

GaAs monolithic microwave power splitter

2~20GHz

key indicator

- Frequency range: 2~20GHz
- Insertion loss: ≤1.2dB@18GHz
- Good input/output/output standing wave ratio: 1.3 : 1
- Chip size: 2.18mm×2.07mm×0.1mm

typical application

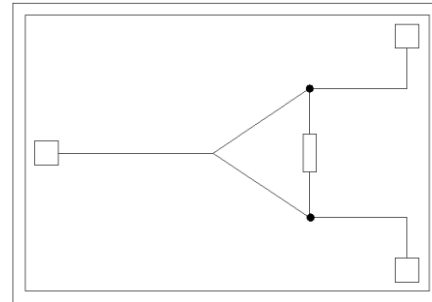
- Radar and electronic countermeasures
- RF/Microwave Circuit
- Test measurement
- Instrumentation

Product Introduction

AY1369G is a 0° ultra-wideband power divider chip. The operating frequency covers 2~20GHz, the insertion loss is less than 1.2dB, and the standing wave ratio is less than 1.3:1.

The chip uses an on-chip metallization process to ensure good grounding, and is suitable for eutectic sintering or conductive adhesive bonding processes.

Functional block diagram



Electrical performance (T_A=25 °C, Z₀=50Ω)

parameter name	symbol	Test condition	Parameter value			unit
			MIN	TYP	MAX	
Frequency Range	f	Z _{in} =Z _{out} =50Ω T _A =+25°C	2	—	20	GHz
Insertion loss	IL		—	-1	—	dB
Insertion loss balance	IP		—	±1	—	dB
RF1 standing wave ratio	VSWR		—	1.3	—	:1
RF2 standing wave ratio			—	1.3	—	:1
RF3 standing wave ratio			—	1.3	—	:1
Isolation	ISO		—	-20	—	dB

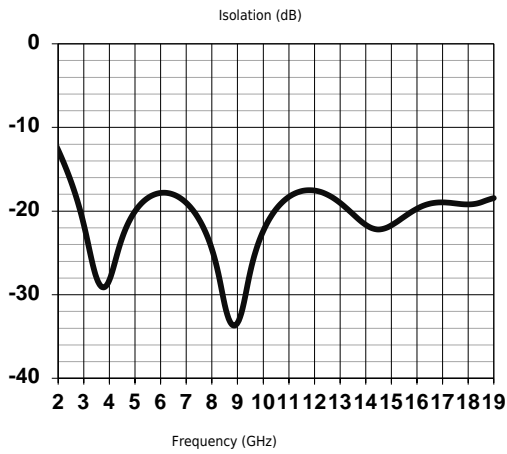
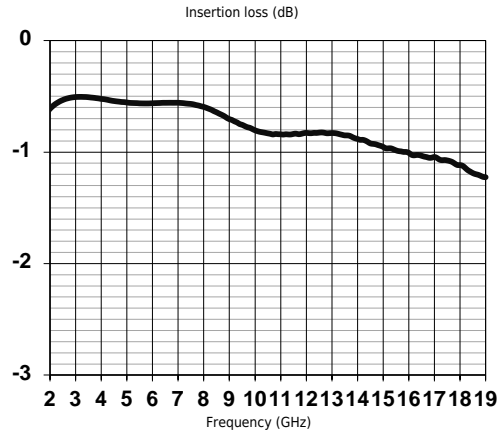
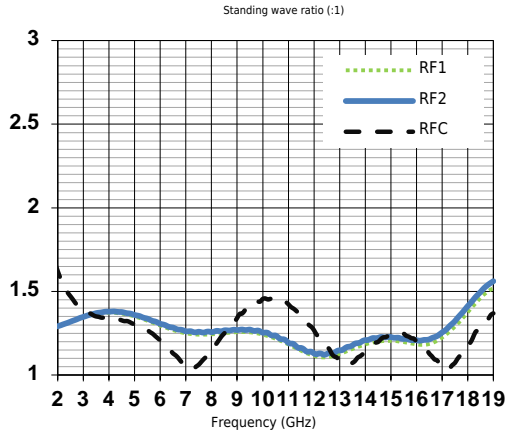
Absolute maximum ratings

Maximum input RF power	+30dBm	Operating temperature	-55 °C ~ + 85 °C
Channel temperature	150 °C	Storage temperature	-65 °C ~ + 150 °C

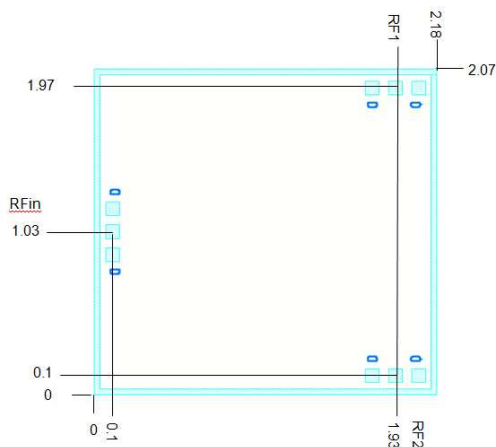
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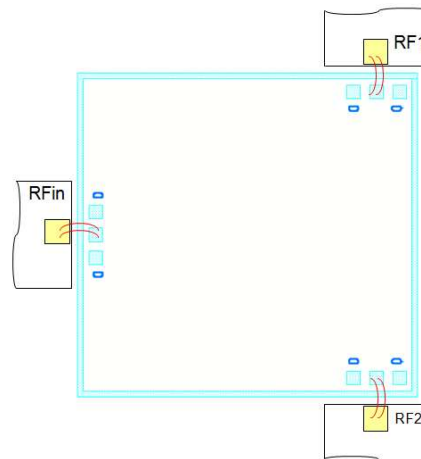
Typical test curve



Shape and port size (mm)



Recommended assembly drawing



Precautions

Gallium arsenide MMIC devices are susceptible to electrostatic discharge damage. Precautions should be taken during transportation, assembly and testing.