

180-186MHz Input Frequency Multiply by 5

Features

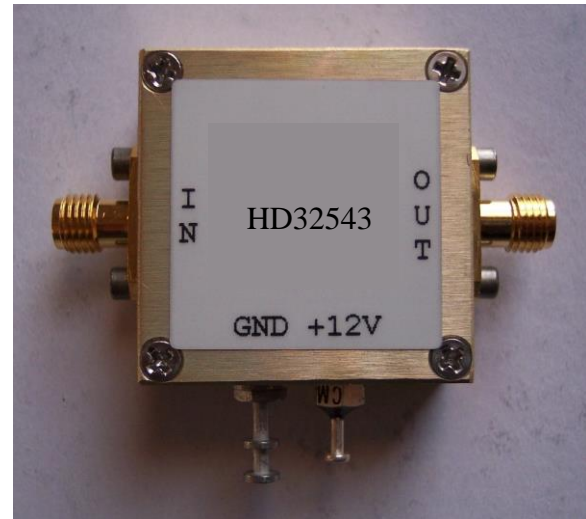
- Input Frequency: 180 – 186MHz
- Output Frequency: 900 – 930MHz
- Conversion Gain: 2dB
- F0 Isolation: 60dB
- Input Drive Level: 0dBm
- DC Power: 12V
- SMA Connector

Performance@183MHz, Pin= 0dBm

Description

HD32543 is an active frequency multiply by 5 operates with input frequency range from 183 to 186MHz and output frequency range from 900 to 930MHz.

Picture



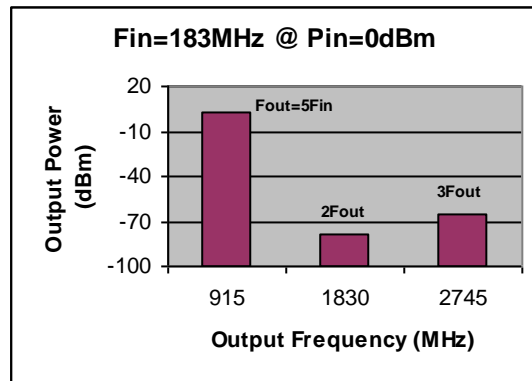
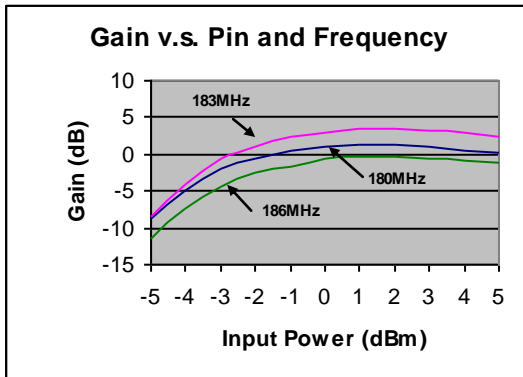
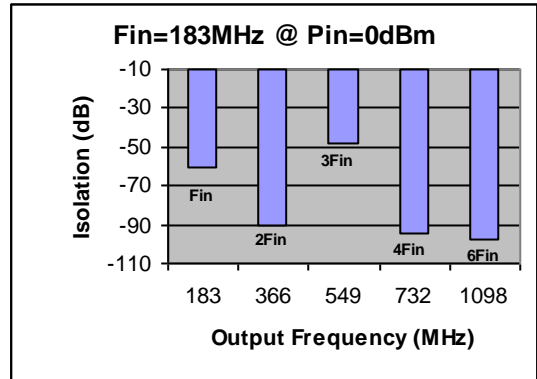
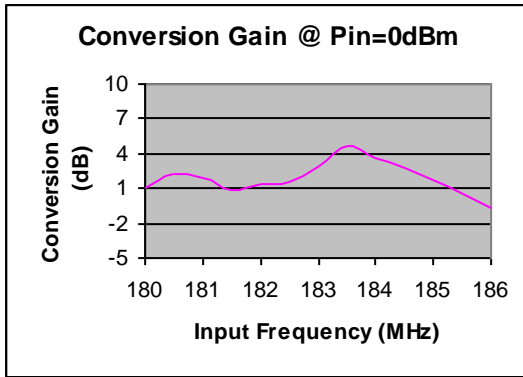
Electrical Specifications @ +25 °C, $Z_S = Z_L = 50$ Ohms, Pin = 0dBm

| Parameter | Unit | Min. | Typ. | Max. |
|---|------|------|----------|------|
| Input Frequency Range | MHz | 180 | 183 | 186 |
| Output Frequency Range | MHz | 900 | 915 | 930 |
| Conversion Gain | dB | -1 | 2 | |
| Output Power $F_{in}=183\text{MHz}/F_{out}=915\text{MHz}$ | dBm | | 2 | |
| F ₀ Isolation * $F_{in}=183\text{MHz}/F_{in}=183\text{MHz}$ | dB | | 60 | |
| 2F ₀ Isolation * $F_{in}=183\text{MHz}/2F_{in}=366\text{MHz}$ | dB | | 90 | |
| 3F ₀ Isolation * $F_{in}=183\text{MHz}/4F_{in}=549\text{MHz}$ | dB | | 48 | |
| 4F ₀ Isolation * $F_{in}=183\text{MHz}/4F_{in}=732\text{MHz}$ | dB | | 95 | |
| 6F ₀ Isolation * $F_{in}=183\text{MHz}/4F_{in}=1098\text{MHz}$ | dB | | 98 | |
| Harmonic Output * $F_{in}=183\text{MHz}/2F_{out}=1830\text{MHz}$ | dBc | | 80 | |
| $F_{in}=183\text{MHz}/3F_{out}=2745\text{MHz}$ | dBc | | 68 | |
| VSWR Input/Output | 1: | | 1.05/2.0 | |
| DC Power Input | V | 10 | 12 | 15 |
| Operating Current | mA | | 150 | |

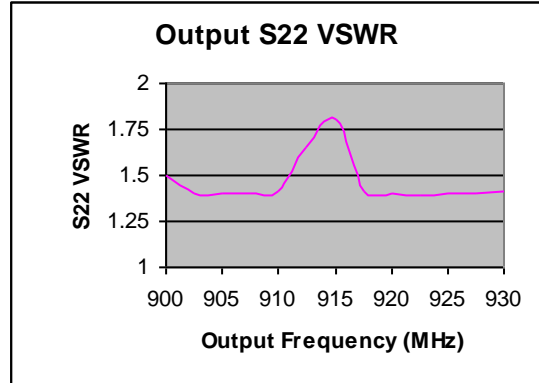
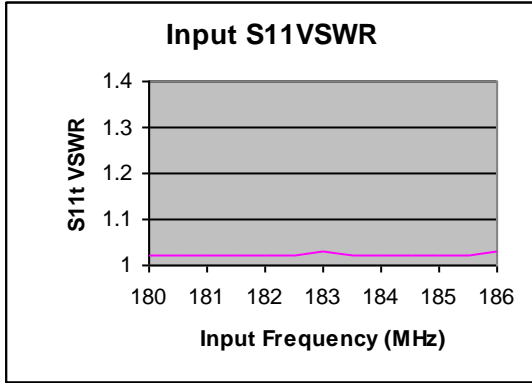
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* Isolation with respect to desired frequency output power level at 915MHz

Typical Performance @ +25 °C



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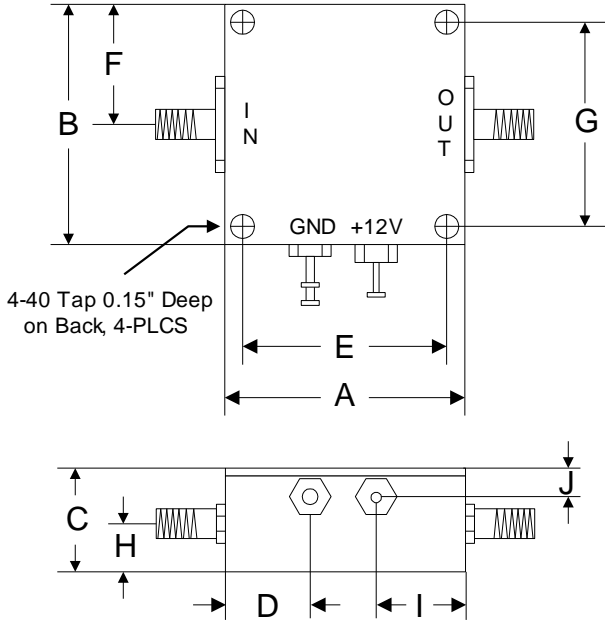


Absolute Maximum Ratings

| 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 |