

GaAs MMIC Monolithic Integrated 0 Degree Power Divider , 2-6 GHz

Performance characteristics

- Range : 2-6GHz
- Insertion loss : 0.9 dB
- Isolation: 25dB
- Phase imbalance: 2 °
- Amplitude imbalance: 0.1dB
- 50Ohm input / output
- Chip size: QFN 3X3

Product Introduction

The GPD-0206B-CQ3 monolithic integrated 0 -degree power divider has low insertion loss, good isolation, low phase imbalance, low amplitude imbalance and other characteristics in the frequency range of 2 ~ 6 GHz , and is very suitable for microwave hybrid integrated circuits and multi-chip modules. The power divider adopts a 3X3 mm surface-mount leadless ceramic tube shell to achieve airtight packaging, and the surface of the pin pad is gold-plated, which is suitable for reflow soldering installation process.

Use restriction parameter ¹

Maximum input power	+40dBm
Operating temperature	-55 ~ +85°C
Storage temperature	-65 ~ +150°C

【1】 Exceeding any of these maximum limits may cause permanent damage.

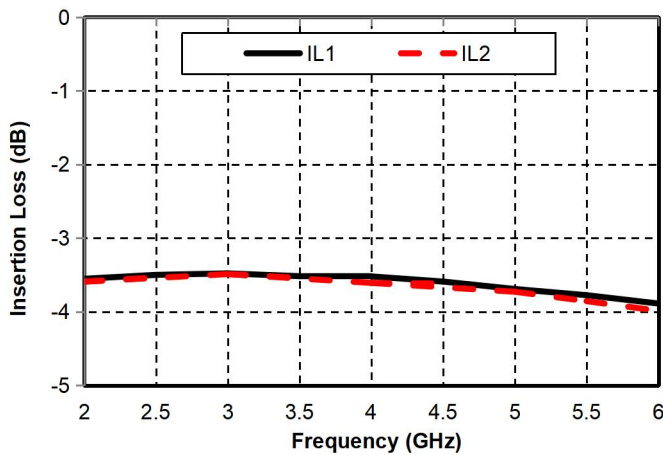
Electrical performance parameters (TA = +25°C)

Index	Minimum	Typical Value	Maximum	Unit
Frequency Range	2-6			GHz
Insertion loss (excluding inherent loss)	-	0.6	-	dB
Insertion loss fluctuation		± 0.2		dB
Isolation	-	25	-	dB
Phase imbalance	-	2	-	degree
Amplitude imbalance	-	0.1	-	dB
Input return loss	-	20	-	dB
Output return loss	-	22	-	dB

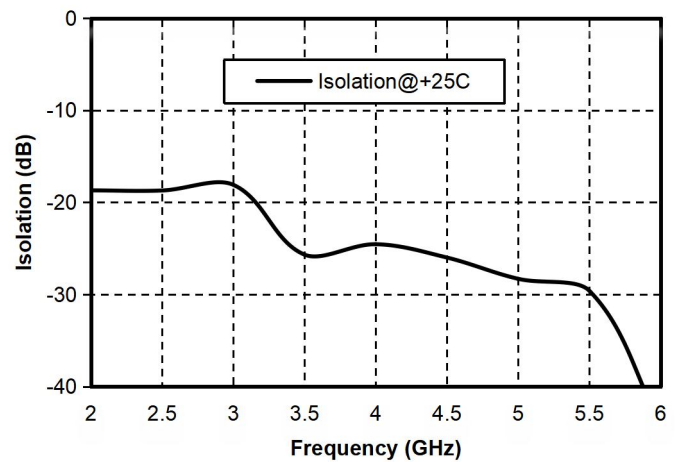
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Main index test curve

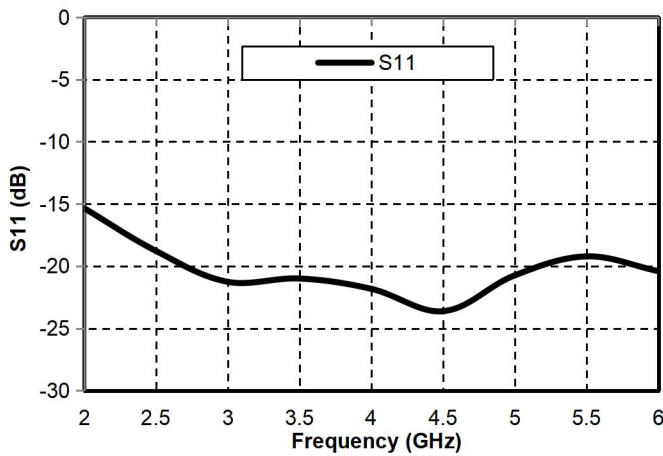
Insertion Loss vs. Operating Frequency



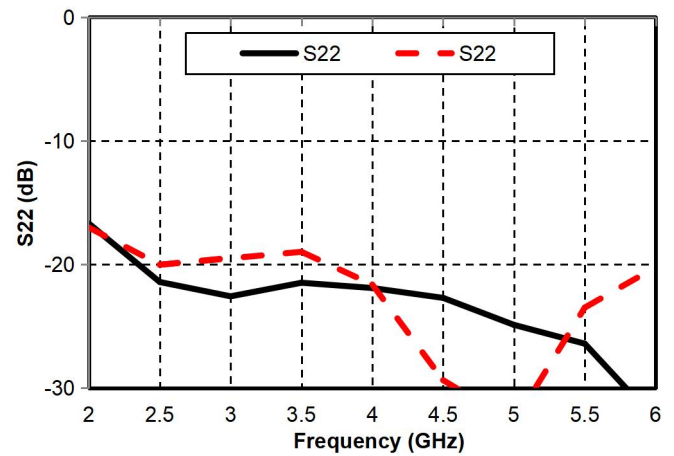
Isolation vs. Operating Frequency



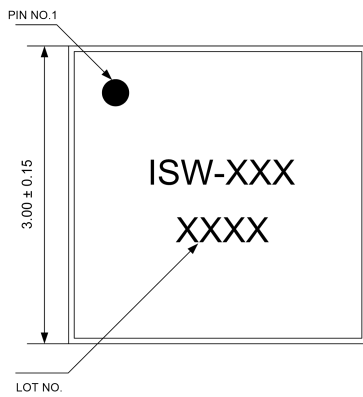
Input Return Loss vs. Operating Frequency



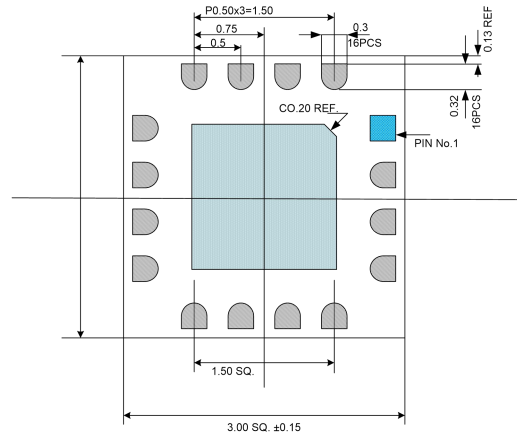
Output Return Loss vs. Operating Frequency



Appearance structure



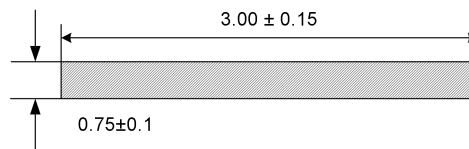
Top view



Bottom view

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Appearance structure

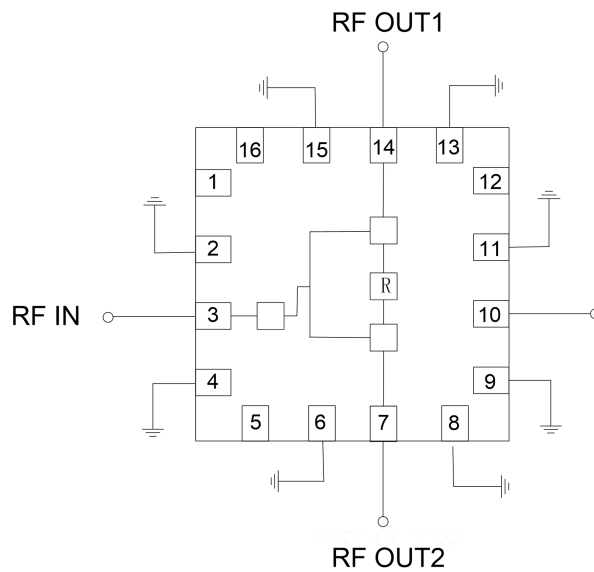


Side View

All units in the figures are millimeters .

Pin Definition		
Solder point number	Function Symbol	Functional Description
3	RFIN	RF signal input terminal
7 , 14	RFOUT1 , RFPUT2	RF signal output terminal
2 , 4 , 6 , 8 , 13 , 15	GND	The bottom of the chip needs to be well grounded to RF and DC
Other	NC	No welding required

Recommended assembly drawing



Precautions for use

- Sealing material : Ceramic material that meets ROHS standards
- Lead frame material: copper alloy
- Lead surface plating: gold, gold layer thickness 0.3um MIN
- Maximum reflow peak temperature: 260 °C