

GaAs MMIC Absorptive SPST Switch Chip, DC- 12 GHz

Performance characteristics

- Frequency range: DC-12GHz
- Insertion loss: 1.8dB
- Isolation degree: 61dB
- Open state standing wave ratio: 1.4
- 50Ohm input/output
- QFN4X4mm

Product Introduction

GSW-0012ST is a GaAs MMIC absorption single pole single throw switching chip with input/output 50 Ω matching, frequency range covering DC~12GHz, and powered by 0V/-5V. Switching speed of 10ns. The amplifier adopts a 4X4mm surface mount lead-free ceramic casing, which can achieve airtight packaging. The surface of the pin pads is treated with gold plating technology, suitable for reflow soldering installation process.

Use restriction parameters ¹	
Control voltage range	-8V~+0.5V
Maximum input power	+30dBm
Working temperature	-55 ~ +85°C
Storage temperature	-65 ~ +150°C

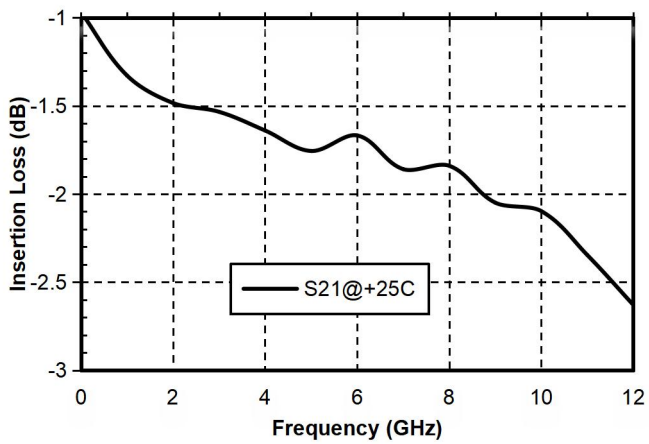
【1】 Exceeding any of the above maximum limits may result in permanent damage.

Electrical performance parameters($T_A = +25^\circ\text{C}$)				
Index	Minimum value	Typical value	Maximum value	Unit
Frequency range	DC-12			GHz
Insertion loss	-	1.8	-	dB
Isolation degree	-	61	-	dB
Input return loss	-	20	-	dB
Output Return Loss	-	19	-	dB
P-1dB	-	23	-	dBm
Switching speed	-	10	-	ns

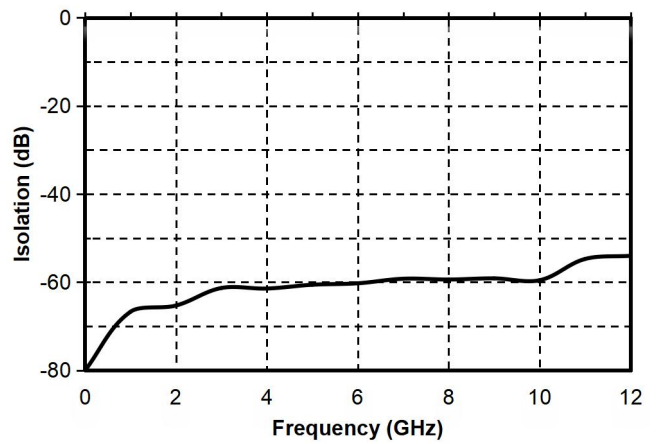
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Main indicator testing curve

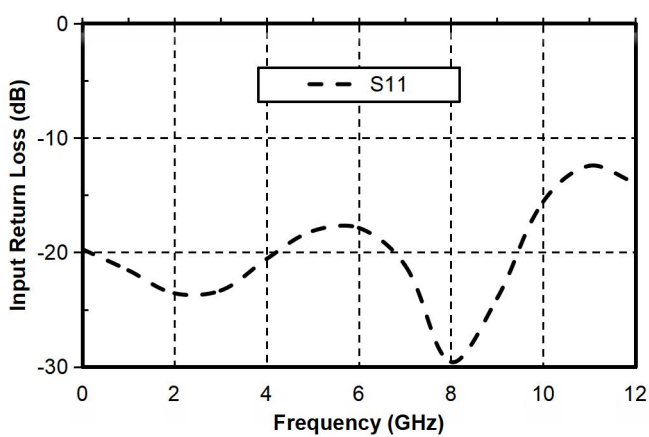
Insertion loss vs. operating frequency



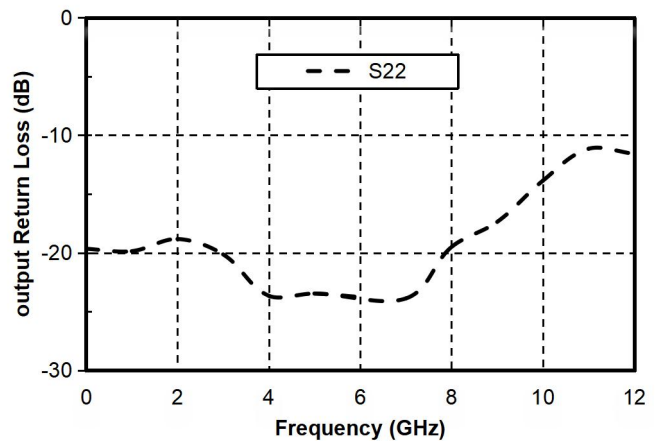
Isolation degree vs. operating frequency



Input wave loss vs. operating frequency



Output return loss vs. operating frequency



Application circuit

