

HD25090

2.0-4.0GHz Input Frequency Doubler

Features

- Input Frequency: 2.0 – 4.0GHz
- Output Frequency: 4.0 – 8.0GHz
- Conversion Loss: 14dB
- F0 Isolation: 33dB
- Input Drive Level: 10 to 15dBm
- No DC Power Required
- SMA Connector



Description

HD25090 is a passive frequency doubler operates with input frequency range from 2.0 to 4.0GHz and output frequency range from 4.0 to 8.0GHz.

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

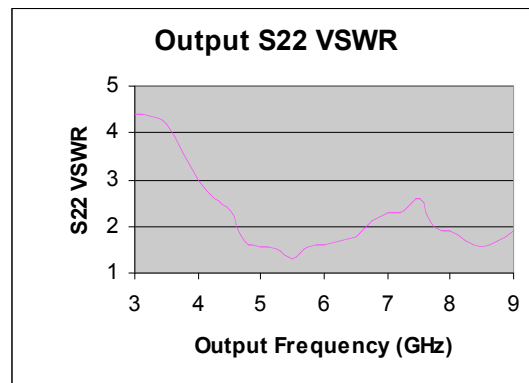
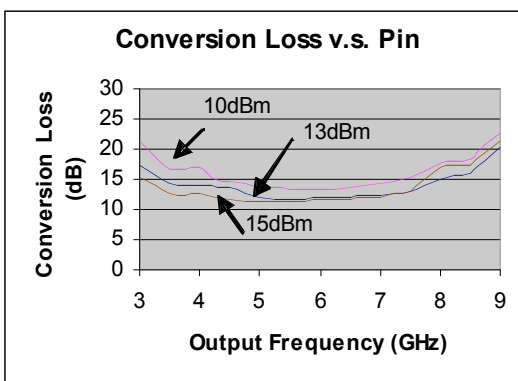
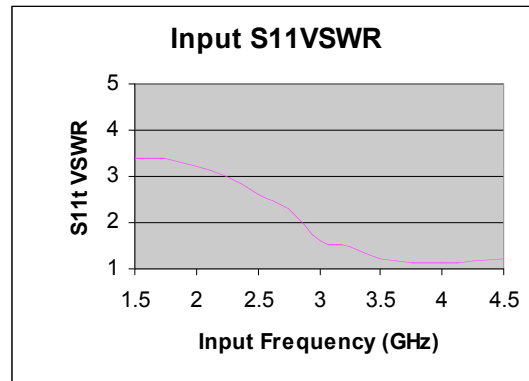
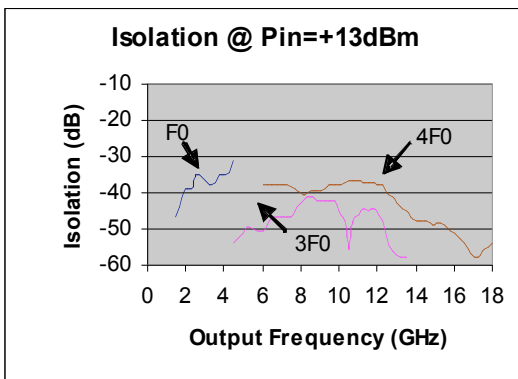
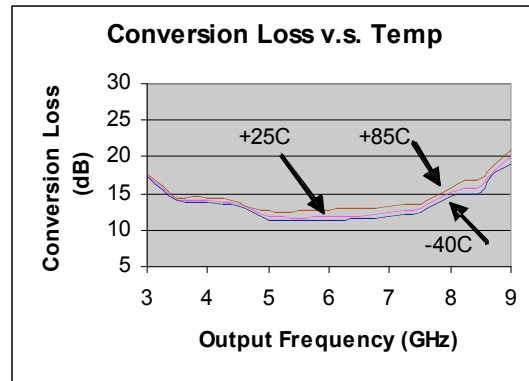
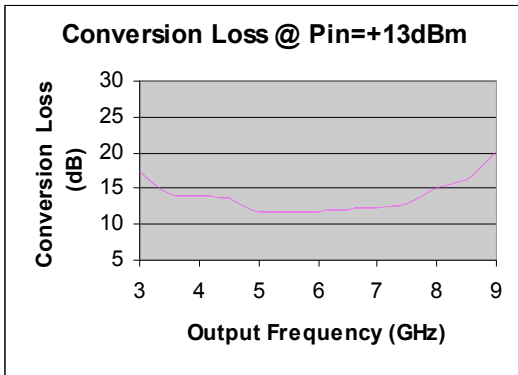
Parameter	Unit	Pin = +10dBm			Pin = +13dBm			Pin = +15dBm		
		Min.	Typ.	Max	Min.	Typ.	Max	Min.	Typ.	Max
Input Frequency Range	GHz	2.5 – 3.5			1.5 – 2.5			2.0 - 4.0		
Output Frequency Range	GHz	5.0 – 7.0			3.0 – 5.0			4.0 – 8.0		
Conversion Loss	dB		13	17		13	15		13	17
F0 Isolation *	dB				30	33				
3F0 Isolation *	dB				35	42				
4F0 Isolation *	dB				33	40				
VSWR Input						2.5:1				
Output						2.5:1				

* Isolation with respect to input power level

HD25090

2.0-4.0GHz Input Frequency Doubler

Typical Performance @ +25 °C



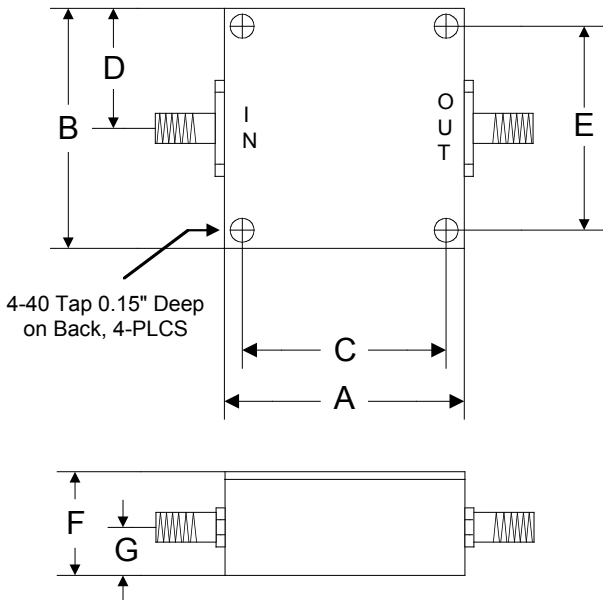
HD25090

2.0-4.0GHz 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