

GaAs MMIC Limiter Chip, DC - 18 GHz

Performance characteristics

- Frequency range: DC - 18 GHz
- Insertion loss : 0.9 dB (Tpy .)
- Limiting level: 16dB m
- Power handling: 37dBm (CW)
- 50Ohm input / output
- Chip size: QFN 4X4

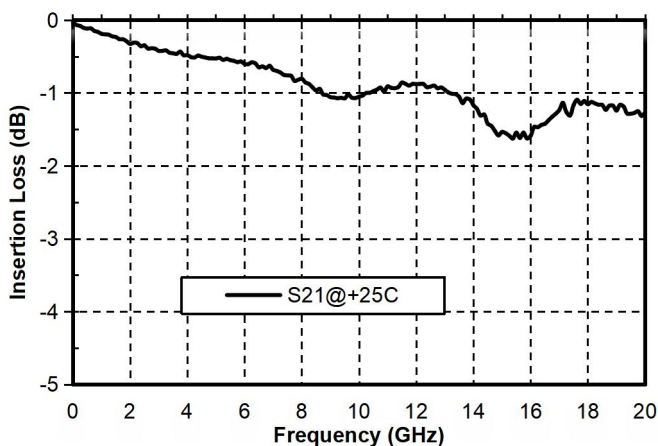
GLM-0018A-CQ4 is a GaAs MMIC limiter with a frequency range of DC~18GHz , an insertion loss of 0.9dB , an input and output standing wave of 1.5 , and an anti-burnout power of 37dBm within the working frequency band . The amplifier adopts a 4X4mm surface-mount leadless ceramic tube shell, and the surface of the pin pad is gold-plated, which is suitable for reflow soldering installation process.

Electrical performance parameters (TA = +25°C)

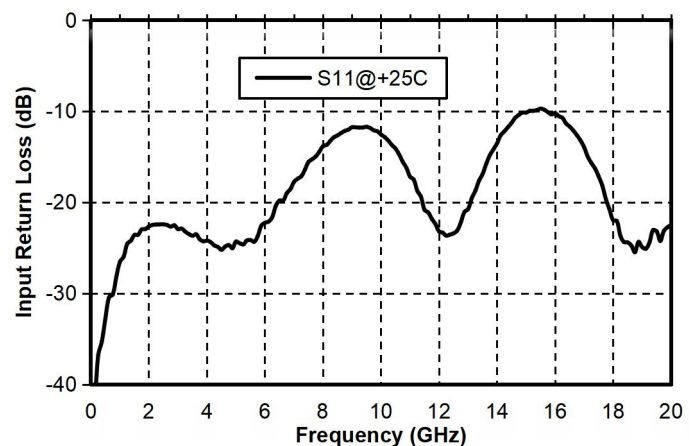
Index	Minimum	Typical Value	Maximum	Unit
Frequency Range	DC-18			G Hz
Insertion loss	-	0.9	-	dB
Input return loss	-	19	-	dB
Output return loss	-	20	-	dB
Clipping level	-	16	-	dBm
Anti-burning power	-	-	37	dBm

Main index test curve

Insertion Loss vs. Operating Frequency

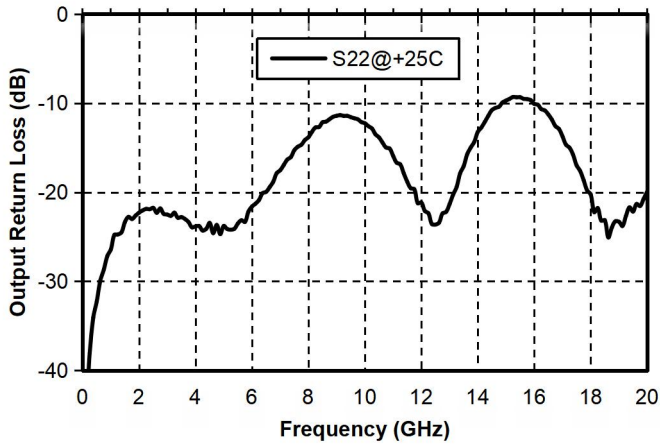


Input Standing Wave vs. Operating Frequency

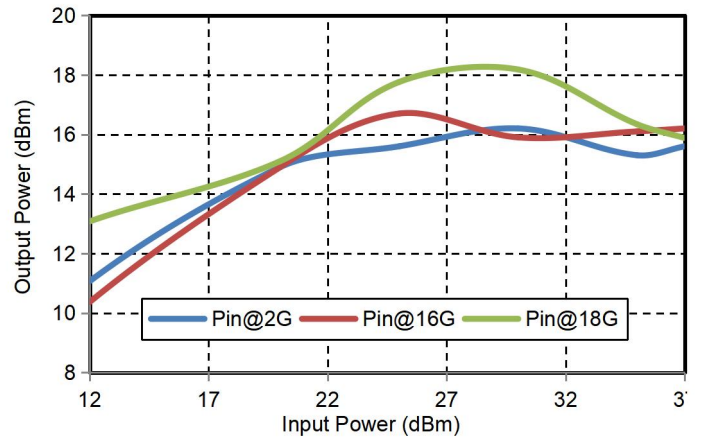


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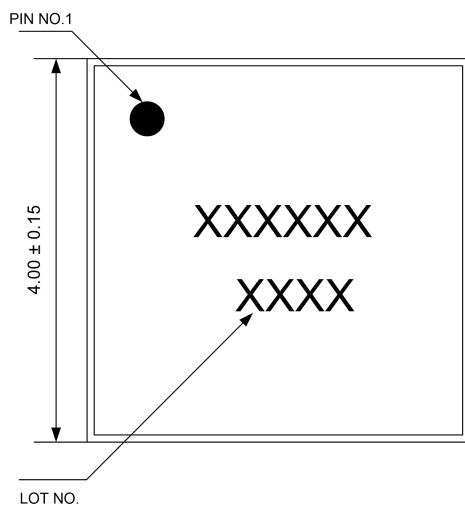
Output Standing Wave vs. Operating Frequency



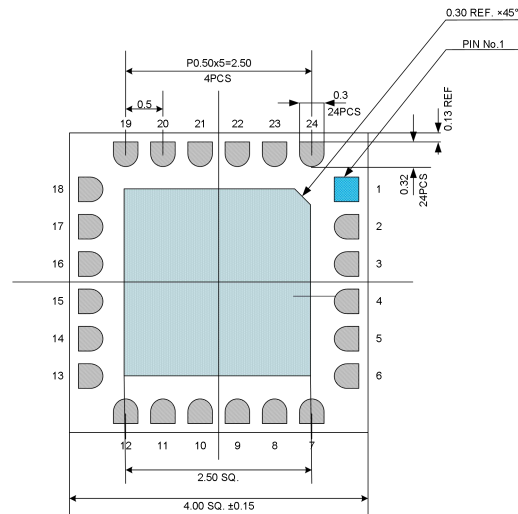
Clipping level @2G & 16G & 18G



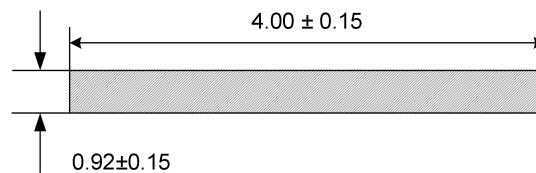
Appearance structure



Top view



Bottom view

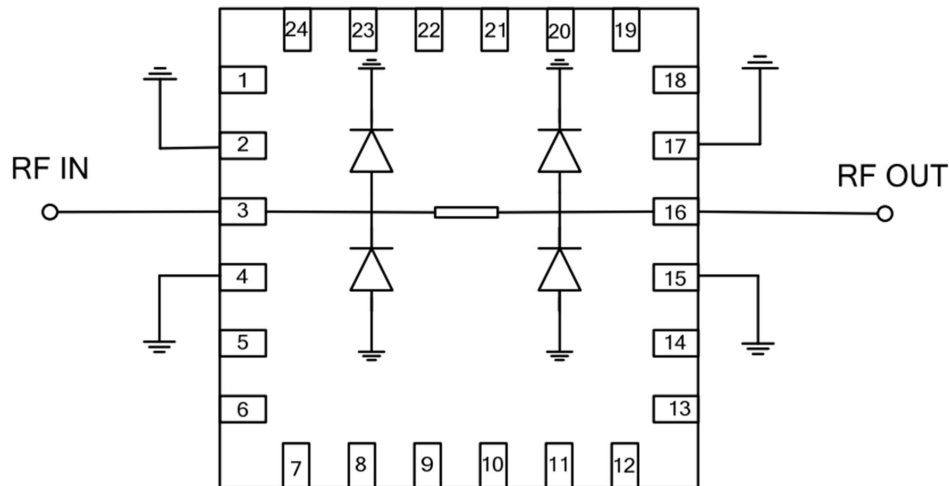


Side View

All units in the figures are millimeters .

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Application Circuit



Pin Definition

Bonding point number	Function Symbol	Functional Description
3	RFIN	RF signal input terminal, external DC blocking capacitor is required
16	RFOUT	RF signal output terminal, external DC blocking capacitor is required
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	No welding required, can be grounded

Precautions for use

- Sealing material : Ceramic material that meets ROHS standards
- Lead surface plating: gold, gold layer thickness greater than 1.5um
- Maximum reflow peak temperature: 260 °C

Use limit parameters

Maximum input power	+37dBm
Operating temperature	-55 ~ + 125 °C
Storage temperature	-65 ~ +150°C

Exceeding any of these maximum limits may cause permanent damage.