

GaAs MMIC Monolithic Integrated Low Pass Filter , DC-10 GHz

Performance characteristics

- Frequency range: DC-10GHz
- Insertion loss: 2.5dB (typ.)
- Stopband attenuation: $\geq 30\text{dB}@14.2\text{GHz}$;
 $\geq 40\text{dB}@15\sim 20\text{GHz}$
- Input/output standing wave: 1.5
- 50Ohm input/output
- Chip size: QFN 4X4

Use limit parameters

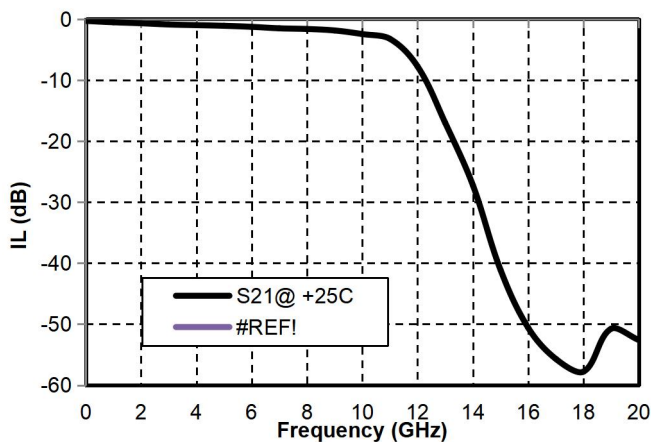
Maximum input power	+30dBm
Operating temperature	-55 ~ +85°C
Storage temperature	-65 ~ +150°C

Product Introduction

GFL -10-CQ4 single-chip coupler chip, frequency range covers DC ~ 10GHz , in-band insertion loss 2.5 dB , in-band standing wave 1.5 . This chip adopts 4 x 4 mm ceramic surface mount package, the pin pad surface is gold-plated, suitable for reflow soldering installation process.

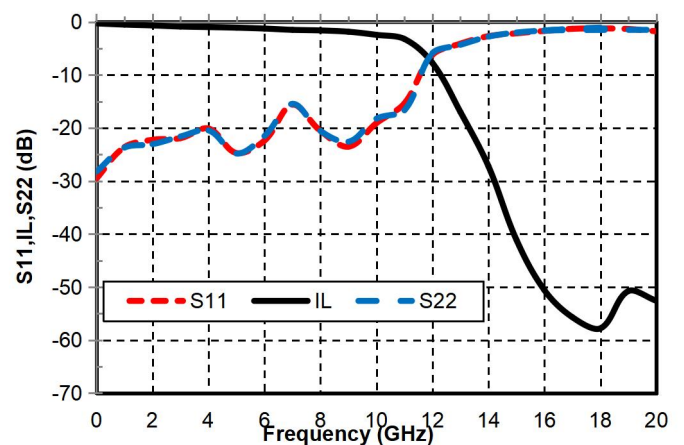
Main index test curve

Insertion Loss vs. Operating Frequency

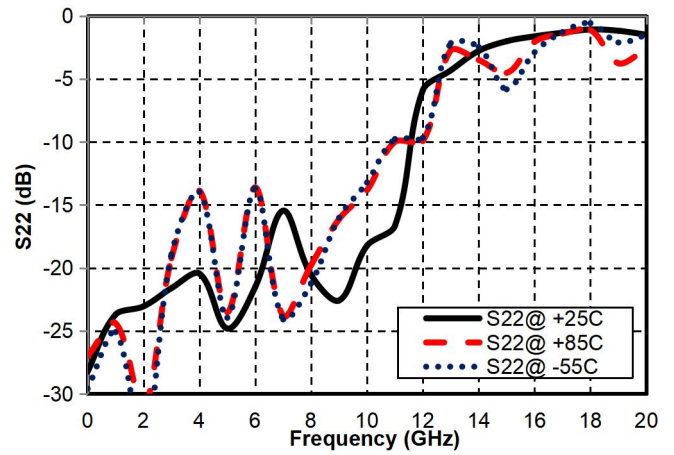
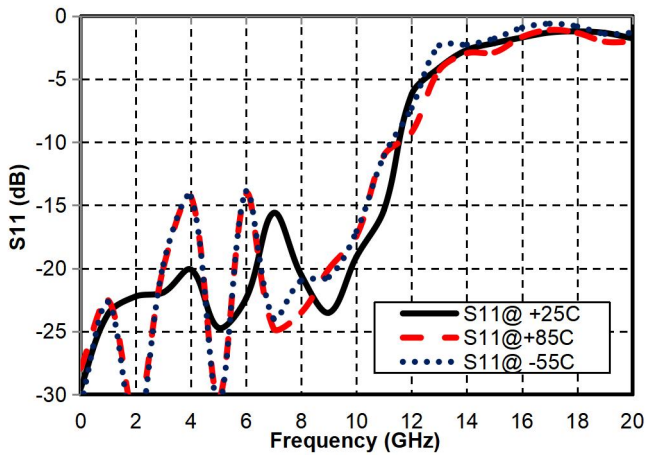


Input Return Loss vs. Operating Frequency

Insertion Loss vs. Operating Frequency

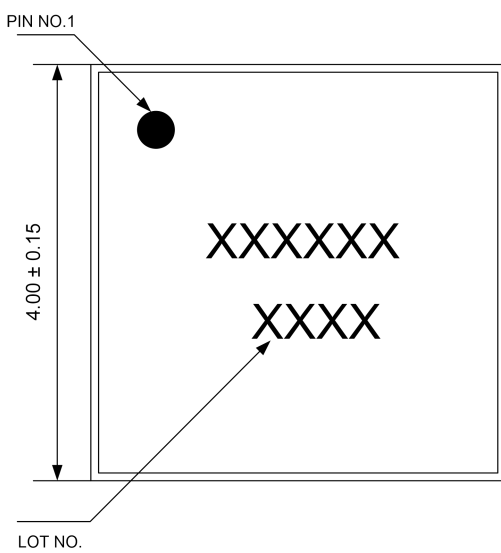


Output Echo vs. Operating Frequency

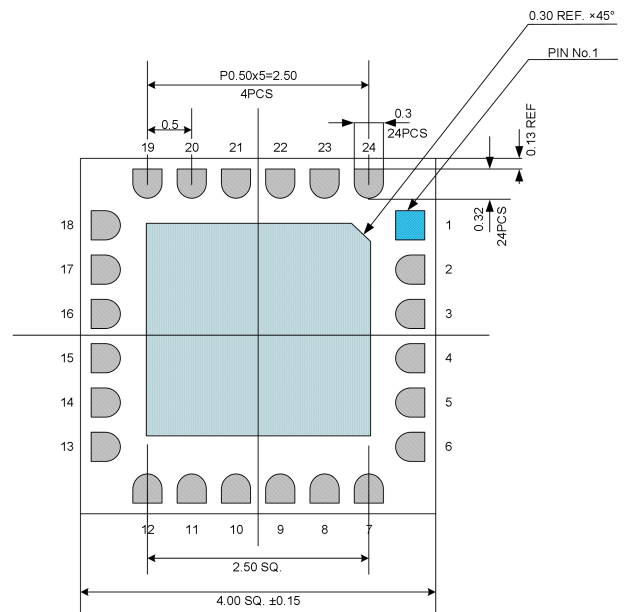


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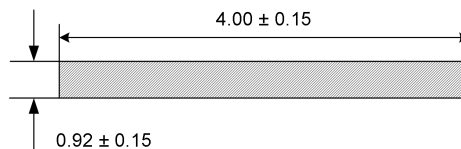
Appearance structure



Top view



Bottom view



Side View

The units in the figures are all in millimeters , and the tolerance is ± 0.15 mm.

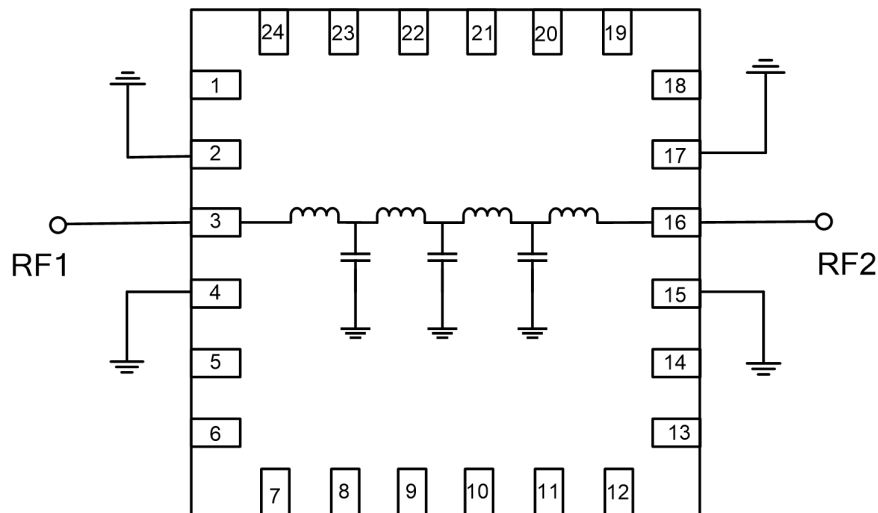
Pin Definition

Pin number	Function Symbol	Functional Description

3	RFIN	RF signal input terminal
16	RFOUT	RF signal output terminal
2, 4, 15, 17	GND	The pins need to be in good contact with the RF and DC grounds.
Chip bottom	GND	Needs to be in good contact with the RF and DC grounds
Other	NC	The pin is floating and can be grounded

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Recommended Circuit



Precautions for use

- Sealing material : Ceramic material that meets ROHS standards
- Lead frame material: copper alloy
- Lead surface plating: gold, gold layer thickness 0.30um MIN
- Maximum reflow peak temperature: 260 °C