

## SMA Female Active 3x Frequency Multiplier with 750 MHz to 1.05 GHz Output

The FMFX2015 is an active Frequency Tripler (x3) module that covers a broad output frequency bandwidth from 750 MHz to 1050 MHz. Typical performance includes 7 dB conversion gain, 40 dB fundamental Isolation, with an RF input drive level of -3 dBm. DC bias is +12Vdc with 105 mA DC current. Maximum RF input power is +23 dBm with an operational temperature range of -40° C to +85° C. The rugged and compact package assembly supports SMA female connectors. And for highly reliable operation, the model is designed to meet a variety of MIL-STD-202 test conditions including shock, vibration, altitude, and humidity.

**Electrical Specifications** (TA= 25°C, VDC1 = 12 Vdc, IDC1 = 105 mA, Pin = -3dBm)

| Description            | Min | Typ   | Max   | Units |
|------------------------|-----|-------|-------|-------|
| Input Frequency Range  | 250 |       | 350   | MHz   |
| Output Frequency Range | 750 |       | 1,050 | MHz   |
| Impedance              |     | 50    |       | Ohms  |
| Conversion Gain        | 2   | 7     |       | dB    |
| Fundamental Isolation* | 30  | 40    |       | dB    |
| 2F0 Isolation*         | 20  | 30    |       | dB    |
| 4F0 Isolation*         | 40  | 50    |       | dB    |
| Input VSWR(@ 300 MHz)  |     | 1.4:1 | 2:1   |       |
| Output VSWR(@ 900 MHz) |     | 1.6:1 | 2:1   |       |
| Operating DC Voltage 1 | 10  | 12    | 15    | V     |
| Operating DC Current 1 |     | 105   | 125   | mA    |

\*Isolation with respect to output power level

## Mechanical Specifications

|                  |                    |
|------------------|--------------------|
| <b>Size</b>      |                    |
| Length           | 1.25 in [31.75 mm] |
| Width            | 0.563 in [14.3 mm] |
| Height           | 1.25 in [31.75 mm] |
| Weight           | 0.003 lbs [1.36 g] |
| Output Connector | SMA Female         |

## Environmental Specifications

|                    |                                        |
|--------------------|----------------------------------------|
| <b>Temperature</b> |                                        |
| Operating Range    | -40 to +85 deg C                       |
| Storage Range      | -55 to +105 deg C                      |
| Humidity           | MIL-STD-202, Method 103B, Condition B  |
| Shock              | MIL-STD-202F, Method 213B, Condition B |
| Vibration          | MIL-STD-202F, Method 204D, Condition B |
| Altitude           | MIL-STD-202F, Method 105C, Condition B |



## Features:

- Active Frequency Tripler (x3)
- 250 to 350 MHz Input Frequency
- 750 to 1050 MHz Output Frequency
- Conversion Gain 7 dB typ
- Fundamental Isolation 40 dB typ
- RF Input Drive Level: -3 dBm
- Max RF Input Power: +23 dBm
- DC Bias: +12Vdc @ 105 mA
- SMA Female Connectors
- -40° C to +85° C Operating Temperature
- 50 Ohm Design
- Rugged Design meets MIL-STD-202 Test Conditions

## Applications:

- Aerospace & Defense
- Test & Measurement
- Microwave Radio Systems
- Military & Commercial Communication Systems
- Research & Development
- SATCOM
- Wireless Communications

Fairview Microwave  
301 Leora Ln., Suite 100  
Lewisville, TX 75056  
Tel: 1-800-715-4396 / (972) 649-6678  
Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

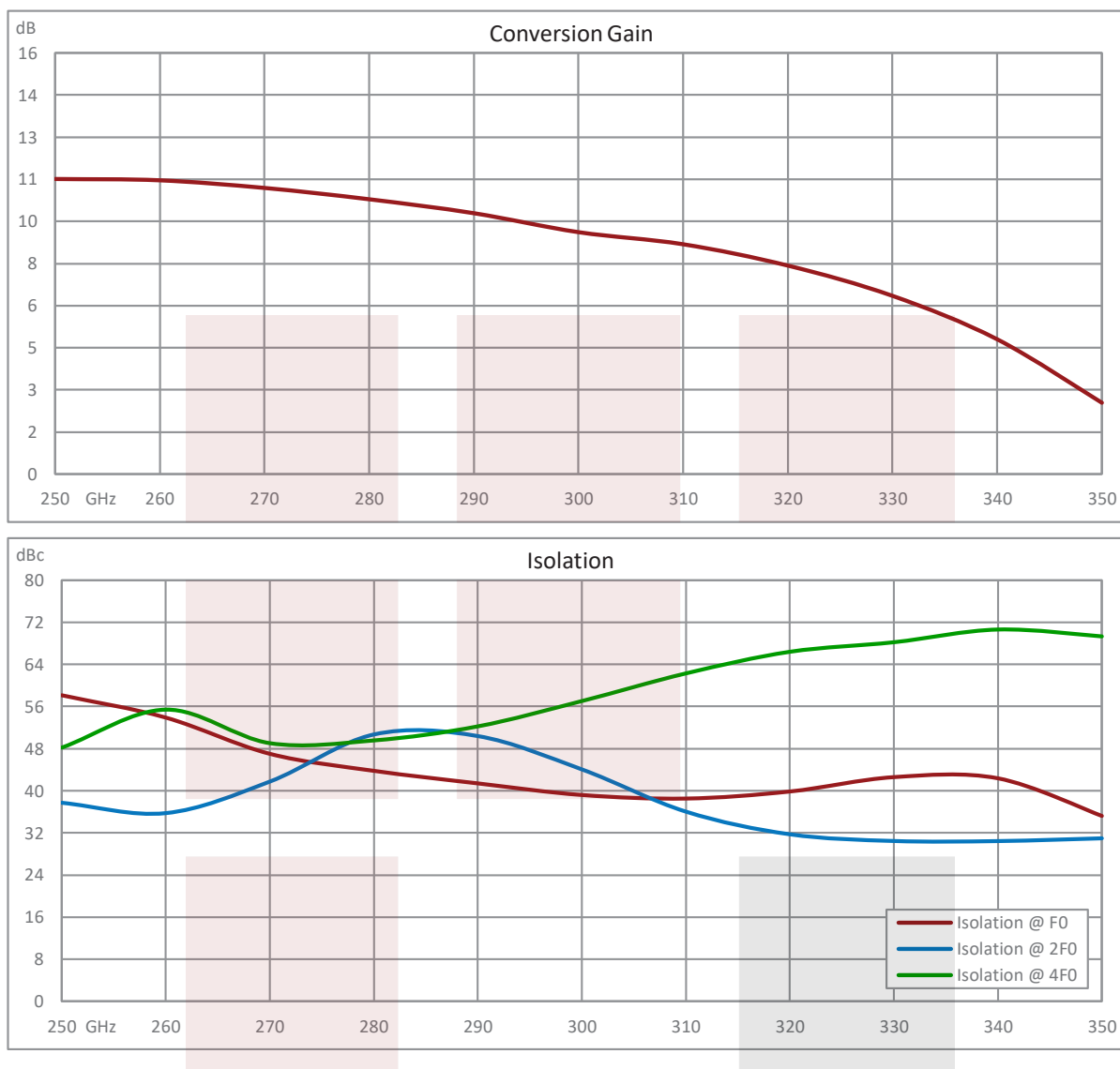
Notes:

**Absolute Maximum Rating**

**Absolute Maximum Ratings**

| Parameter             | Maximum          |
|-----------------------|------------------|
| RF Input Power        | +23dB            |
| Operating Temperature | -40 °C to +85 °  |
| Storage Temperature   | -55 °C to +105 ° |

### Typical Performance Data

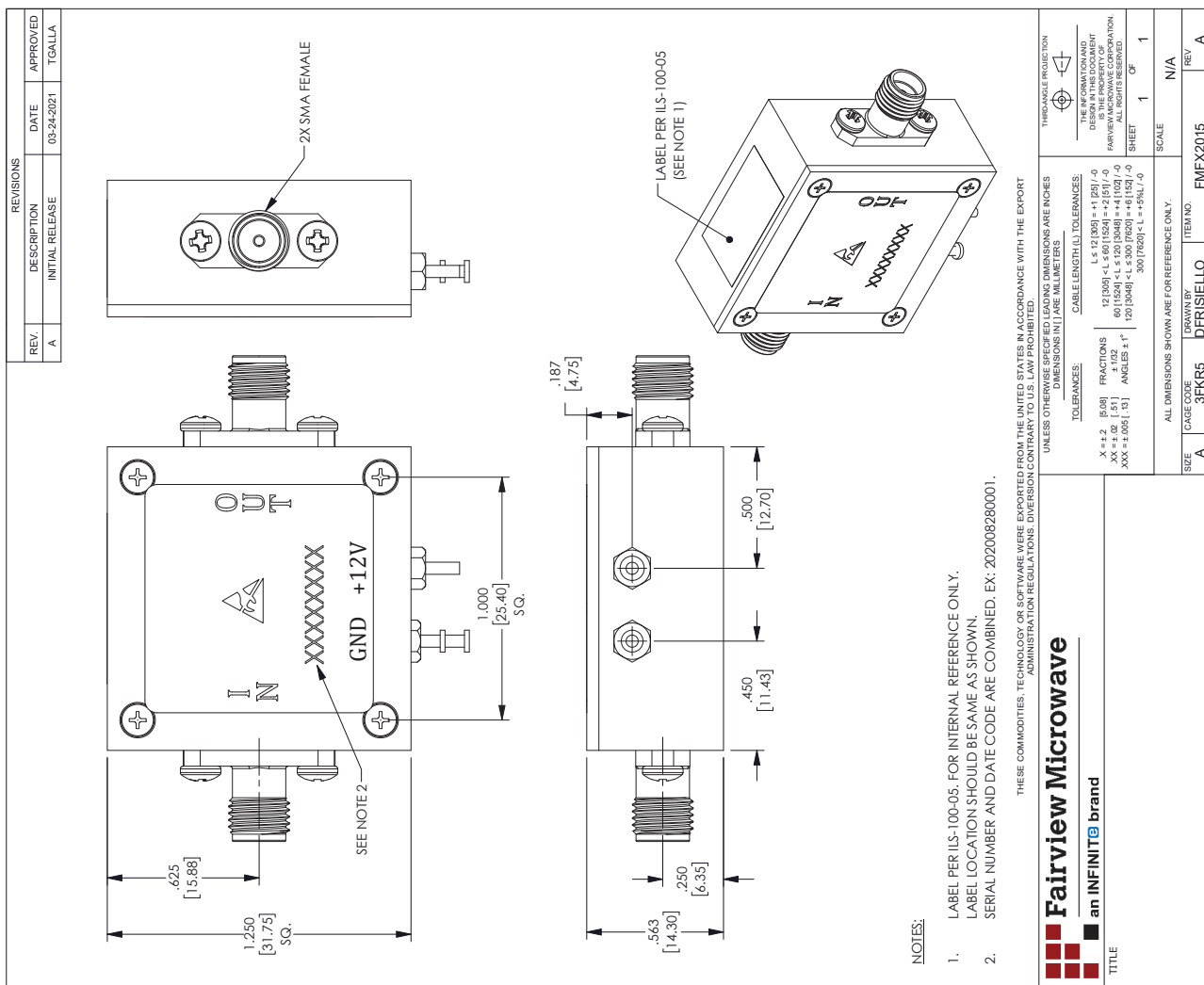


SMA Female Active 3x Frequency Multiplier with 750 MHz to 1.05 GHz Output from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA Female Active 3x Frequency Multiplier with 750 MHz to 1.05 GHz Output FMFX2015](#)

URL: <https://www.fairviewmicrowave.com/sma-active-3x-frequency-multiplier-1.05-ghz-fmfx2015-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



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