

Field Replaceable 2.92mm Mixer from 24 GHz to 40 GHz with an IF Range from DC to 18 GHz and LO Power of +13 dBm

The FMMX1010 is an ultra broadband millimeter wave double balanced mixer that operates across an RF and LO frequency range from 24 to 40 GHz with a broadband IF frequency range of DC to 18 GHz and supports an LO drive level of +13 dBm typical. The 50 ohm design utilizes high performance GaAs Schottky diodes in a balanced configuration that's DC coupled. Exceptional typical performance includes 8 dB conversion loss, and 35 dB LO to RF isolation, and 28 dB LO to IF Isolation. The compact and rugged drop-in pin package supports field replaceable 2.92mm connectors for the RF and LO ports and an SMA connector for the IF port, operates over a temperature range of 0°C to +50°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 Module
- RF/LO Frequency
- Wide IF Bandwidth
- No external components or matching circuitry
- Mil Spec Compliant
- DC Coupled Design
- LO Drive level +13 dBm
- Low Conversion loss
- High LO/RF Isolation 35 dB
- Field Replaceable 2.92 RF and LO Connectors and an SMA IF Connector
- RF/IF Input up to +10 dBm
- Operating Temperature Range 0°C to +50°C

Electrical Specifications +25°C, 50 Ohm System

Description	Min	Typ	Max	Units
RF Frequency Range	24		40	GHz
LO Frequency Range	24		40	GHz
IF Frequency Range	DC		18	GHz
Impedance		50		Ohms
Conversion Loss		8		dB
LO to RF Isolation		35		dB
LO to IF Isolation		28		dB
RF Input Power			+10	dBm
LO Input Power		+13		dBm
IF Input Power			+10	dBm

Mechanical Specifications

Weight 0.039 lbs [17.69 g]

Configuration

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

Environmental Specifications

Temperature

Operating Range 0 to +50 deg C
 Humidity MIL-STD-202F, Method 103B, Condition B
 Shock MIL-STD-202F, Method 213B, Condition B
 Vibration MIL-STD-202F, Method 204D, Condition B

Applications:

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

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
sales@fairviewmicrowave.com

Altitude

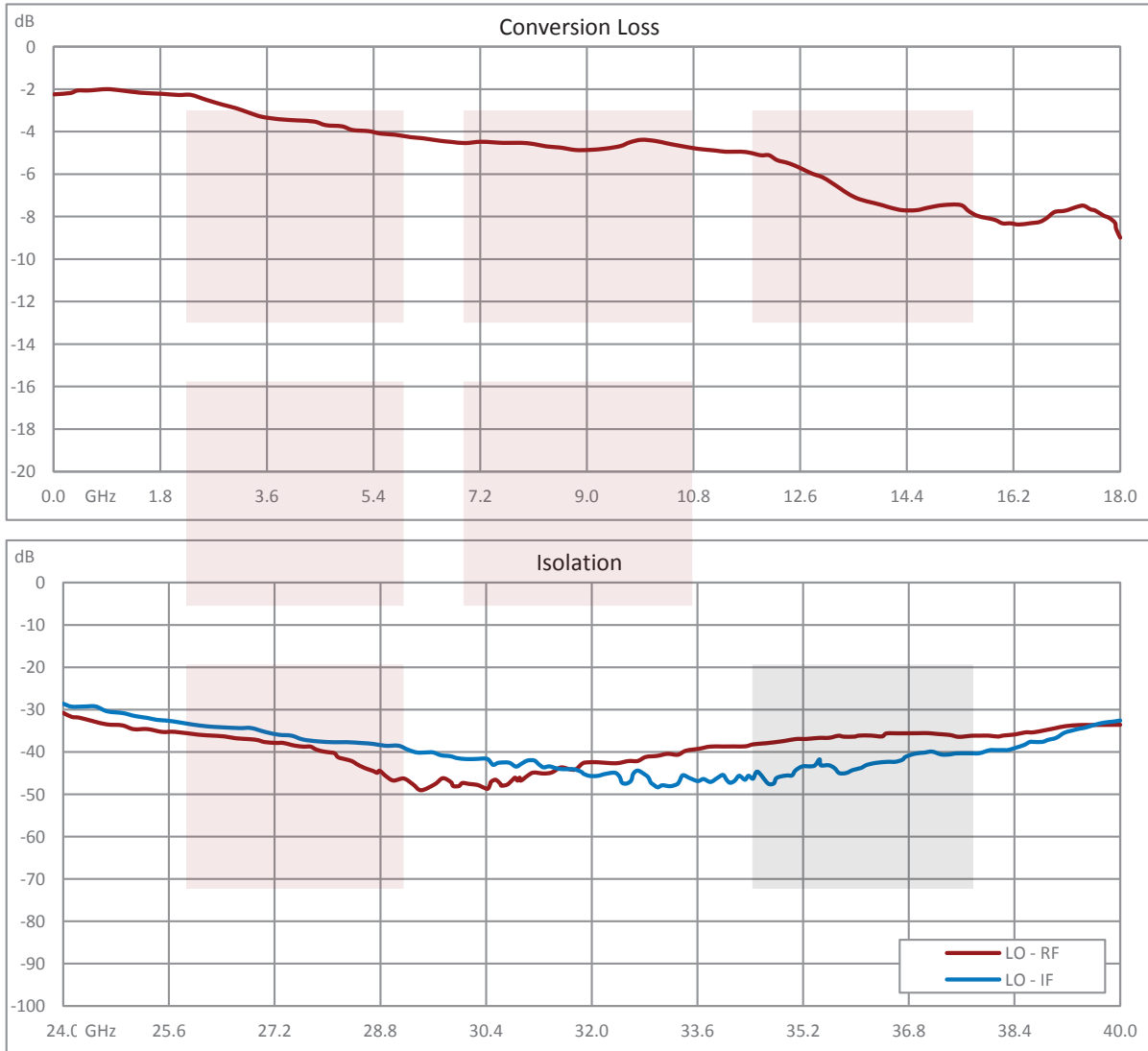
MIL-STD-202F, Method 105C, Condition B

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

Plotted and Other Data

Notes:

Typical Performance Data



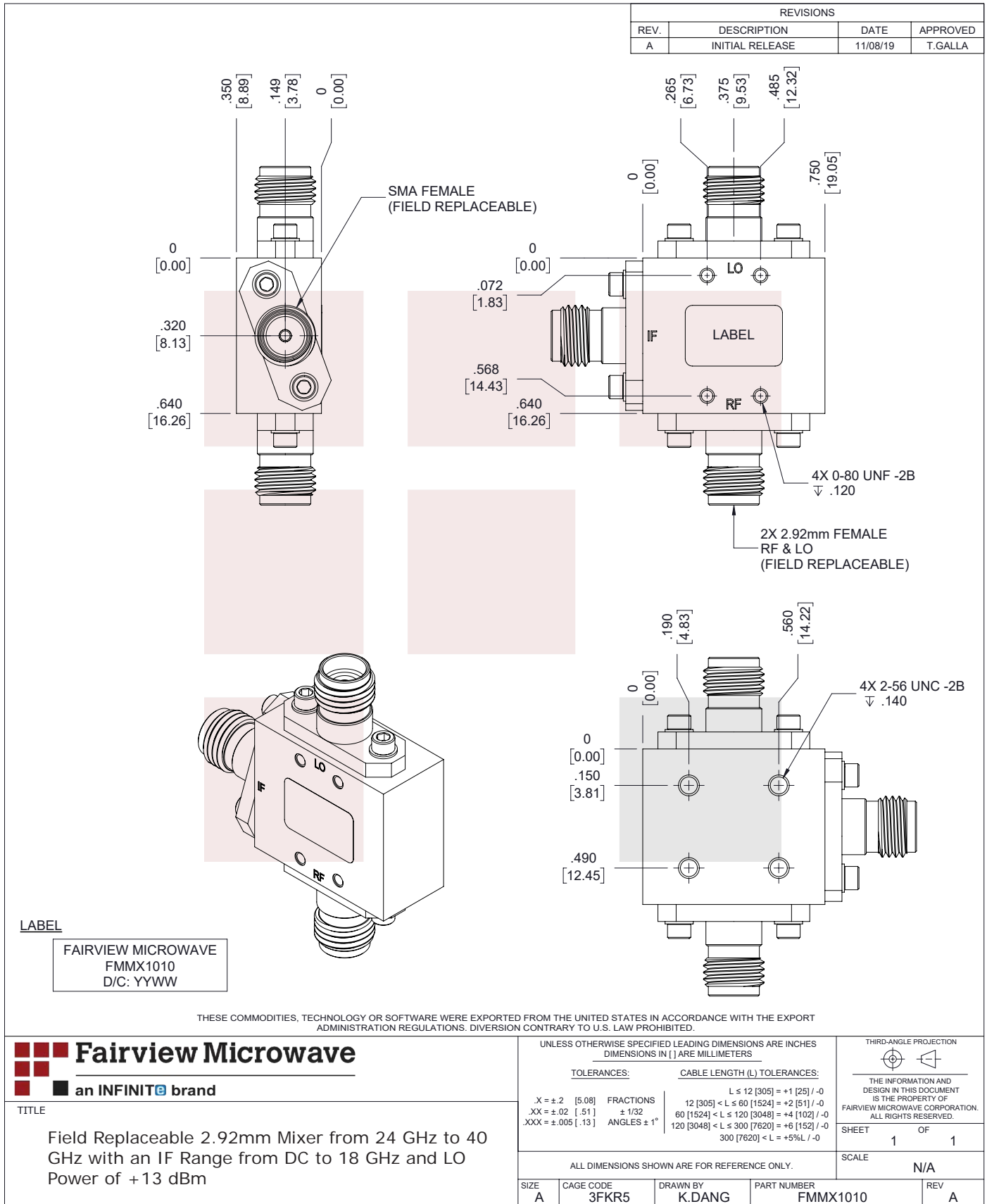
Field Replaceable 2.92mm Mixer from 24 GHz to 40 GHz with an IF Range from DC to 18 GHz and LO Power of +13 dBm from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Field Replaceable 2.92mm Mixer from 24 GHz to 40 GHz with an IF Range from DC to 18 GHz and LO Power of +13 dBm FMMX1010](#)

URL: <https://www.fairviewmicrowave.com/field-replaceable-2.92mm-mixer-13-dbm-fmmx1010-p.aspx>

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