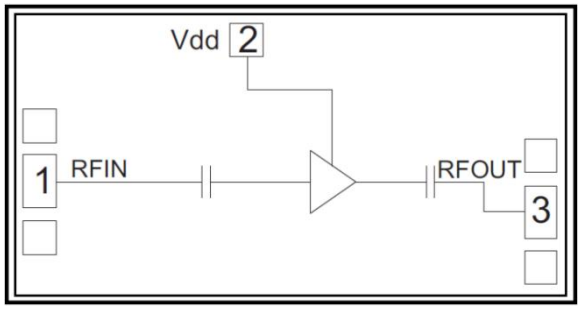
GLA-1725E

GaAs MMIC Low noise amplifier chip，17-25GHz

Performance characteristics

- Frequency range: 17-25GHz
- Small signal gain: 24.5dB
- Gain flatness: ±0.4dB
- Noise figure: 1.3dB typ.
- P-1dB：13.5dBm
- Psat：14.5dBm
- Power supply:+5V/55mA
- Input/Output: 50Ohm
- 100% on-chip testing
- Chip size: 1.9 x 0.95 x 0.09 mm

Functional Block Diagram



Product Introduction

GLA-1725E is a broadband low-noise amplifier chip, with a frequency range of 17GHz~25GHz, a small signal gain of 24.5dB, and an in band noise figure of 1.3dB. GLA-1725E adopts+5V single power supply.

Use restriction parameters[1]	
Maximum leakage voltage	+7V
Maximum input power	+20dBm
Working temperature	-55 ~ +125°C
Storage temperature	-65 ~ +150°C

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

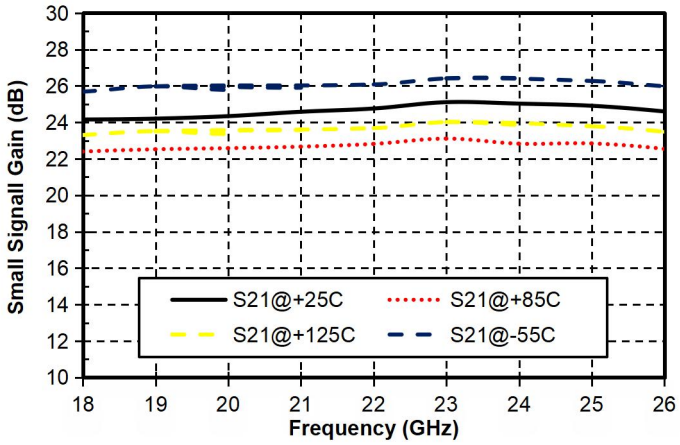
Electrical performance parameters(T_A = +25°C，Vd=+5V)				
Index	Minimum value	Typical value	Maximum value	Unit
Frequency range		17-25		GHz
Small signal gain	-	24.5	-	dB
Gain flatness		±0.5		dB
Noise figure	-	1.3	-	dB
P-1dB	-	13.5	-	dBm
Psat	-	14.5	-	dBm
Input return loss	-	13	-	dB
Output return Loss	-	17	-	dB
Static current		55		mA

Add: 101 cecil street #14-10, tong eng building singapore 069533
Email: info@standardcircuit.com
Web: www.standardcircuit.com
Tel: +65 82613258

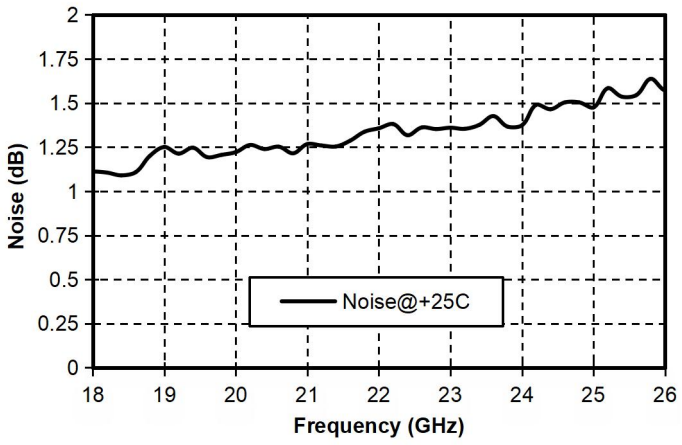
GaAs MMIC Low noise amplifier chip，17-25GHz

Main indicator testing curve

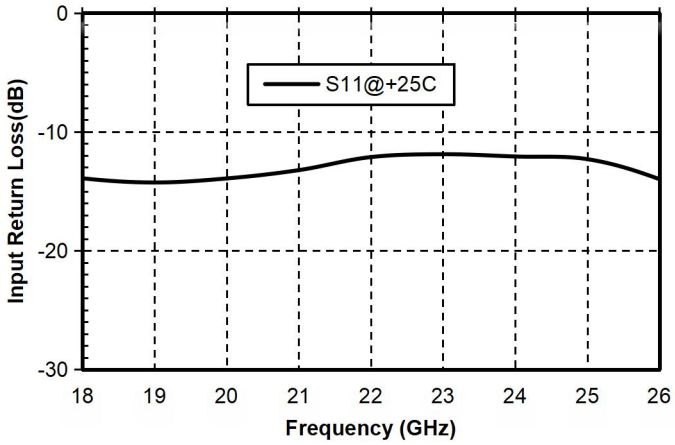
Gain vs. Temperature



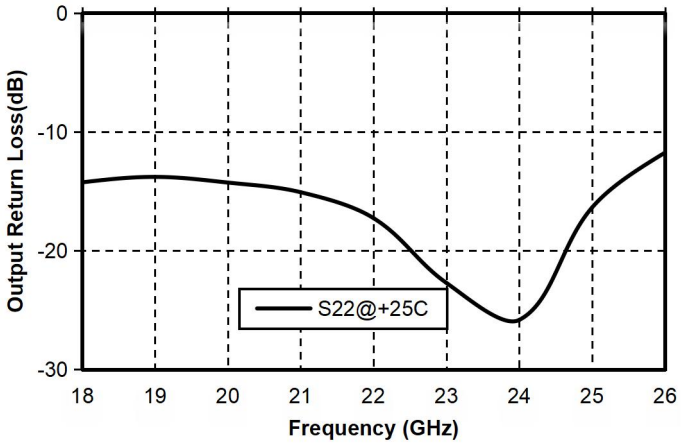
Noise Figure vs. Temperature



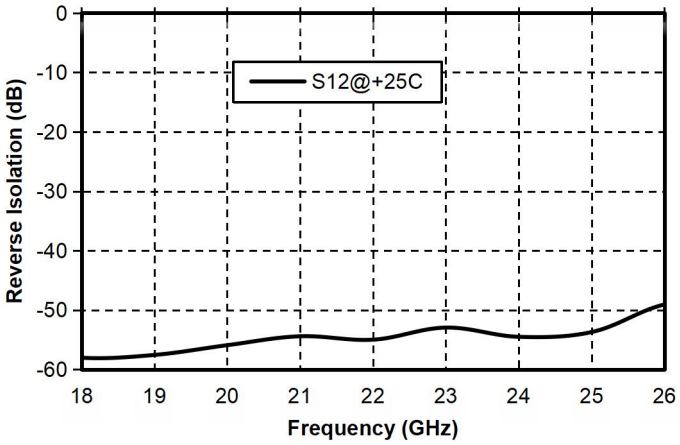
Input return loss vs. Temperature



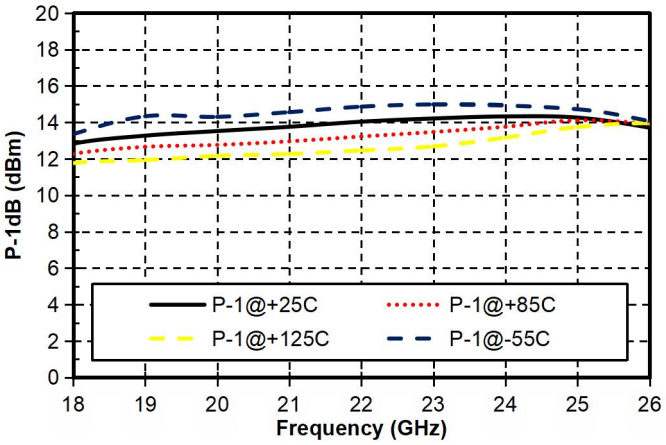
Output return Loss vs.Temperature



Reverse isolation vs. Temperature



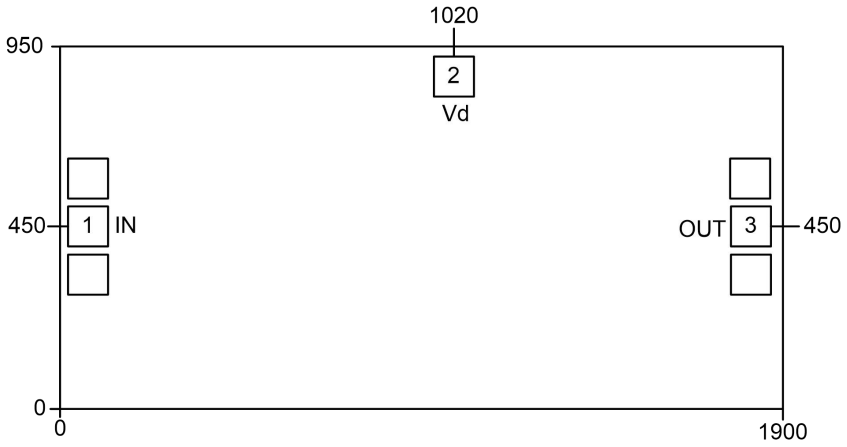
P-1dB vs. Temperature



Add: 101 cecil street #14-10, tong eng building singapore 069533
Email: info@standardcircuit.com
Web: www.standardcircuit.com
Tel: +65 82613258

GaAs MMIC Low noise amplifier chip，17-25GHz

External structure[2]



【2】The units in the figure are all millimeters.

Definition of bonding pressure point		
Bond point number	Functional symbols	Function Description
1	RFIN	RF signal input terminal, no need for DC capacitors.
3	RFOUT	RF signal output terminal, no need for DC isolation capacitor.
2	VDD	Amplifier drain bias, requires an external 100pF bypass capacitor.
Chip bottom	GND	The bottom of the chip needs to be well grounded with RF and DC.

Recommended assembly diagram