

Performance Characteristics:

- Frequency range: 10GHz~18GHz
- Insertion loss: 0.6dB
- Limiting level: 17dBm
- Input/output voltage standing wave ratio: 1.6/1.6
- Resistant power: 20W+ (PW=2ms,DC=20%)
- Chip size: 1.4mm×1.25mm×0.10mm(can be made into 1.4×0.85)

Product Description:

CW-LM1018 is a GaAs process broadband limiter chip. Its band range covers 10GHz-18GHz, insertion loss is less than 0.6dB, and input-output voltage standing wave ratio is less than 1.6.

Electrical parameters: (TA=25°C)

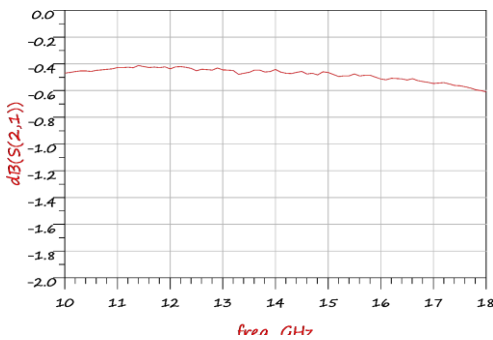
Indicators	Minimum	Typical value	Maximum value	Units
Frequency range	10-18			GHz
Insertion loss	-	0.5	0.6	dB
Enter the standing wave ratio	-	-	1.6	-
Output standing wave ratio	-	-	1.6	-
Limiting level	-	17	-	dBm

Use limit parameters: (Exceeding any of the above maximum limits is likely to cause permanent damage.)

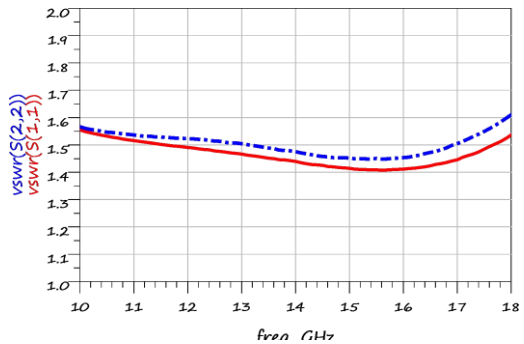
Maximum input power	43.5dBm
Storage temperature	-65°C -150°C
Service temperature	-55°C -125°C

Typical curve:

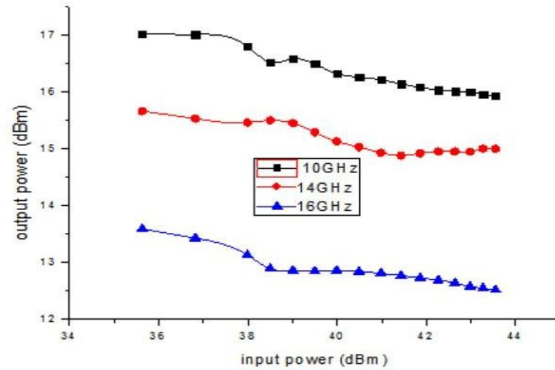
Insertion loss



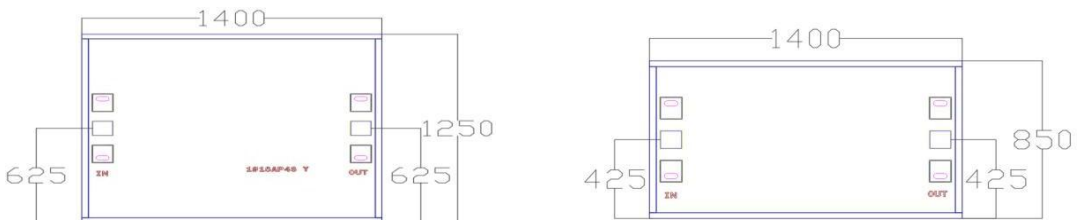
standing wave ratio



Limiting level

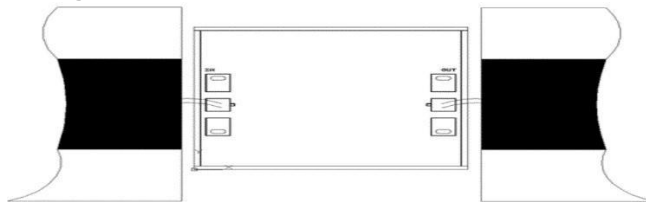


Chip size diagram: (unit μm)(two size options)



Note: All sizes are in (μm) and the press-point size is $100 \times 100 \mu\text{m}^2$

Proposed assembly drawing for the chip:



Instructions:

1. Assembly in a purified environment;
2. GaAs material is very brittle, chip surface is easy to be damaged, do not touch the surface, must be careful when using;
3. Input and output with two bonding lines (diameter of $25 \mu\text{m}$), the bonding line as short as possible, not more than $300 \mu\text{m}$;
4. The back of the chip must be grounded;
5. Sintered with 80/20 gold tin. The sintering temperature should not exceed 300°C , and the sintering time should not exceed 30 seconds as short as possible;
6. This product belongs to electrostatic sensitive device, pay attention to anti-static when storing and using;
7. Dry and nitrogen storage environment;
8. Do not try to clean the surface of the chip by dry or wet chemical methods;
9. Contact the supplier if you have any problems.