

HD25089

1.25-3.0GHz Input Frequency Doubler

Features

- Input Frequency: 1.25 – 3.0GHz
- Output Frequency: 2.5 – 6.0GHz
- Conversion Loss: 15dB
- F0 Isolation: 40dB
- Input Drive Level: 10 to 20dBm
- No DC Power Required
- SMA Connector



Description

HD25089 is a passive frequency doubler operates with input frequency range from 1.25 to 3.0GHz and output frequency range from 2.5 to 6.0GHz.

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

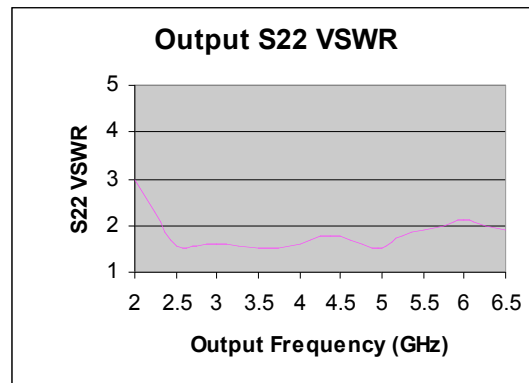
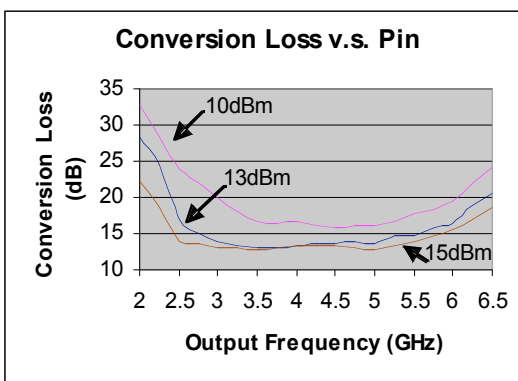
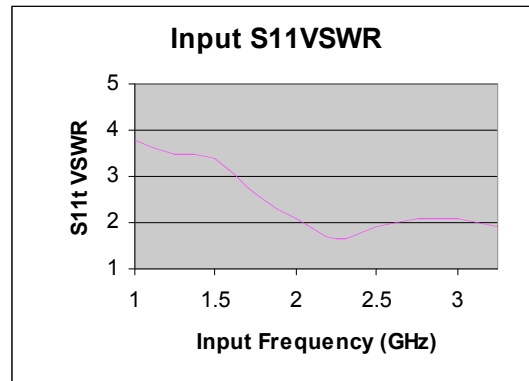
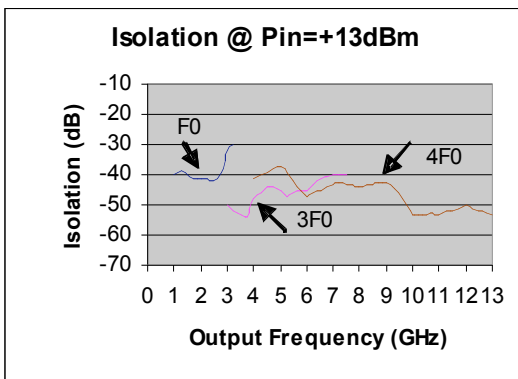
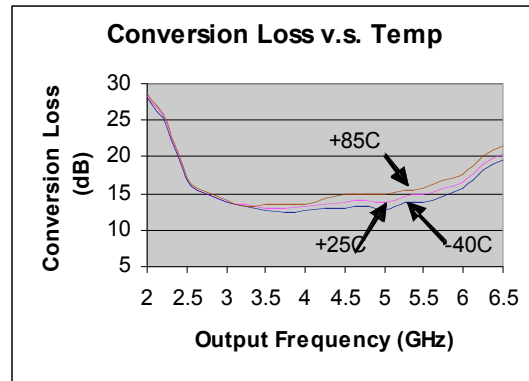
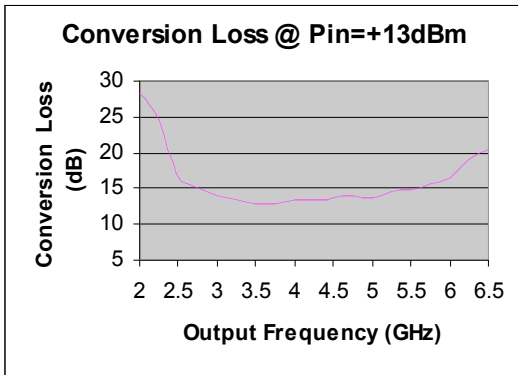
Parameter	Unit	Pin = +10dBm			Pin = +13dBm			Pin = +15dBm		
		Min.	Typ.	Max	Min.	Typ.	Max	Min.	Typ.	Max
Input Frequency Range	GHz	1.75 – 2.75			1.5 – 2.5			1.25 - 3.0		
Output Frequency Range	GHz	3.5 – 5.5			3.0 – 5.0			2.5 – 6.0		
Conversion Loss	dB		18	22		14	17		15	18
F0 Isolation *	dB				35	40				
3F0 Isolation *	dB				40	45				
4F0 Isolation *	dB				35	42				
VSWR Input						2.0:1	3.5:1			
Output						1.7:1	2.0:1			

* Isolation with respect to input power level

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Typical Performance @ +25 °C



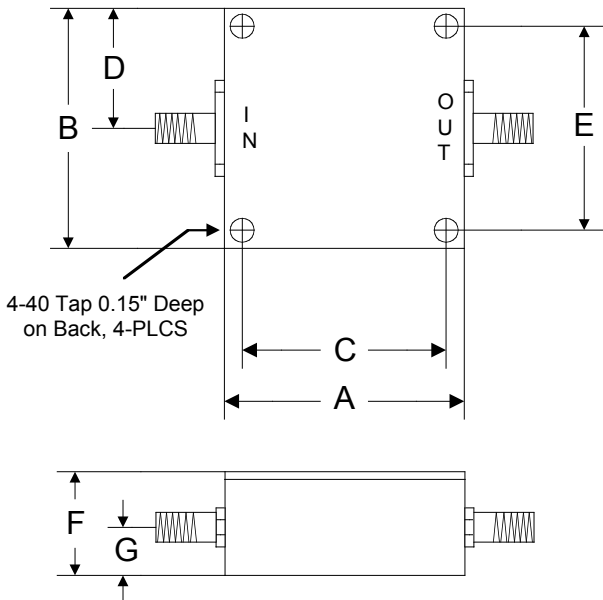
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Absolute Maximum Ratings

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