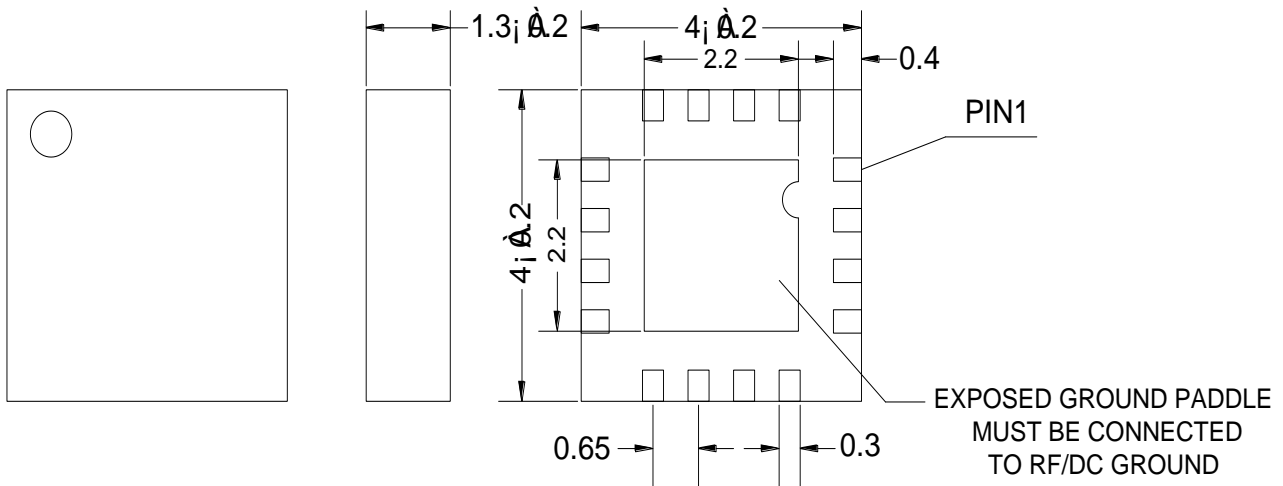


# SAC3809Q4

GaAs MMIC 2-Way Power Divider  
1~18GHz

Rev 1.0

## Outline (all dimensions in mm)



### Attention:

1. The moisture resistant grade of products is 2A, the storage environment  $\leq 30^{\circ} \text{C}/60\% \text{RH}$ , The surrounding workshop Life is 4 weeks.
2. After un-packing, It is necessary to bake the parts for 6 hours in  $125 \pm 5$  degree environment before soldering.