

## HD24088

## 0.85-2.0GHz Input Frequency Doubler

### Features

- Input Frequency: 0.85 – 2.0GHz
- Output Frequency: 1.7 – 4.0GHz
- Conversion Loss: 15dB
- F0 Isolation: 45dB
- Input Drive Level: 10 to 20dBm
- No DC Power Required
- SMA Connector



### Description

HD25088 is a passive frequency doubler operates with input frequency range from 0.85 to 2.0GHz and output frequency range from 1.7 to 4.0GHz.

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

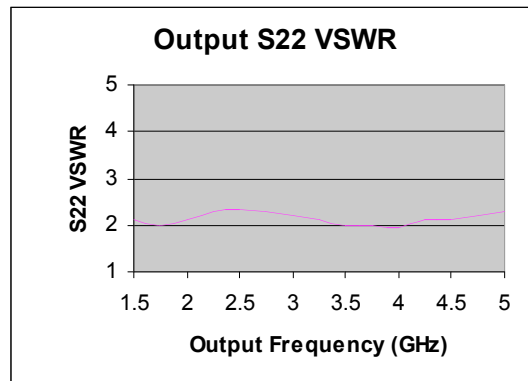
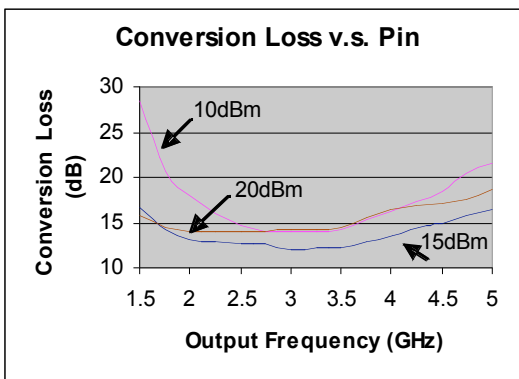
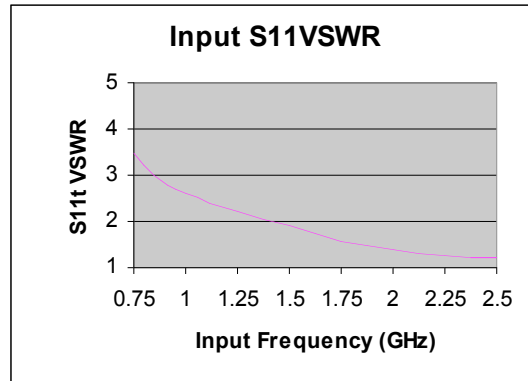
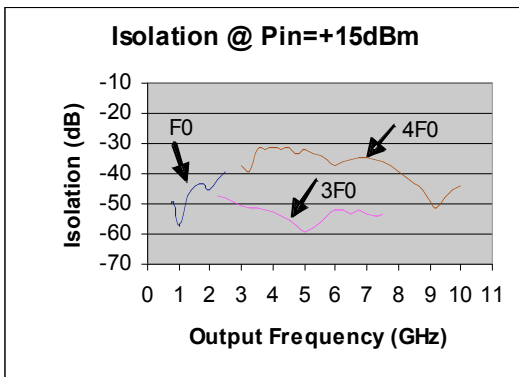
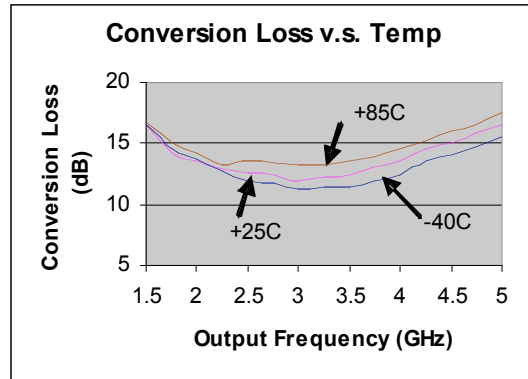
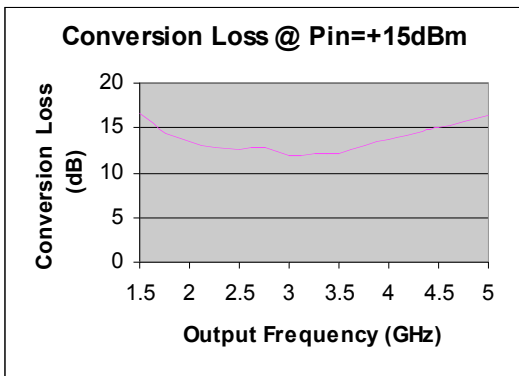
Parameter	Unit	Pin = +10dBm			Pin = +15dBm			Pin = +20dBm		
		Min.	Typ.	Max	Min.	Typ.	Max	Min.	Typ.	Max
Input Frequency Range	GHz	1.0 – 1.75			0.85 – 2.0			0.85 - 2.0		
Output Frequency Range	GHz	2.0 – 3.5			1.75 – 4.0			1.75 – 4.0		
Conversion Loss	dB		18	22		14	17		15	18
F0 Isolation *	dB				35	45				
3F0 Isolation *	dB				46	52				
4F0 Isolation *	dB				31	40				
VSWR Input						2.0:1	3.5:1			
Output						2.1:1	2.5:1			

\* Isolation with respect to input power level

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**Typical Performance @ +25 °C**



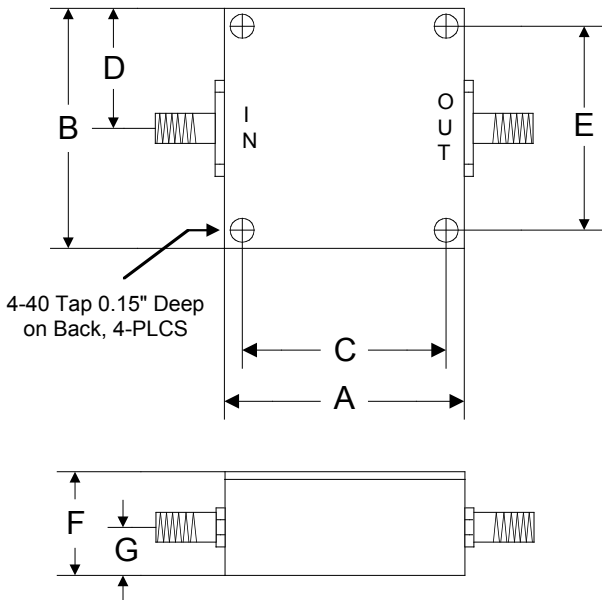
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### Absolute Maximum Ratings

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
<b>Inch</b>	1.250	1.250	1.000	0.625	1.000	0.563	0.250
<b>mm</b>	31.75	31.75	25.40	15.88	25.40	14.29	6.35