

## 274-284MHz Input Frequency Tripler

### Features

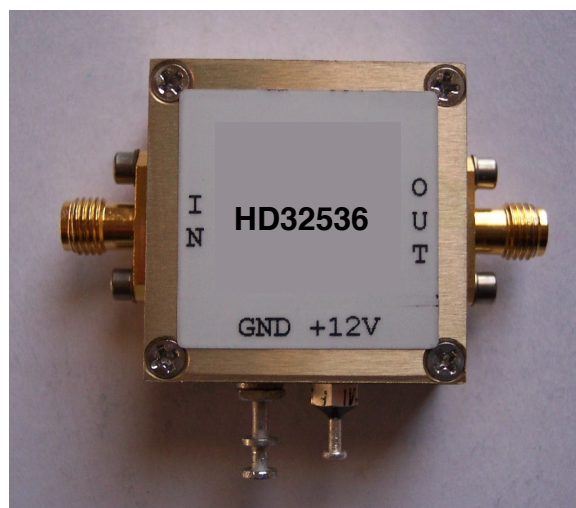
- Input Frequency: 274 – 284MHz
- Output Frequency: 822 – 852MHz
- Conversion Gain: 10dB
- F0 Isolation: 93dB
- Input Drive Level: 0dBm
- DC Power: 12V
- SMA Connector

Performance@279MHz, Pin= 0dBm

### Description

HD32536 is an active frequency tripler operates with input frequency range from 274 to 284MHz and output frequency range from 822 to 852MHz.

### Picture



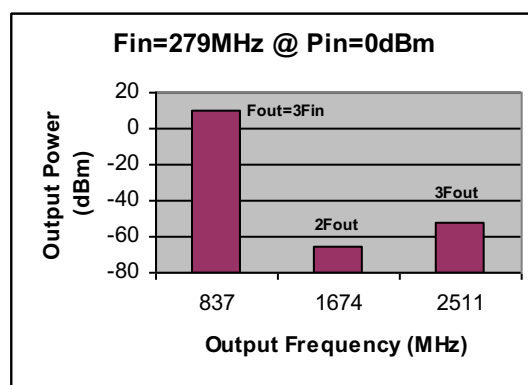
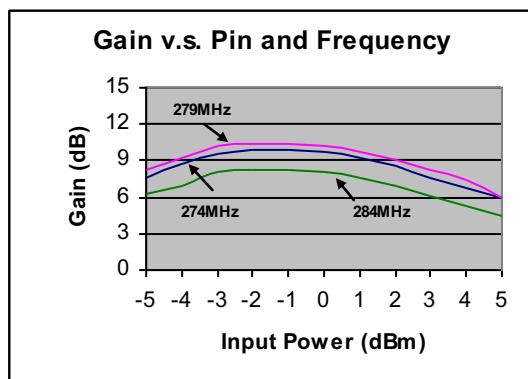
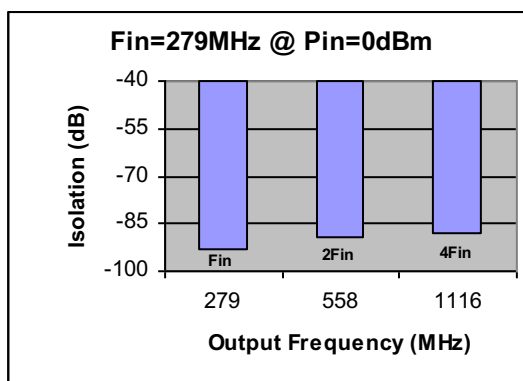
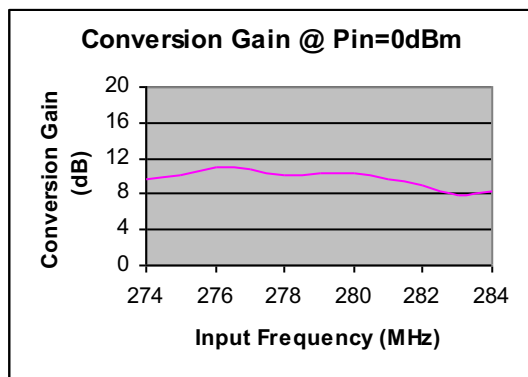
### Electrical Specifications @ +25 °C, Z<sub>s</sub> = Z<sub>L</sub> = 50 Ohms, Pin = 0dBm

Parameter	Unit	Min.	Typ.	Max.
Input Frequency Range	MHz	274	279	284
Output Frequency Range	MHz	822	837	852
Conversion Gain	dB	8	10	
Output Power F <sub>in</sub> =279MHz/F <sub>out</sub> =837MHz	dBm		10	
F <sub>o</sub> Isolation * F <sub>in</sub> =279MHz/F <sub>in</sub> =279MHz	dB		93	
2F <sub>o</sub> Isolation * F <sub>in</sub> =279MHz/2F <sub>in</sub> =558MHz	dB		89	
4F <sub>o</sub> Isolation * F <sub>in</sub> =279MHz/4F <sub>in</sub> =1116MHz	dB		88	
Harmonic Output * F <sub>in</sub> =279MHz/2F <sub>out</sub> =1674MHz	dBc		75	
F <sub>in</sub> =279MHz/3F <sub>out</sub> =2511MHz	dBc		60	
VSWR Input/Output	1:		1.2/1.7	
DC Power Input	V	10	12	15
Operating Current	mA		150	

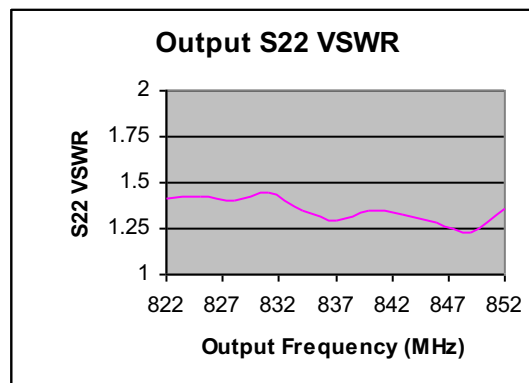
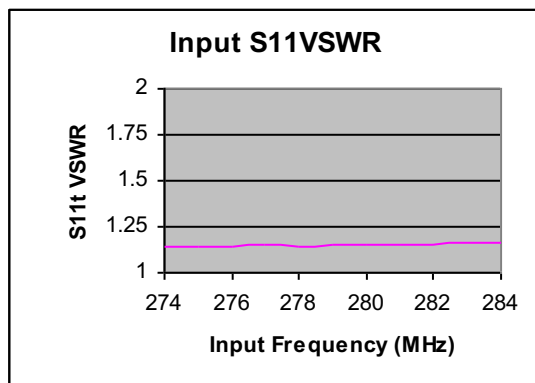
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\* Isolation with respect to desired frequency output power level at 837MHz

### Typical Performance @ +25 °C



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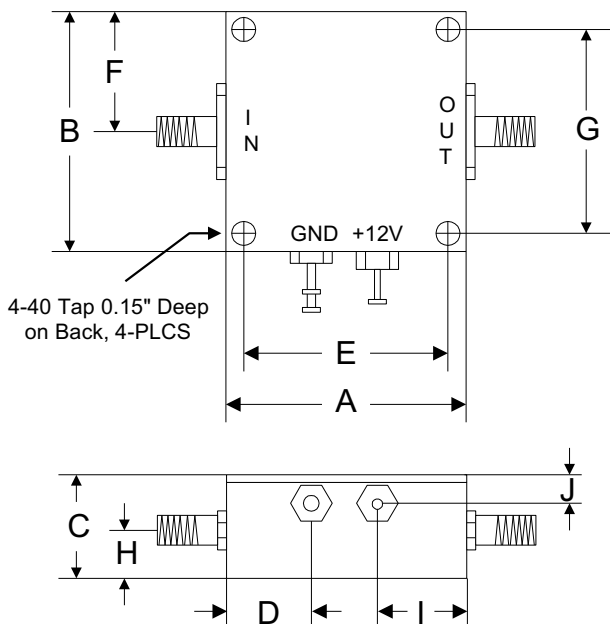


### Absolute Maximum Ratings

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

### Outline

## 274-284MHz Input Frequency Tripler



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