

FTR Series

310-320MHz Input Frequency Tripler

Features

- Input Frequency: 310 – 320MHz
- Output Frequency: 930 – 960MHz
- Conversion Gain: 11.5B
- F0 Isolation: 30dB
- Input Drive Level: 0Bm
- DC Power: 12V
- SMA Connector

Performance@315MHz, Pin= 0Bm

Description

FTR-945 is an active frequency tripler operates with input frequency range from 310 to 320MHz and output frequency range from 930 to 960MHz.

Picture



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

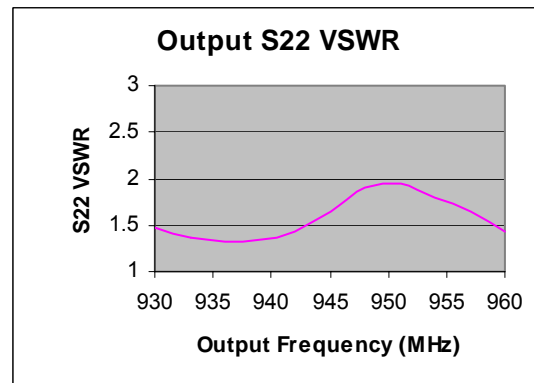
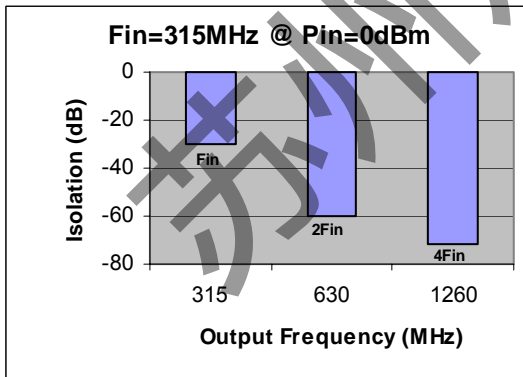
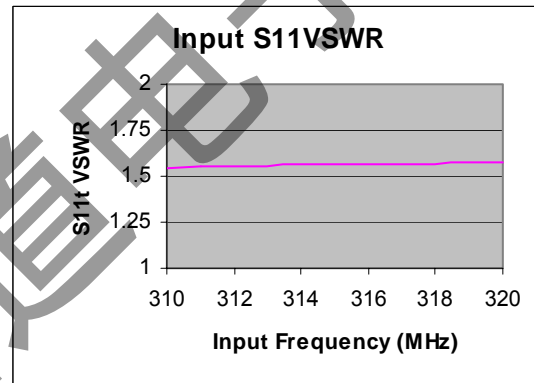
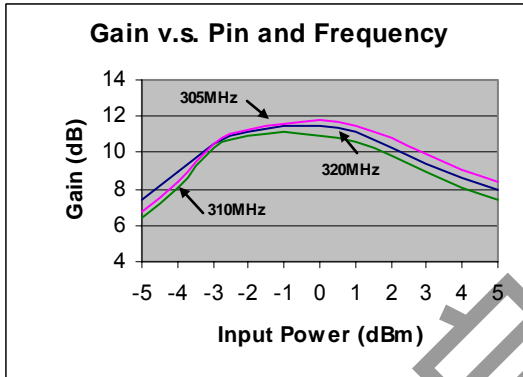
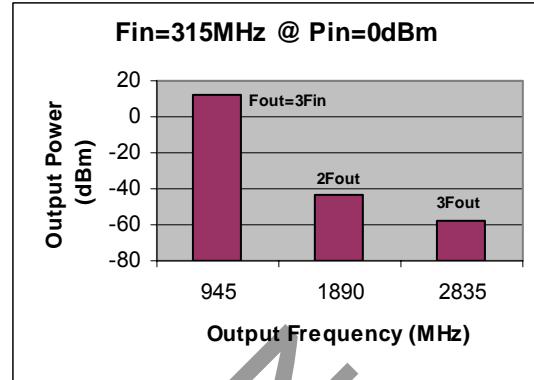
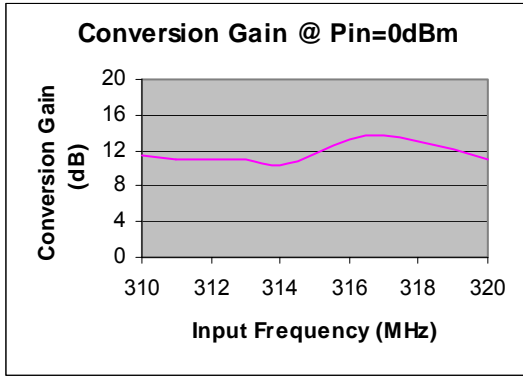
| Parameter | Unit | Min. | Typ. | Max. |
|---|------|------|---------|------|
| Input Frequency Range | MHz | 310 | 315 | 320 |
| Output Frequency Range | MHz | 930 | 945 | 960 |
| Conversion Gain | dB | 10.5 | 11.5 | |
| Output Power $F_{in}=315\text{MHz}/F_{out}=945\text{MHz}$ | dBm | | 11.5 | |
| F _o Isolation * $F_{in}=315\text{MHz}/F_{in}=315\text{MHz}$ | dB | | 30 | |
| 2F _o Isolation * $F_{in}=315\text{MHz}/2F_{in}=630\text{MHz}$ | dB | | 60 | |
| 4F _o Isolation * $F_{in}=315\text{MHz}/4F_{in}=1260\text{MHz}$ | dB | | 72 | |
| Harmonic Output * $F_{in}=315\text{MHz}/2F_{out}=1890\text{MHz}$ | dBc | | 55 | |
| $F_{in}=315\text{MHz}/3F_{out}=2835\text{MHz}$ | dBc | | 69 | |
| VSWR Input/Output | 1: | | 1.6/2.0 | |
| DC Power Input | V | 10 | 12 | 15 |
| Operating Current | mA | | 150 | |

* Isolation with respect to desired frequency output power level at 945MHz

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Typical Performance @ +25 °C



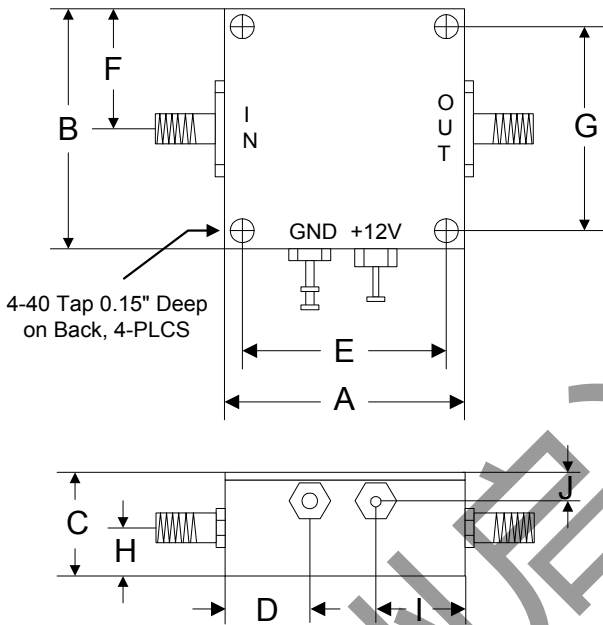
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Absolute Maximum Ratings

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

Outline



| | 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 |