

FVR Series

164-170MHz Input Frequency Multiply by 5

Features

- Input Frequency: 164 – 170MHz
- Output Frequency: 820 – 850MHz
- Conversion Gain: 2dB
- F0 Isolation: 90dB
- Input Drive Level: 0dBm
- DC Power: 12V
- SMA Connector

Performance@167MHz, Pin= 0dBm

Description

FVR-835 is an active frequency multiply by 5 operates with input frequency range from 164 to 170MHz and output frequency range from 820 to 850MHz.

Picture



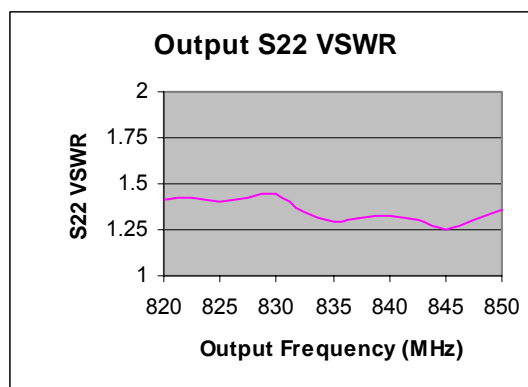
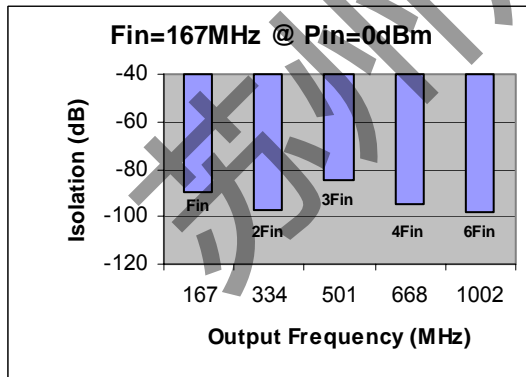
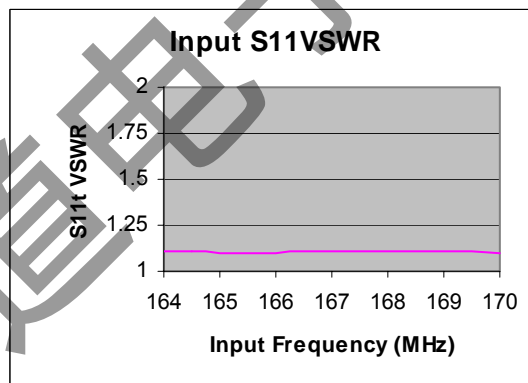
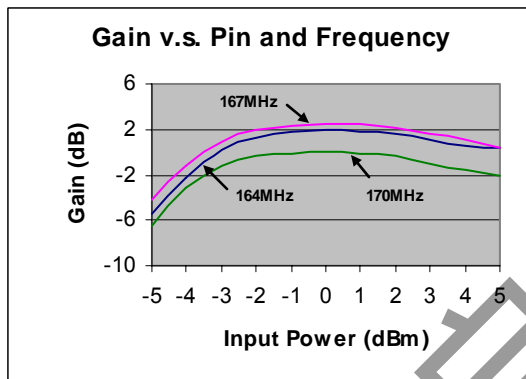
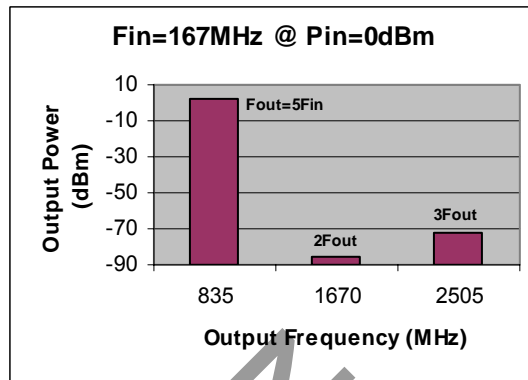
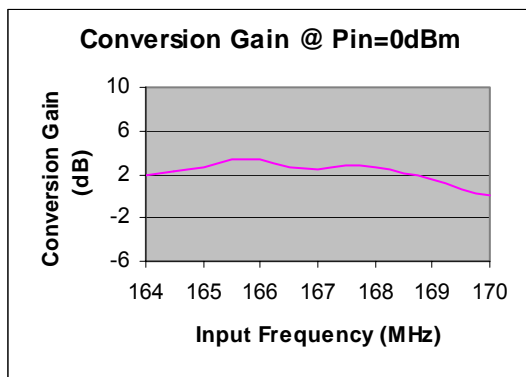
Electrical Specifications @ +25 °C, $Z_S = Z_L = 50 \text{ Ohms}$, Pin = 0dBm

| Parameter | Unit | Min. | Typ. | Max. |
|---|------|------|---------|------|
| Input Frequency Range | MHz | 164 | 167 | 170 |
| Output Frequency Range | MHz | 820 | 835 | 850 |
| Conversion Gain | dB | 0 | 2 | |
| Output Power $F_{in}=167\text{MHz}/F_{out}=835\text{MHz}$ | dBm | | 2 | |
| F ₀ Isolation * $F_{in}=167\text{MHz}/F_{in}=334\text{MHz}$ | dB | | 90 | |
| 2F ₀ Isolation * $F_{in}=167\text{MHz}/2F_{in}=558\text{MHz}$ | dB | | 97 | |
| 3F ₀ Isolation * $F_{in}=167\text{MHz}/4F_{in}=501\text{MHz}$ | dB | | 85 | |
| 4F ₀ Isolation * $F_{in}=167\text{MHz}/4F_{in}=668\text{MHz}$ | dB | | 95 | |
| 6F ₀ Isolation * $F_{in}=167\text{MHz}/4F_{in}=1002\text{MHz}$ | dB | | 98 | |
| Harmonic Output * $F_{in}=167\text{MHz}/2F_{out}=1670\text{MHz}$ | dBc | | 87 | |
| $F_{in}=167\text{MHz}/3F_{out}=2505\text{MHz}$ | dBc | | 73 | |
| VSWR Input/Output | 1: | | 1.1/1.5 | |
| DC Power Input | V | 10 | 12 | 15 |
| Operating Current | mA | | 150 | |

* Isolation with respect to desired frequency output power level at 835MHz

FVR Series 164-170MHz Input Frequency Multiply by 5

Typical Performance @ +25 °C

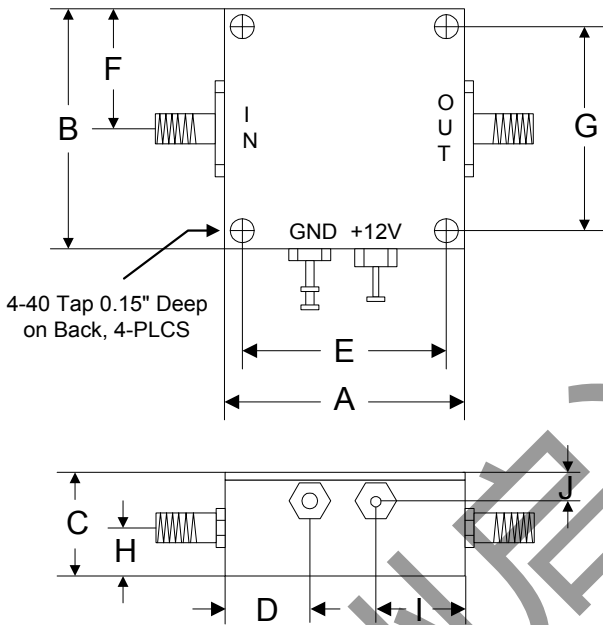


FVR Series 164-170MHz Input Frequency Multiply by 5

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 |