

FTR Series

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

Picture



Performance@279MHz, Pin= 0dBm

Description

FTR-835 is an active frequency tripler operates with input frequency range from 274 to 284MHz and output frequency range from 822 to 852MHz.

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

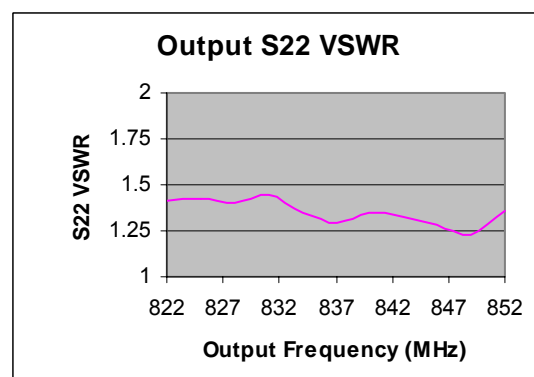
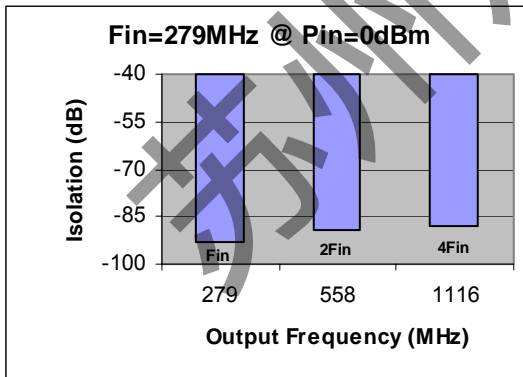
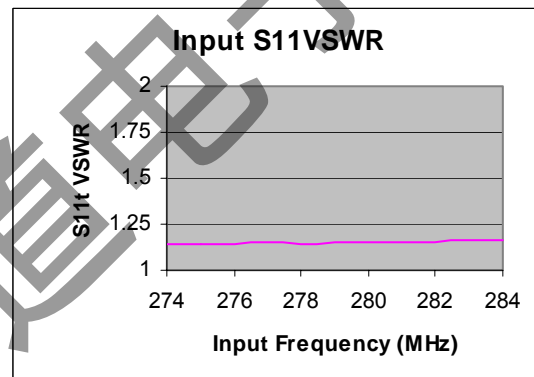
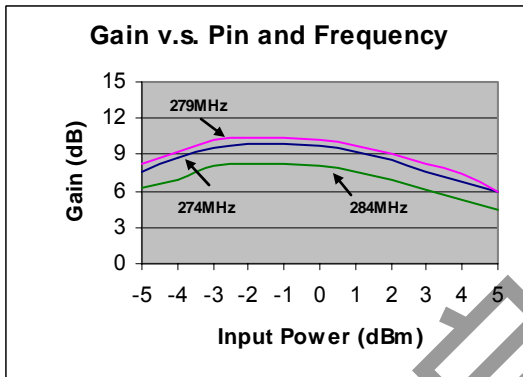
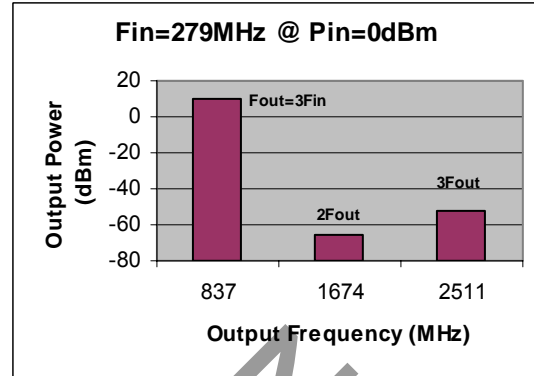
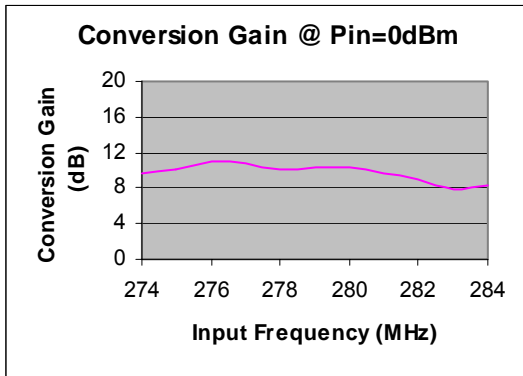
| Parameter | Unit | Min. | Typ. | Max. |
|---|------|------|---------|------|
| Input Frequency Range | MHz | 274 | 279 | 284 |
| Output Frequency Range | MHz | 822 | 837 | 852 |
| Conversion Gain | dB | 8 | 10 | |
| Output Power $F_{in}=279\text{MHz}/F_{out}=837\text{MHz}$ | dBm | | 10 | |
| F ₀ Isolation * $F_{in}=279\text{MHz}/F_{in}=279\text{MHz}$ | dB | | 93 | |
| 2F ₀ Isolation * $F_{in}=279\text{MHz}/2F_{in}=558\text{MHz}$ | dB | | 89 | |
| 4F ₀ Isolation * $F_{in}=279\text{MHz}/4F_{in}=1116\text{MHz}$ | dB | | 88 | |
| Harmonic Output * $F_{in}=279\text{MHz}/2F_{out}=1674\text{MHz}$ | dBc | | 75 | |
| $F_{in}=279\text{MHz}/3F_{out}=2511\text{MHz}$ | dBc | | 60 | |
| VSWR Input/Output | 1: | | 1.2/1.7 | |
| DC Power Input | V | 10 | 12 | 15 |
| Operating Current | mA | | 150 | |

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

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Typical Performance @ +25 °C



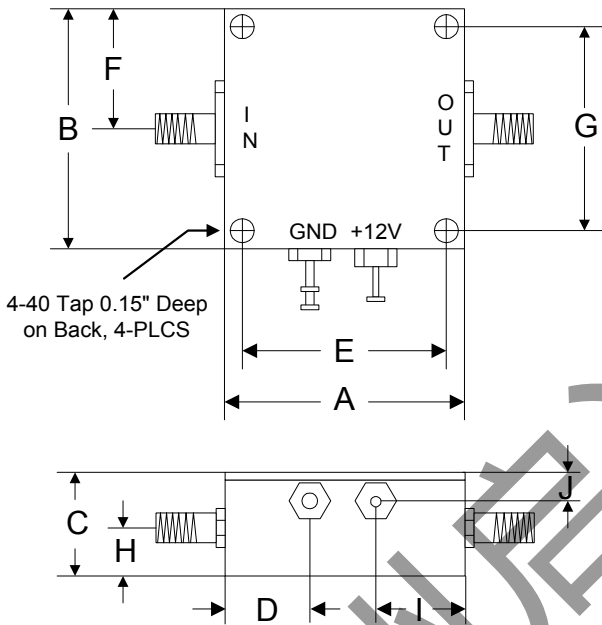
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Absolute Maximum Ratings

| 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 |