

GaAs MMIC Limiter Chip, 8 - 12 GHz

Performance characteristics

- Frequency range: 8 - 12 GHz
- Insertion loss : 1.1 dB (Tpy .)
- Limiting level: 14dB m
- Power handling: 40dBm (CW)
- 50Ohm input / output
- Chip size: QFN 4X4

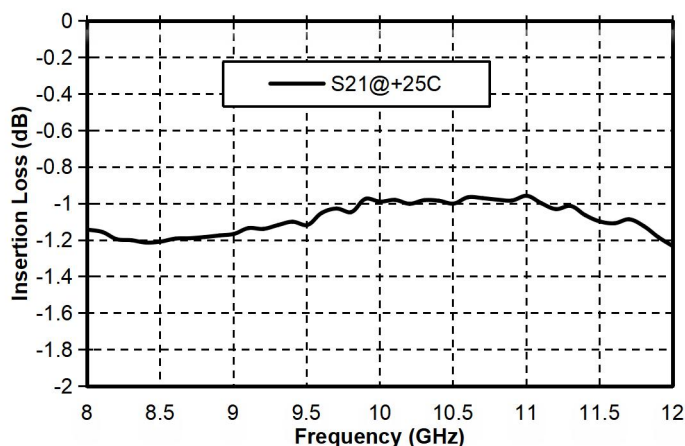
GLM-0812A-CQ4 is a GaAs MMIC limiter with a frequency range of 8~12 GHz and an insertion loss of 1.1 dB within the operating frequency band. wave 1. 4, anti-burning power 40dBm. The limiter adopts 4X4mm surface-mount leadless ceramic tube shell, which can achieve airtight packaging. The surface of the pin pad is plated gold process, suitable for reflow soldering installation process.

Electrical performance parameters (TA = +25°C)

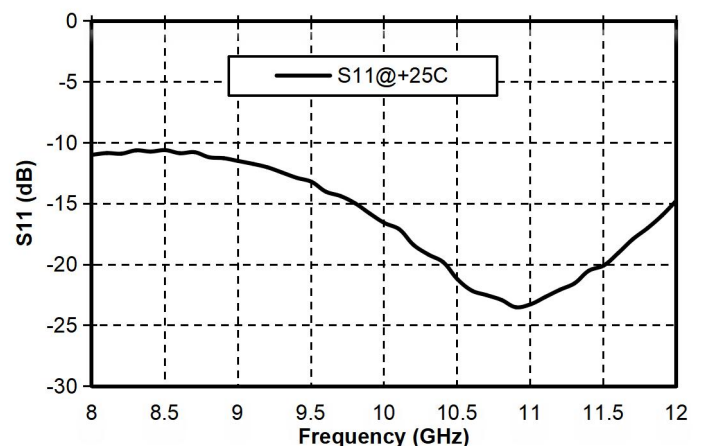
Index	Minimum	Typical Value	Maximum	Unit
Frequency Range	8-12			G Hz
Insertion loss	-	1.1	-	dB
Input return loss	-	16		dB
Output return loss	-	16		dB
Clipping level	-	14	-	dBm
Anti-burning power	-	-	40	dBm

Main index test curve

Insertion Loss vs. Operating Frequency

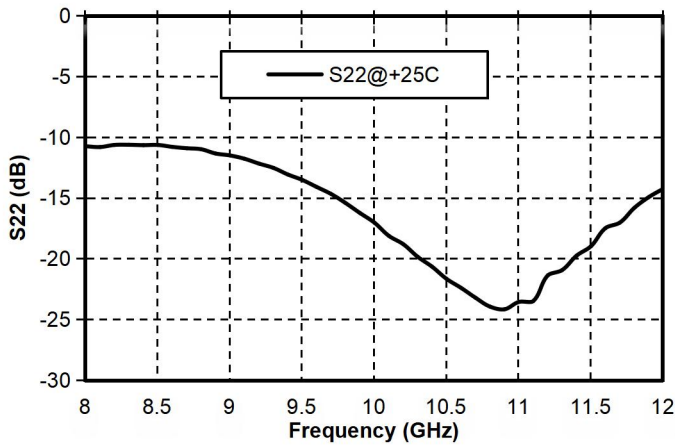


Input Standing Wave vs. Operating Frequency

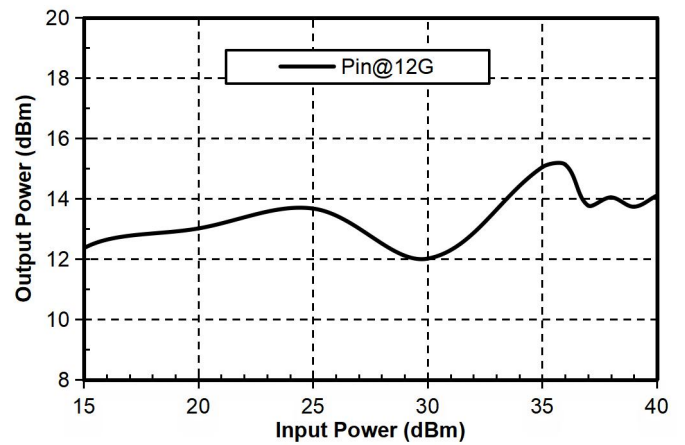


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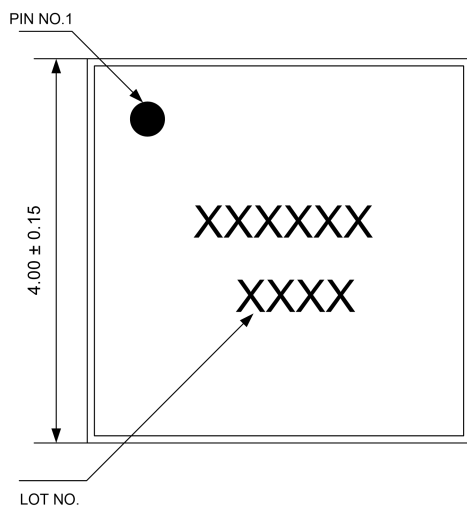
Output Standing Wave vs. Operating Frequency



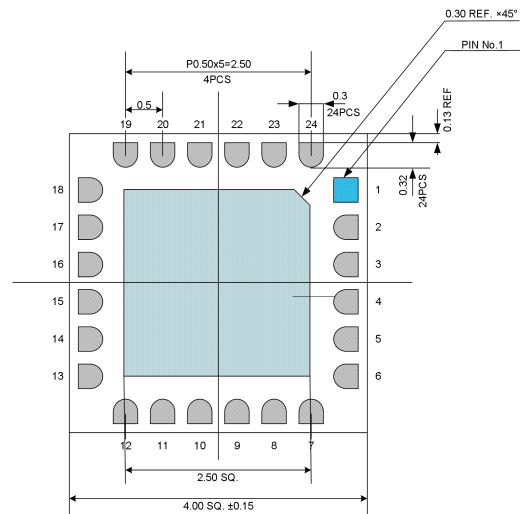
Clipping level @12GHz



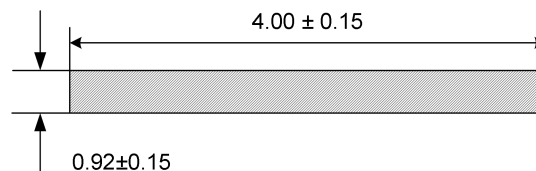
Appearance structure



Top view



Bottom view

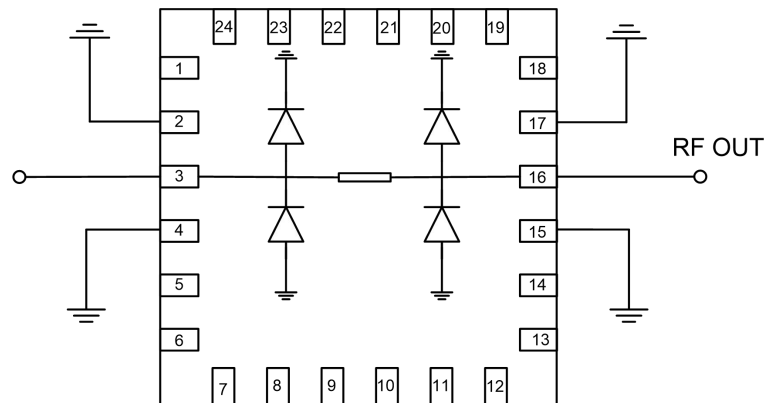


Side View

All units in the figures are millimeters .

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Recommended assembly drawing



Pin Definition		
Pin number	Pin number	Pin number
3	RFIN	RF signal input terminal, no external DC blocking capacitor required
16	RFOUT	RF signal output terminal, no external DC blocking capacitor required
2, 4, 15, 17	GND	Needs to be in good contact with the RF and DC grounds
1, 5~14, 18~24	NC	No welding required

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

Use limit parameters

Maximum input power	+40dBm
Operating temperature	-55 ~ + 125 °C
Storage temperature	-65 ~ +150°C

Exceeding any of these maximum limits may cause permanent damage.