

2.92mm Mixer from 16 GHz to 30 GHz with an IF Range from DC to 8 GHz and LO Power of +13 dBm

The FMMX1030 is a broadband Double Balanced Mixer that operates across an RF and LO frequency range from 16 GHz to 30 GHz with an IF frequency range of DC to 8 GHz and supports an LO drive level of +13 dBm nominal. The design utilizes advanced MMIC technology and exhibits exceptional typical performance that includes Conversion Loss of 9.5 dB, RF to LO and LO to IF isolation levels up to 40 dB, and an input IP3 level of +20 dBm. The 50 ohm hybrid module does not require any external components or matching circuitry. The rugged compact package assembly supports female 2.92mm connectors for the RF and LO ports and a female SMA connector on the IF port, operates over a temperature range of -40°C to +85°C, and is designed to meet MIL-STD-202 environmental test conditions for Humidity, Shock, Vibration, and Altitude for high reliability.



Features:

- Double Balanced Mixer Design
- LO & RF Frequency Range: 16 GHz to 30 GHz
- IF Frequency Range: DC to 8 GHz
- LO Drive Level Range: +13 dBm
- Advanced MMIC Technology
- Conversion Loss: 9.5 dB typ
- Port Isolations up to 40 dB typ
- Input IP3 Level: +20 dBm
- RF Input for P1dB: +14 dBm
- RF/LO Connectors: Female 2.92mm
- IF Connector: Female SMA
- Operating Temperature Range: -40°C to +85°C
- Designed to Meet MIL-STD-202 Environmental Test Conditions

Electrical Specifications

Description	Min	Typ	Max	Units
RF Frequency Range	16		30	GHz
LO Frequency Range	16		30	GHz
IF Frequency Range	DC		8	GHz
Impedance		50		Ohms
Conversion Loss		9	12	dB
LO to RF Isolation	32	40		dB
LO to IF Isolation	24	32		dB
RF to IF Isolation	14	25		dB
Input at P1dB	+8	+13		dBm
Input at IP3	+15	+18		dBm
LO Input Power	+11	+13	+15	dBm

Mechanical Specifications

Weight 0.045 lbs [20.41 g]

Configuration

Design Double Balanced
 Package Type Connectorized
 RF Connector 2.92mm Female
 LO Connector 2.92mm Female
 IF Connector SMA Female

Environmental Specifications

Humidity MIL-STD-202F, 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

Applications:

- Electronic Warfare
- Point-to-Point Radios
- Point-to-Multipoint Radios
- VSAT
- Radar
- Space Systems
- Test Instrumentation
- Sensors
- Telecom Infrastructure

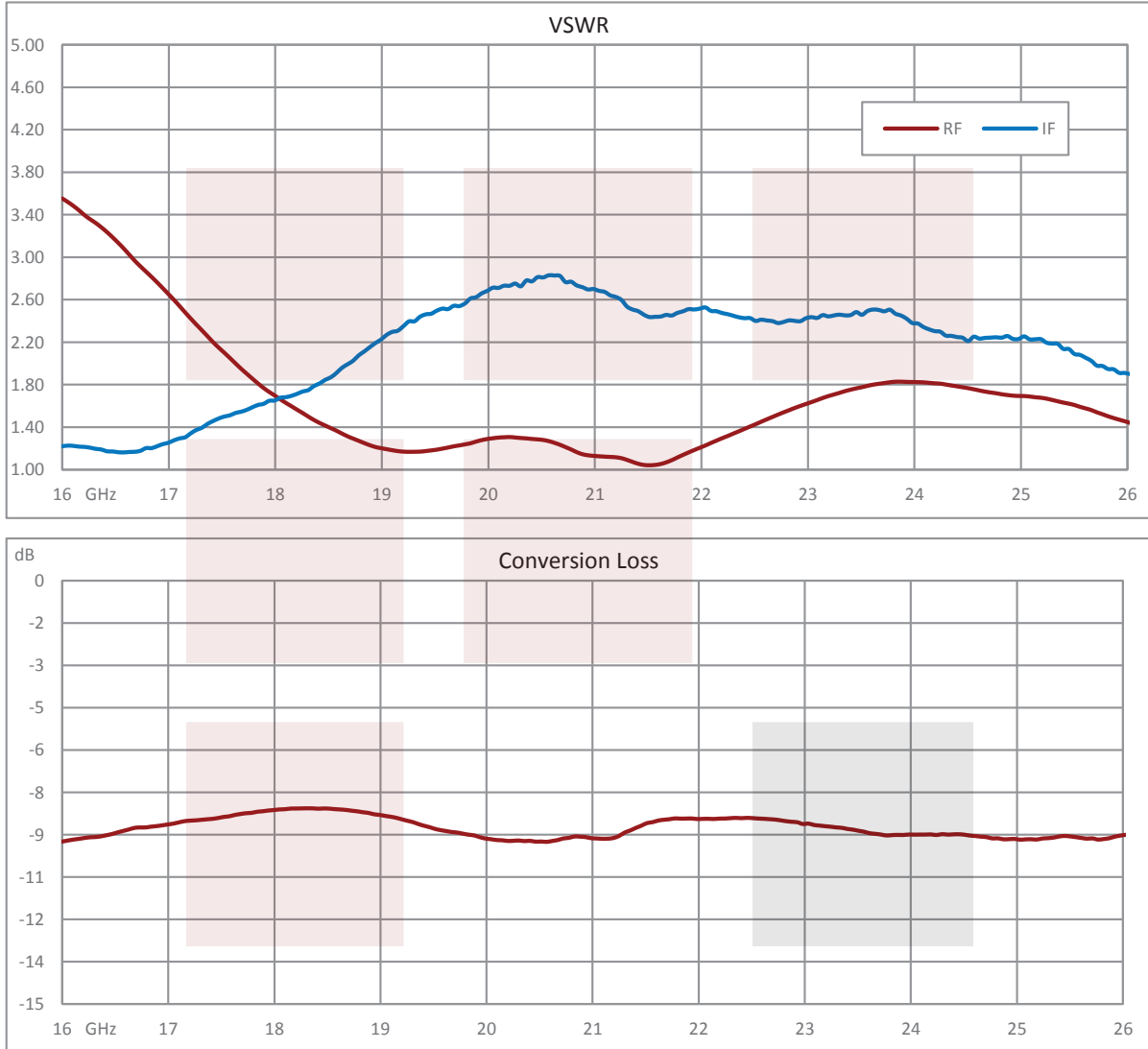
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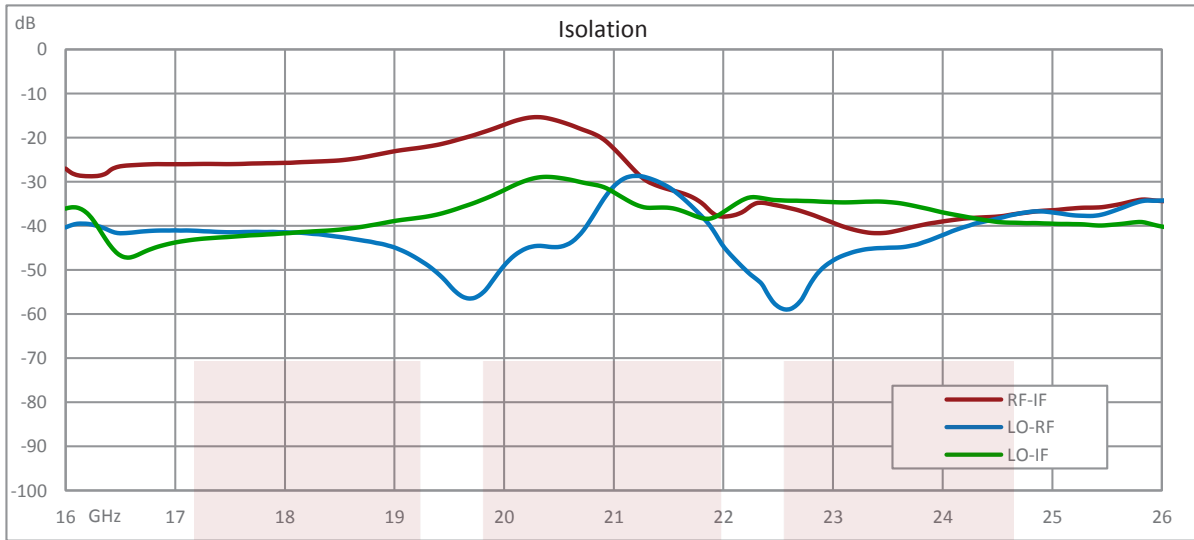
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data



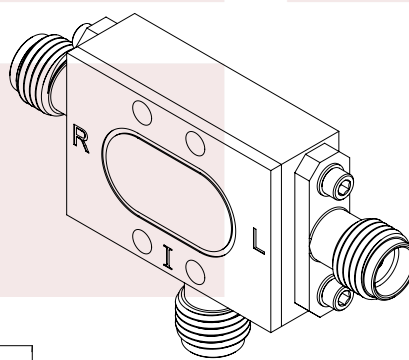
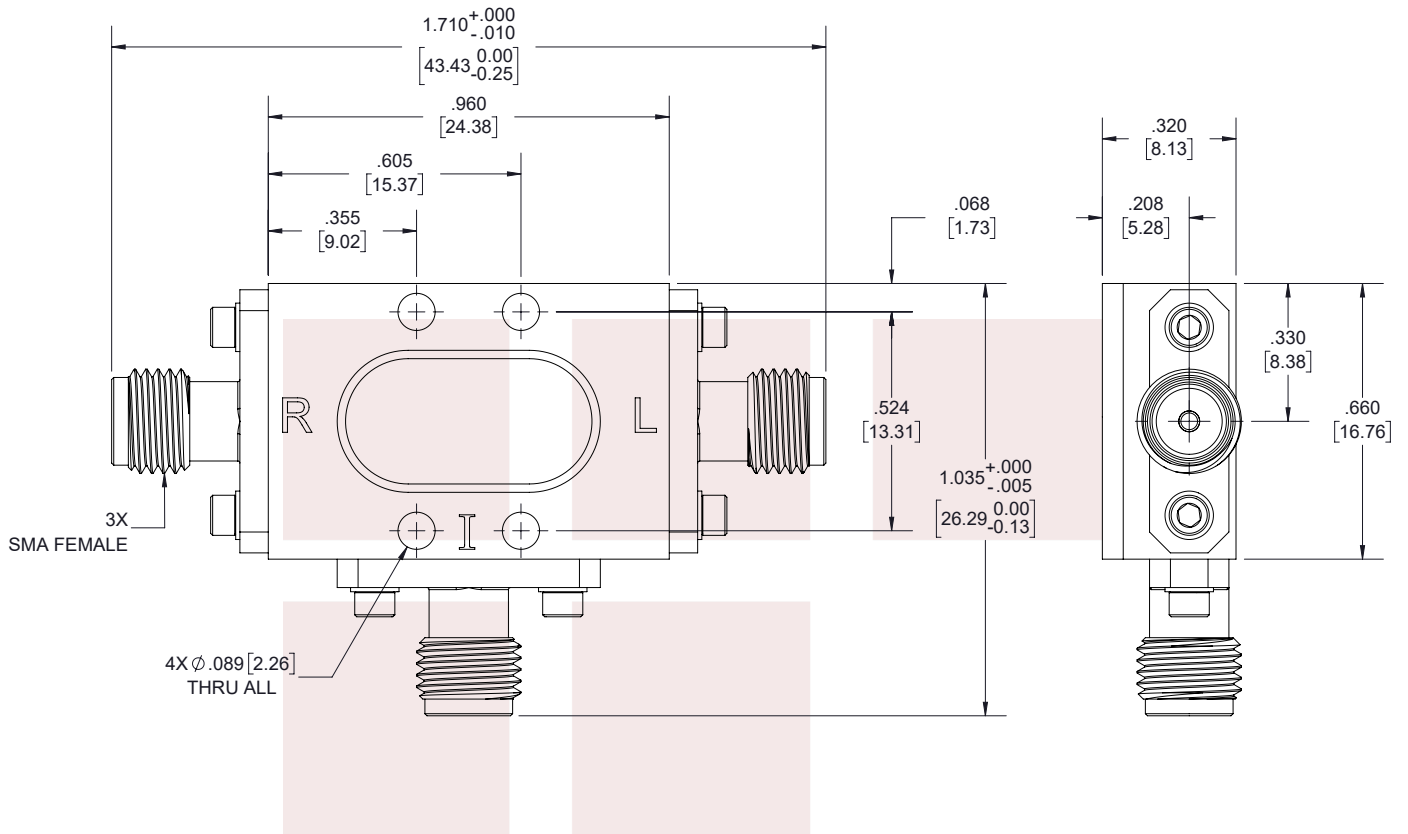


2.92mm Mixer from 16 GHz to 30 GHz with an IF Range from DC to 8 GHz and LO Power of +13 dBm from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [2.92mm Mixer from 16 GHz to 30 GHz with an IF Range from DC to 8 GHz and LO Power of +13 dBm FMMX1030](#)

URL: <https://www.fairviewmicrowave.com/2.92mm-mixer-13-dbm-fmmx1030-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.



LABEL

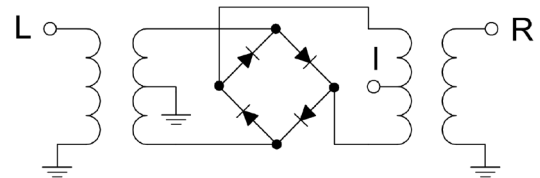


STANDARD TOLERANCES

- .X ± 0.2
- .XX ± 0.01
- .XXX ± 0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

SCHEMATIC



<p>Fairview Microwave RF COMPONENTS ON DEMAND. <i>Done!</i></p>		<p>NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].</p>						
<p>TITLE</p> <p>2.92mm Mixer from 16 GHz to 30 GHz with an IF Range from DC to 8 GHz and LO Power of +13 dBm</p>		<p>DWG NO</p> <p>FMMX1030</p>			<p>CAGE CODE</p> <p>3FKR5</p>			
CAD FILE	04/26/18	SHEET	1 OF 1	SCALE	N/A	SIZE	A	7361