

Performance Characteristics:

- Frequency range: DC~67GHz
- Insertion loss: 3dB
- Isolation level: 20dB
- Standing wave: 1.5
- Nanosecond switching speed and excellent power processing capability

Product Introduction:

The frequency range of this chip covers DC~67GHz, with an insertion loss of less than 3dB and an isolation of over 20dB. The chip adopts -5V/0V logic control, with a switching speed of 20ns and 1dB compressed input power+20dBm. The chip size is 0.96mm x 1.00mm x 0.07mm.

Electrical parameters (TA = +25 °C, Ve= -5V/0V)

Index	Min	Typ	Max	Unit
Frequency Range	DC~67			GHz
Insertion Loss		3	4	dB
Isolation Degree	15	20		dB
Input/Output Standing Wave		1.5	1.8	-

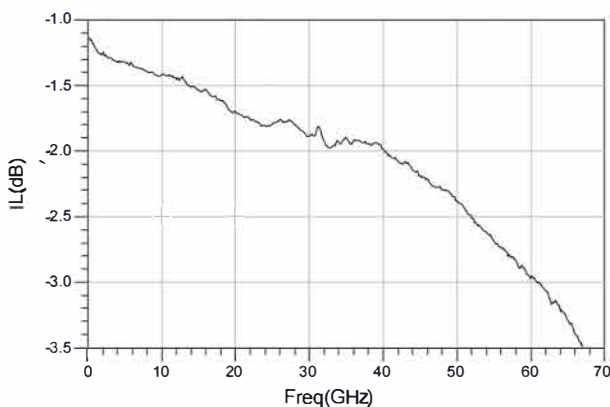
Use Restriction Parameters

Control voltage range	-8V~+0.5V
Maximum input power	+24dBm
Storage temperature	-65°C~+150°C
Usage temperature	-55°C~+125°C

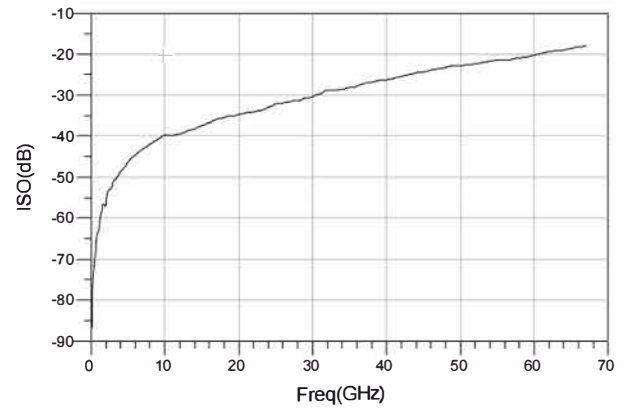
Typical Curve

In order to provide users with a more intuitive understanding of the performance indicators of the chip, the following are curve graphs for each index.

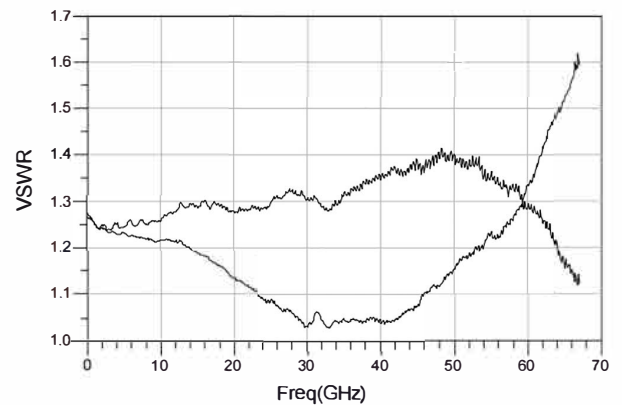
Insertion Loss vs. Frequency



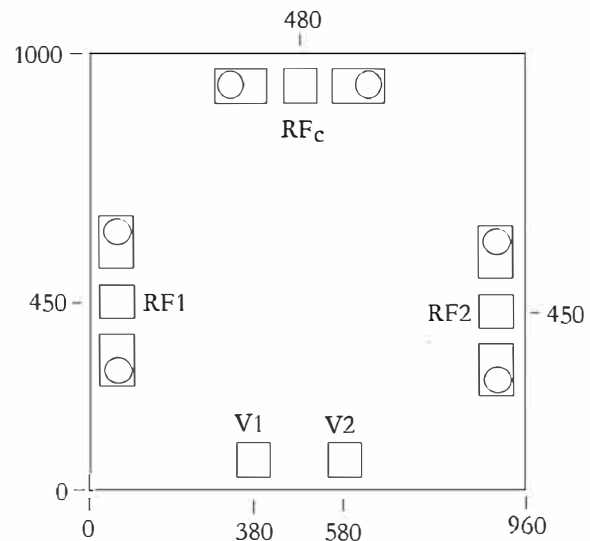
Isolation vs Frequency



Open Standing Wave vs. Frequency



External Dimensions



Note: All dimensions are in micrometers (μm); RF voltage point size $100 \times 100 \mu\text{m}^2$, DC voltage point size $100 \times 100 \mu\text{m}^2$.

Truth Table

	V1	V2
RFc-RF1	0	-5
RFc-RF2	-5	0

Note:

- 1) Assemble and use in a purified environment.
 - 2) GaAs material is very brittle and the chip surface is easily damaged (do not touch the surface), so caution must be taken when using it.
 - 3) Use a wire with a diameter of 25 μ m and a bonding wire length of around 100 μ m for bonding.
 - 4) Input and output without DC blocking capacitors.
 - 5) Use 80/20 gold tin sintering, with a sintering temperature not exceeding 300°C and a sintering time as short as possible, not exceeding 30 seconds.
 - 6) This product belongs to the category of electrostatic sensitive devices. Please pay attention to anti-static measures during storage and use.
 - 7) Store in a dry and nitrogen environment.
 - 8) Do not attempt to clean the surface of the chip using dry or wet chemical methods.
 - 9) Please contact the supplier if you have any questions.
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