

800-833MHz Input Frequency Tripler

Features

- Input Frequency: 800 – 833MHz
- Output Frequency: 2400 – 2499MHz
- Conversion Gain: 12dB
- F0 Isolation: 23dB
- Input Drive Level: 0dBm
- DC Power: 12V
- SMA Connector

Picture



Performance@816MHz, Pin= 0dBm

Description

HD32540 is an active frequency tripler operates with input frequency range from 800 to 833MHz and output frequency range from 2400 to 2499MHz.

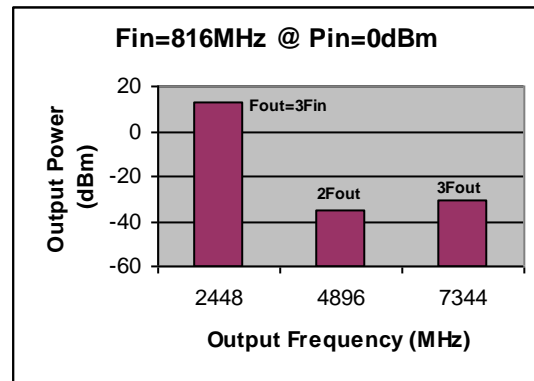
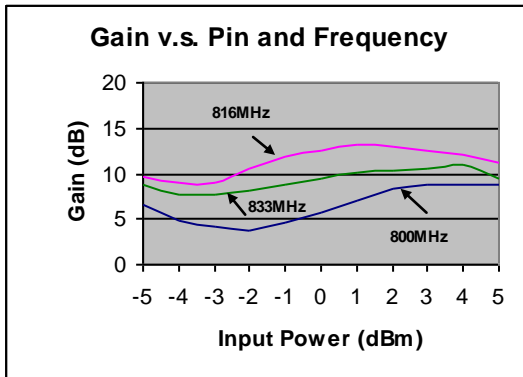
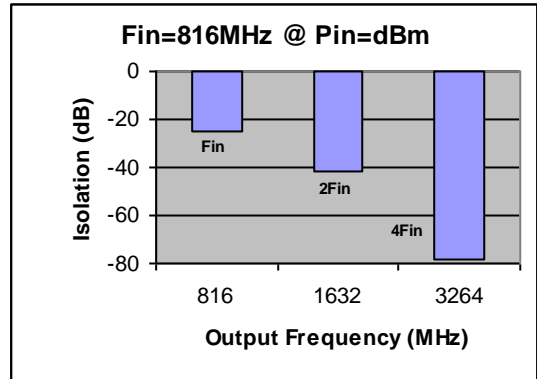
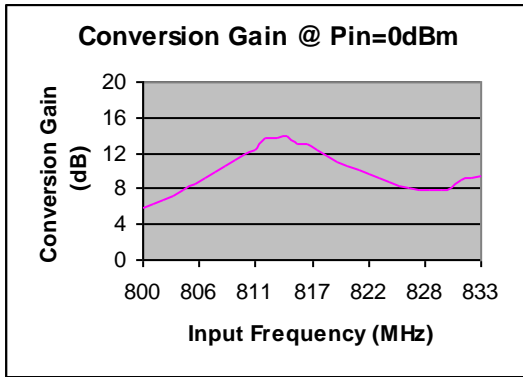
Electrical Specifications @ +25 °C, $Z_S = Z_L = 50 \text{ Ohms}$, Pin = 0dBm

Parameter	Unit	Min.	Typ.	Max.
Input Frequency Range	MHz	800	816	833
Output Frequency Range	MHz	2400	2448	2499
Conversion Gain	dB	6	12	
Output Power $F_{in}=816\text{MHz}/F_{out}=2448\text{MHz}$	dBm		12	
F ₀ Isolation * $F_{in}=816\text{MHz}/F_{in}=816\text{MHz}$	dB		25	
2F ₀ Isolation * $F_{in}=816\text{MHz}/2F_{in}=1632\text{MHz}$	dB		42	
4F ₀ Isolation * $F_{in}=816\text{MHz}/4F_{in}=3264\text{MHz}$	dB		78	
Harmonic Output * $F_{in}=816\text{MHz}/2F_{out}=4896\text{MHz}$ $F_{in}=816\text{MHz}/3F_{out}=7344\text{MHz}$	dBc		47 43	
VSWR Input/Output	1:		2.3/2.0	
DC Power Input	V	10	12	15
Operating Current	mA		160	

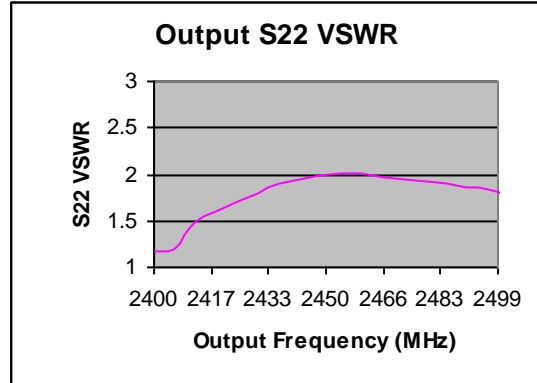
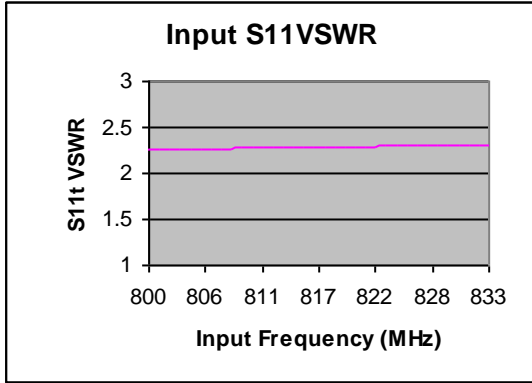
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* Isolation with respect to desired frequency output power level at 2448MHz

Typical Performance @ +25 °C



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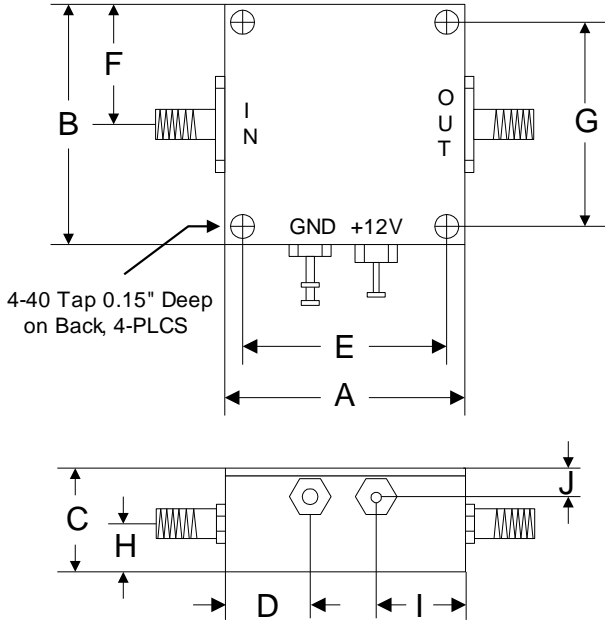


Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+20dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +105 °C

Outline

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	A	B	C	D	E	F	G	H	I	J
Inch	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187
mm	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76