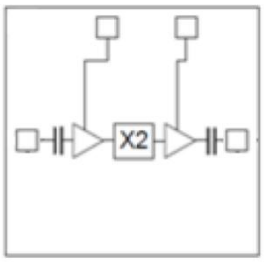
GL-1326-2B

GaAs MMIC Frequency Multiplier Chip,13-26GHz

Performance characteristics

- Frequency Range: 13 - 26 GHz
- Typical power output : 17dBm
- Typical input power: -4dBm
- Working voltage: +5V/105mA
- 50Ohm input/output
- 100% on-chip testing
- Chip size : 1.41 x 2.0 x 0.1mm

Functional Block Diagram



Product Introduction

GL-1326-2B is an active doubler chip. When the input signal power is -4 dBm , the output signal power in the range of 13 GHz to 26 GHz is 17 dBm . The chip through-hole metallization process ensures good grounding, and the back side is metallized, which is suitable for eutectic sintering or conductive adhesive bonding process .

Use restriction parameter [1]	
Maximum input power	+20dBm
Maximum working range	+ 8V
Operating temperature	-55 ~ +85°C
storage temperature	-65 ~ +150°C

【1】Exceeding any of these maximum limits may cause permanent damage.

Electrical performance parameters (TA = +25°C , Vdd = +5V, Pin = -4dBm)				
index	Minimum	Typical Value	Maximum	unit
Input frequency range	6.5-13			GHz
Output frequency range	13-26			GHz
Output Power	-	17	-	dBm
Fundamental Suppression	-	21	-	dBc
Third harmonic suppression	-	18	-	dBc
Input return loss	-	17	-	dB
Output return loss	-	15	-	dB
Current		105		mA

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

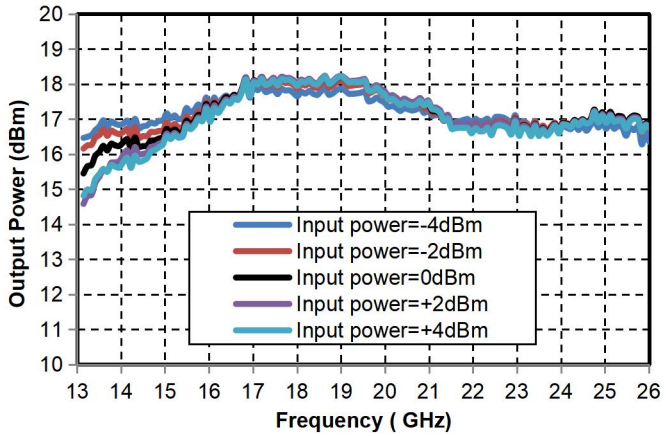
Standard Circuit

GL-1326-2B

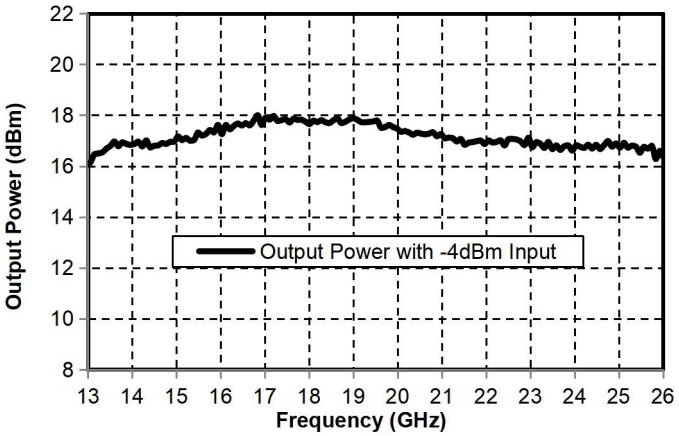
GaAs MMIC Frequency Multiplier Chip,13-26GHz

Main index test curve

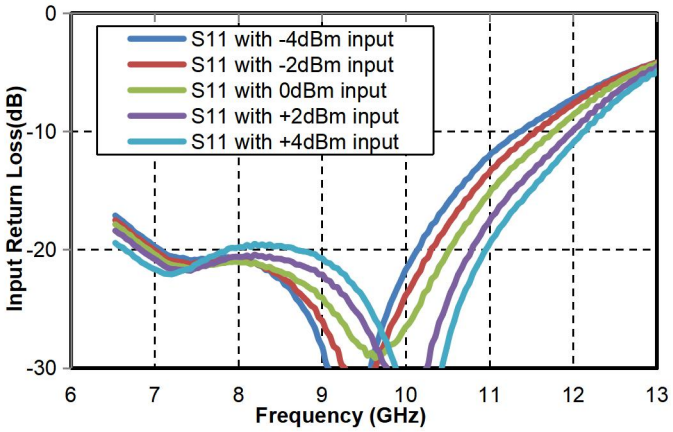
Output Power vs. Input Power



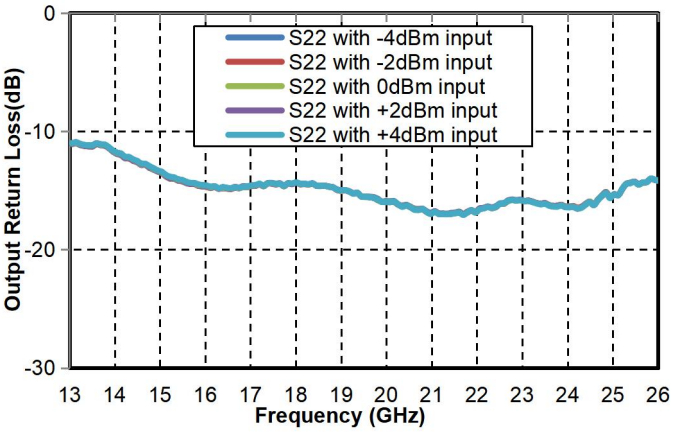
Output power vs. frequency @Pin=-4dBm



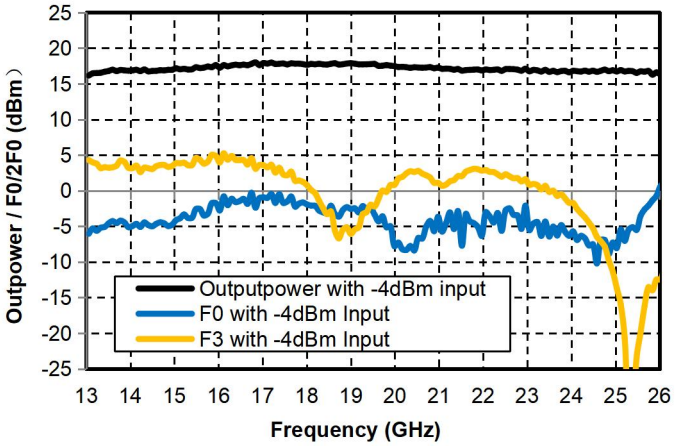
Input Return Loss vs. Operating Frequency



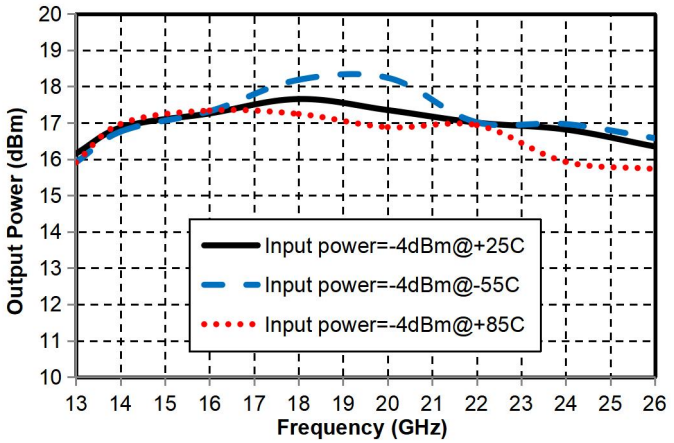
Output Return Loss vs. Operating Frequency



Fundamental vs. Second Harmonic vs. Third Harmonic



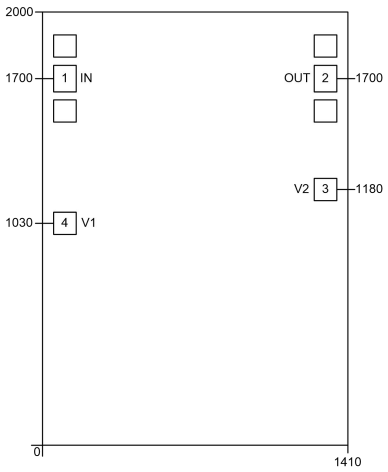
Output Power vs. Temperature



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

GaAs MMIC Frequency Multiplier Chip, 13-26GHz

Appearance structure [2]



【2】The units in the figure are all microns , and the dimensional tolerance is ±50um.

Bonding point definition		
Bonding point number	Function Symbol	Functional Description
1	RFIN	RF signal input terminal
2	RF OUT	RF signal output terminal
3.4	V2, V1	Amplifier drain bias, external 100pF , 1000pF bypass capacitor required
Chip bottom	GND	The bottom of the chip needs to be well grounded to RF and DC

Recommended assembly drawing