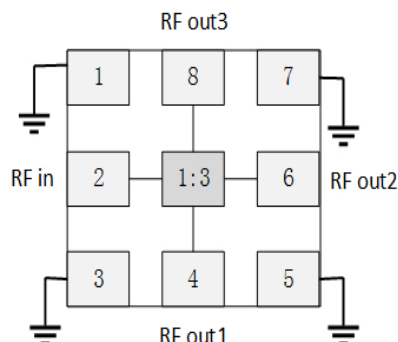


GaAs MMIC Monolithic Integrated 0 Degree Triple Power Divider , 12-18 GHz

Performance characteristics

- Frequency range: 12-18 GHz
- Insertion loss : 2 dB
- Isolation: 27dB
- Amplitude imbalance : ± 0.4 dB
- 50Ohm input / output
- Chip size: QFN 4X4



Product Introduction

GPD-12183-CQ4 monolithic integrated 0 degree three-way power divider has low insertion loss, good isolation, good amplitude imbalance and other characteristics in the frequency range of 12 ~ 18 GHz , which is very suitable for microwave hybrid integrated circuits and multi-chip modules. This chip adopts 4 x 4 ceramic surface mount package, and the surface of the pin pad is tinned, 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)

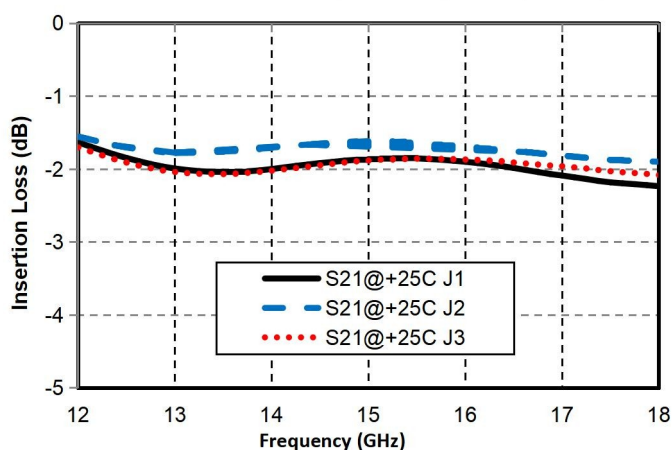
Index	Minimum	Typical Value	Maximum	Unit
Frequency Range	12-18			GHz
Insertion loss	-	2.0	-	dB
Insertion loss fluctuation	-	0.6	-	dB
Isolation	-	27	-	dB
Amplitude imbalance	-	± 0.4	-	dB
Input return loss	-	9	-	dB
Output return loss	-	11	-	dB

GPD-12183-CQ4 V1.2

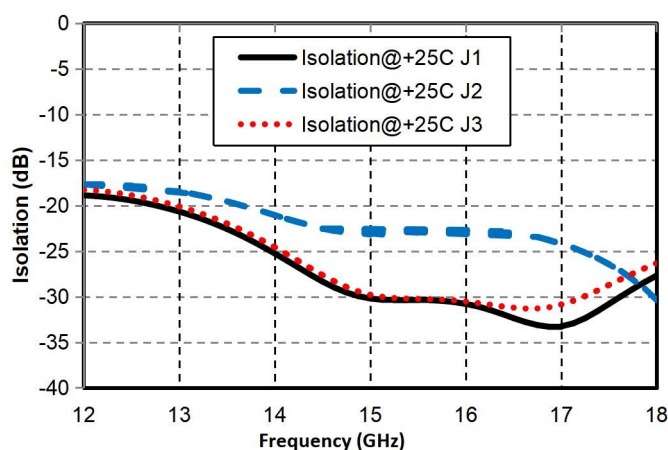
GaAs MMIC Monolithic Integrated 0 Degree Triple Power Divider , 12-18 GHz

Main index test curve

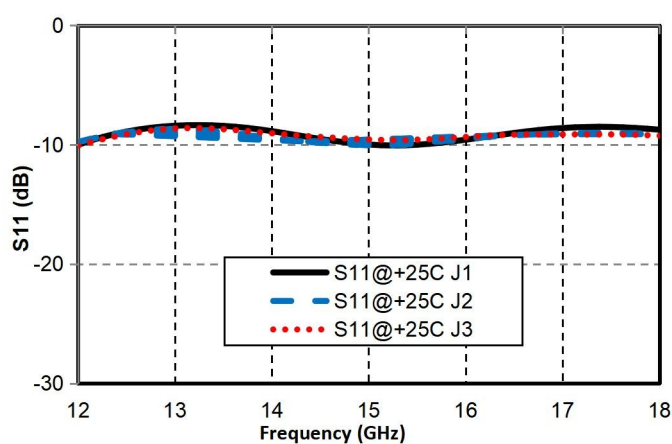
Insertion Loss vs. Operating Frequency



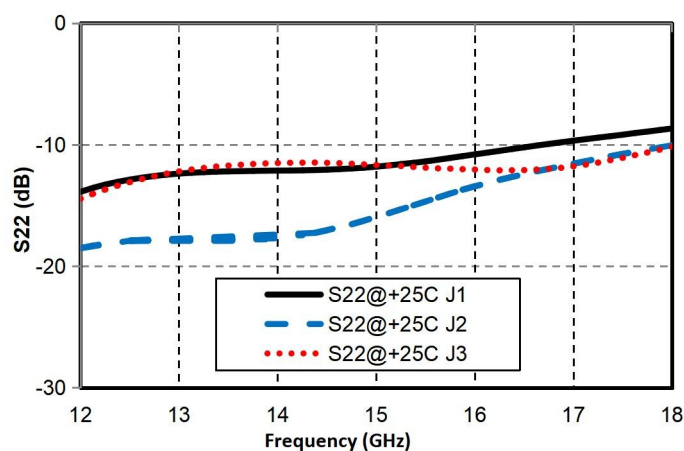
Isolation vs. Operating Frequency



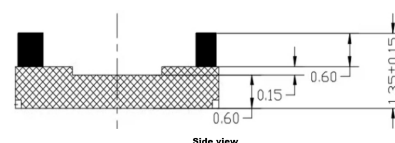
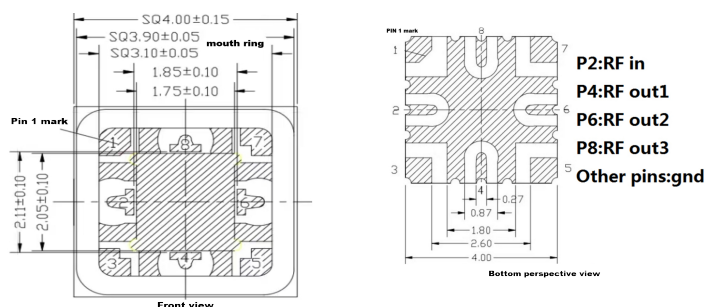
Input Return Loss vs. Operating Frequency



Output Return Loss vs. Operating Frequency



Appearance structure and pin definition

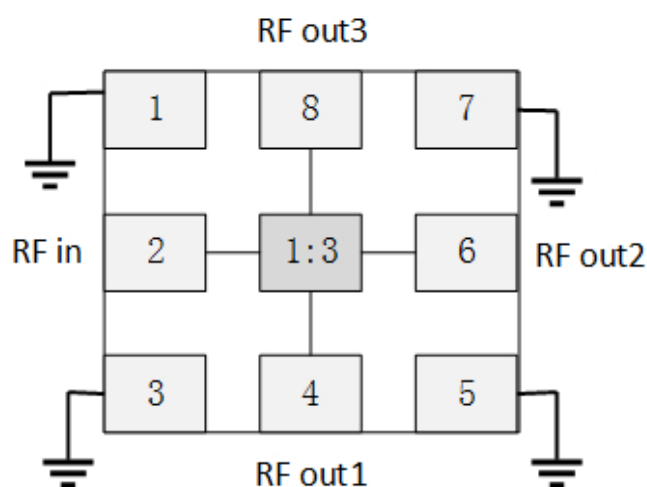


GPD-12183-CQ4 V1.2

GaAs MMIC Monolithic Integrated 0 Degree Triple Power Divider , 12-18 GHz

Pin Definition		
Solder point number	Function Symbol	Functional Description
2	RFIN	RF signal input terminal
4 , 6, 8	RFOUT1 , RFOUT2 , RFOUT3	RF signal output terminal
1 , 3, 5, 7	GND	The bottom of the chip needs to be well grounded to RF and DC

Recommended assembly drawing



Precautions for use

- Sealing material : Low-pressure injection molding plastic that meets ROHS specifications
- Lead frame material: copper alloy
- Lead surface plating: 100% matte tin
- Maximum reflow peak temperature: 260 °C