

289-299MHz Input Frequency Tripler

Features

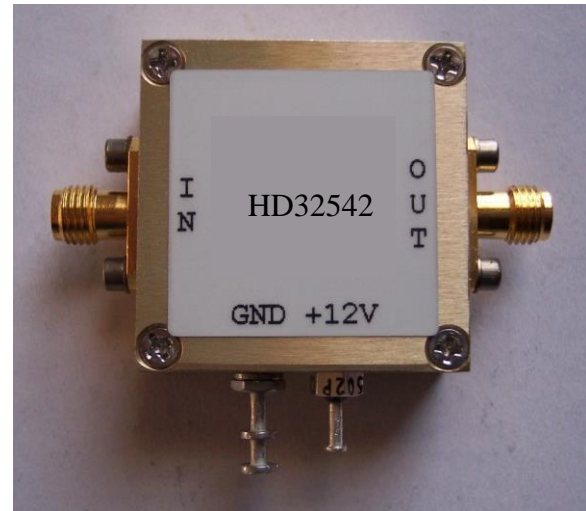
- Input Frequency: 289 – 299MHz
- Output Frequency: 867 – 897MHz
- Conversion Gain: 9.5
- F0 Isolation: 93dB
- Input Drive Level: 0dBm
- DC Power: 12V
- SMA Connector

Performance@294MHz, Pin= 0dBm

Description

HD32542 is an active frequency tripler operates with input frequency range from 289 to 299MHz and output frequency range from 867 to 899MHz.

Picture



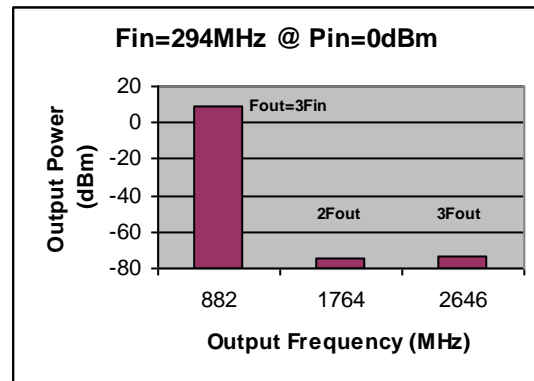
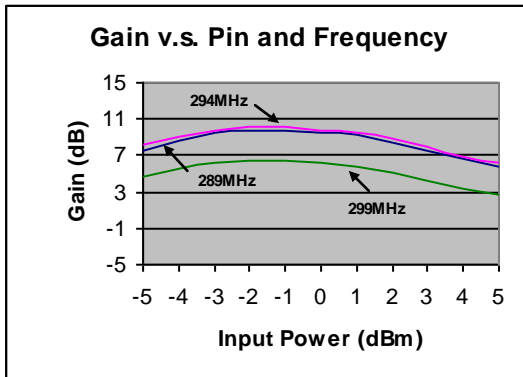
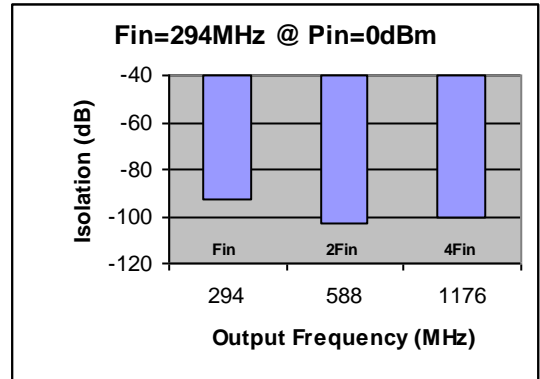
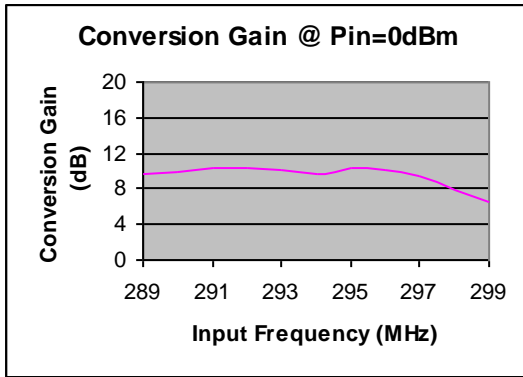
Electrical Specifications @ +25 °C, $Z_s = Z_L = 50$ Ohms, Pin = 0dBm

Parameter	Unit	Min.	Typ.	Max.
Input Frequency Range	MHz	289	294	299
Output Frequency Range	MHz	867	882	899
Conversion Gain	dB	6	9.5	
Output Power $F_{in}=292\text{MHz}/F_{out}=882\text{MHz}$	dBm		9.5	
F ₀ Isolation * $F_{in}=294\text{MHz}/F_{in}=294\text{MHz}$	dB		93	
2F ₀ Isolation * $F_{in}=294\text{MHz}/2F_{in}=588\text{MHz}$	dB		103	
4F ₀ Isolation * $F_{in}=294\text{MHz}/4F_{in}=1176\text{MHz}$	dB		100	
Harmonic Output * $F_{in}=294\text{MHz}/2F_{out}=1764\text{MHz}$	dBc		75	
$F_{in}=294\text{MHz}/3F_{out}=2646\text{MHz}$	dBc		73	
VSWR Input/Output	1:		1.2/1.4	
DC Power Input	V	10	12	15
Operating Current	mA		150	

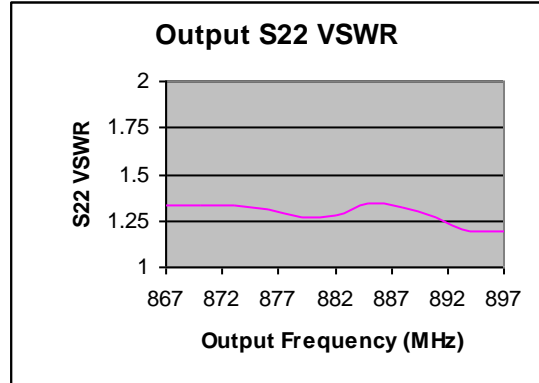
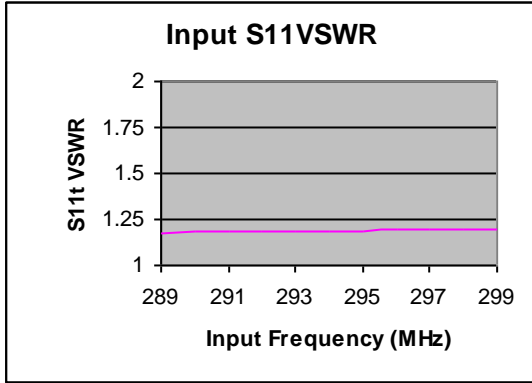
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* Isolation with respect to desired frequency output power level at 882MHz

Typical Performance @ +25 °C



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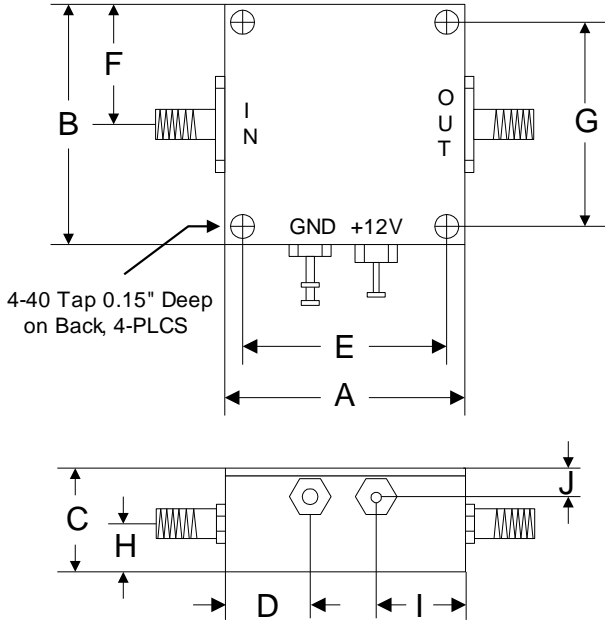


Absolute Maximum Ratings

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