

Features

- Frequency: 1~18GHz
- Insertion Loss: $\leq 1.8\text{dB}@18\text{GHz}$
- Input/Output VSWR: 1.4:1
- Die Size: 2.5mm x2.2mm x0.1mm

Typical Applications

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

General Description

SAC3809 is a GaAs MMIC 2-Way 0° power divider which operates between 1~18GHz with insertion loss 1 dB and VSWR 1.4:1.

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

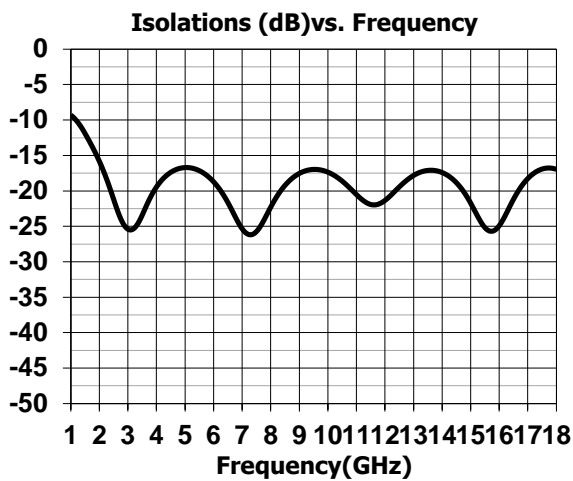
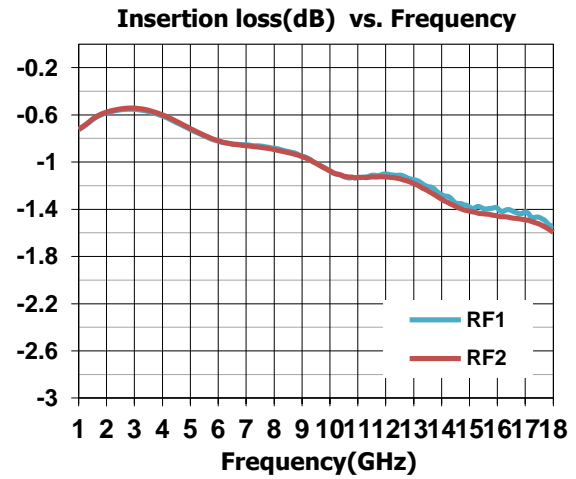
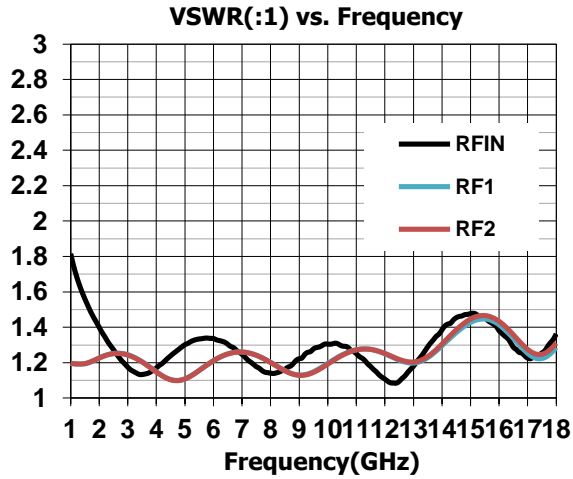
Electrical Performance ($T_A=25^\circ\text{C}, Z_0=50\Omega$)

Parameter	Symbol	Condition's	Min.	Typ.	Max.	Units
Frequency Range	f	Z _{in} =Z _{out} =50Ω T _A =+25°C	1	—	18	GHz
Insertion Loss	IL		—	-1	-1.8	dB
Amplitude Unbalance	IP		—	±0.2	—	dB
RFC VSWR	VSWR		—	1.4	1.9	:1
RF1,RF2 VSWR			—	1.4	1.6	:1
Isolation	ISO		9	20	—	dB

Absolute Maximum Ratings

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

Typical Performance Curve

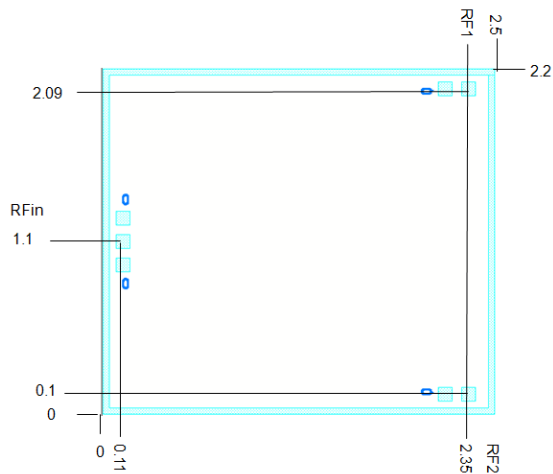


SAC3809

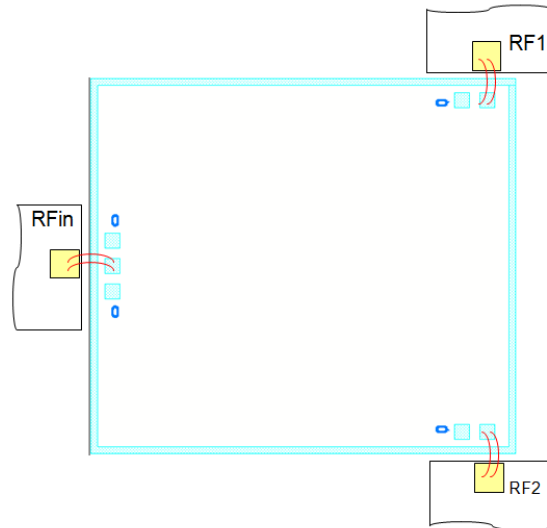
GaAs MMIC 2-Way Power Divider
1~18GHz

Rev 1.0

Die Outline
(all dimensions in mm)



Assembly Diagram



Attention:

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