

GaAs monolithic two-way power splitter chip

1~18GHz

key indicator

- Frequency range: 1~18GHz
- Good input/output standing wave ratio: 1.4
- Chip size: 2.5mm x2.2mm x0.1mm

typical application

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

Product Introduction

AY1365 is a 0° ultra-wideband two-way power divider chip, the working frequency covers 1~18GHz, the typical value of insertion loss is 1dB, The typical standing wave ratio is 1.4.
The chip adopts an on-chip metallization process to ensure good grounding, and is suitable for eutectic sintering or conductive adhesive bonding processes.

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

parameter name	symbol	Test Conditions	Parameter value			unit
			MIN	TYP	MAX	
Frequency Range	f	$Z_{in}=Z_{out}=50\Omega$ $T_A=+25^\circ\text{C}$	1	—	18	GHz
Insertion loss	IL		—	-1	-1.8	dB
Insertion loss balance	IP		—		—	dB
RF1 standing wave ratio	VSWR		—	1.4	1.9	:1
RF1, RF2 standing wave ratio			—	1.4	1.6	:1
	ISO		-9	-20	—	dB

Absolute maximum ratings

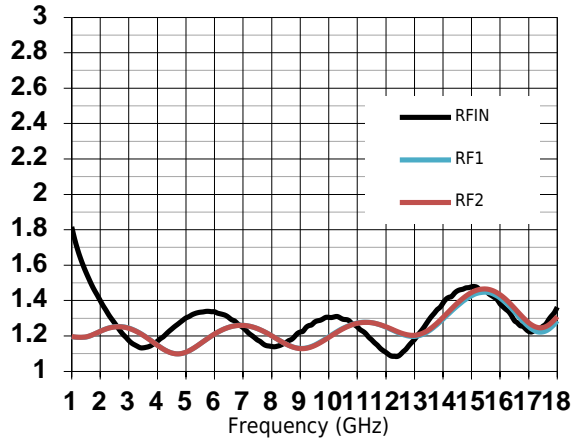
Maximum input RF power	27dBm	Operating temperature	-55 °C ~ + 85 °C
		Storage temperature	-65 °C ~ + 150 °C

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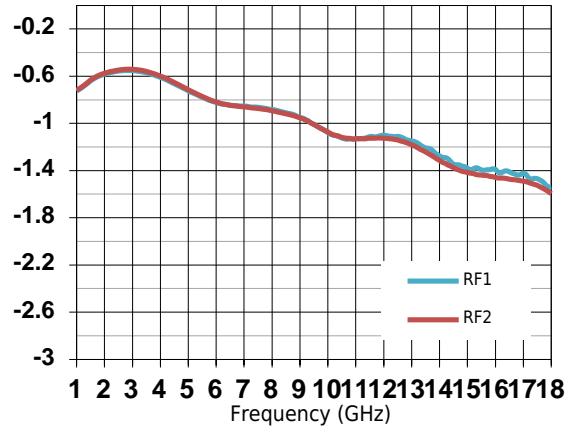
1~18GHz

Typical test curve

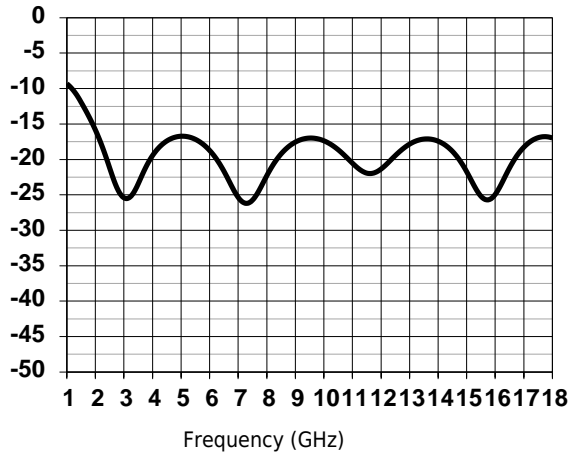
Standing wave ratio (:1) vs. frequency



Insertion loss (dB) vs. frequency



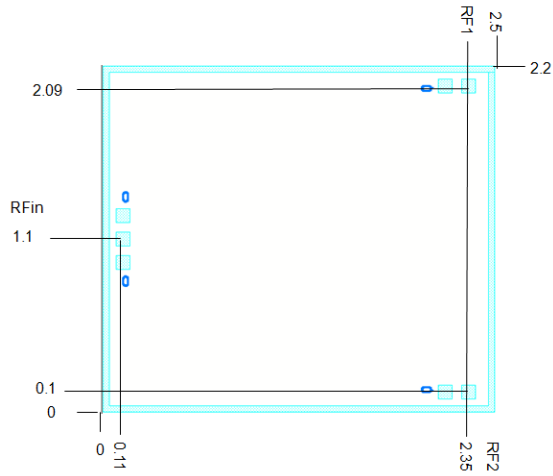
Isolation (dB) vs. Frequency



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Shape and port size (mm)



Recommended assembly drawing

