

HD25091

4.0-8.0GHz Input Frequency Doubler

Features

- Input Frequency: 4.0 – 8.0GHz
- Output Frequency: 8.0 – 16.0GHz
- Conversion Loss: 16dB
- F0 Isolation: 40dB
- Input Drive Level: 10 to 15dBm
- No DC Power Required
- SMA Connector



Description

HD25091 is a passive frequency doubler operates with input frequency range from 4.0 to 8.0GHz and output frequency range from 8.0 to 16.0GHz.

Electrical Specifications @ +25 °C, $Z_s = Z_L = 50 \text{ Ohms}$

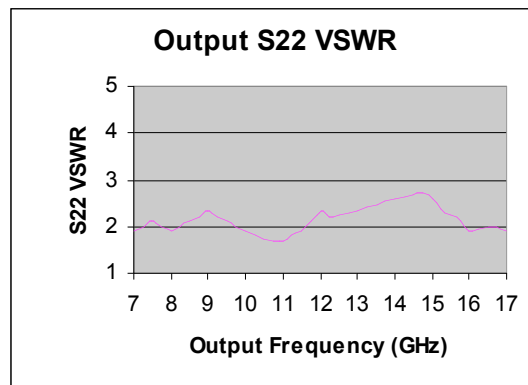
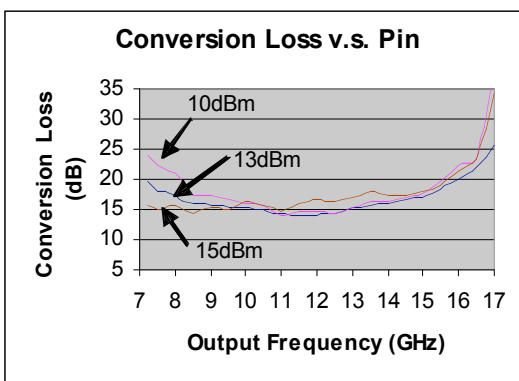
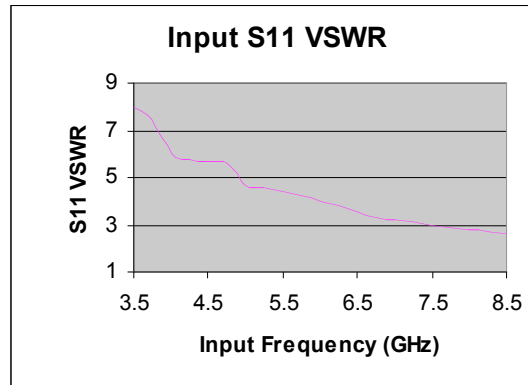
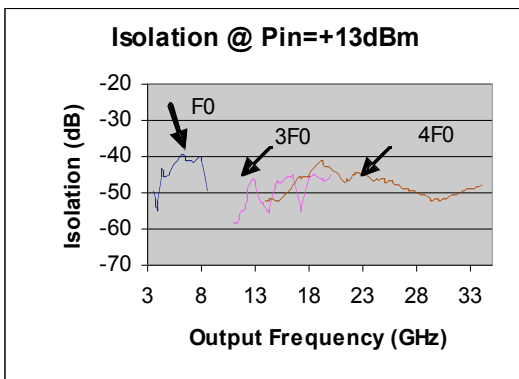
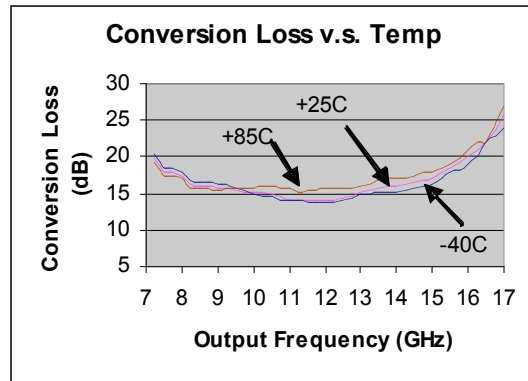
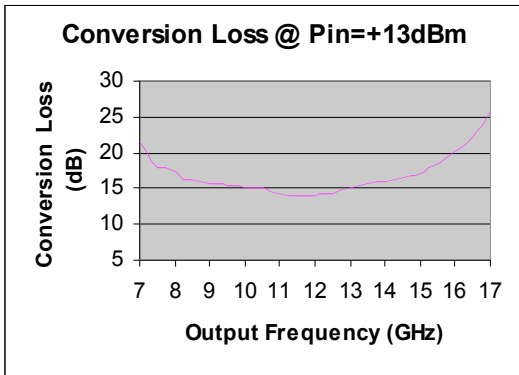
Parameter	Unit	Pin = +10dBm			Pin = +13dBm			Pin = +15dBm		
		Min.	Typ.	Max	Min.	Typ.	Max	Min.	Typ.	Max
Input Frequency Range	GHz	5.5 – 7.5			5.0 – 8.0			4.0 - 8.0		
Output Frequency Range	GHz	11.0 – 15.0			10.0 – 16.0			8.0 – 16.0		
Conversion Loss	dB		16	19		16	19		16	19
F0 Isolation *	dB				37	41				
3F0 Isolation *	dB				42	46				
4F0 Isolation *	dB				35	40				
VSWR Input						4.5:1				
Output						2.7:1				

* Isolation with respect to input power level

HD25091

4.0-8.0GHz Input Frequency Doubler

Typical Performance @ +25 °C



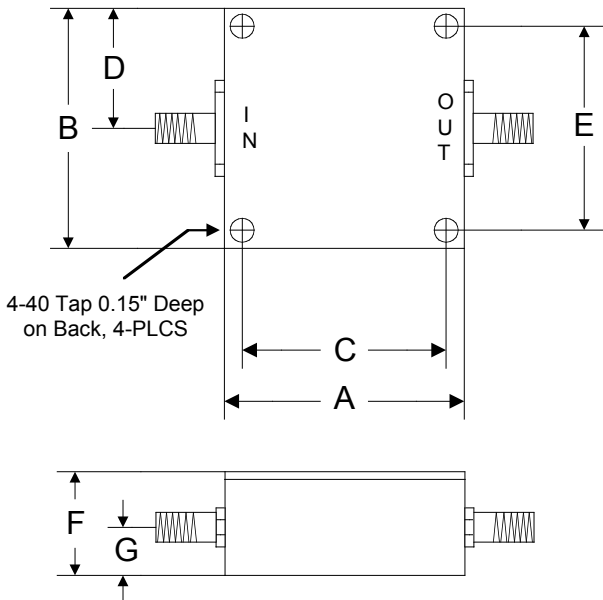
HD25091

4.0-8.0GHz Input Frequency Doubler

Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+27dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-65 °C to +150 °C

Outline



	A	B	C	D	E	F	G
Inch	1.250	1.250	1.000	0.625	1.000	0.563	0.250
mm	31.75	31.75	25.40	15.88	25.40	14.29	6.35