

Field Replaceable SMA Mixer from 5 GHz to 20 GHz with an IF Range from DC to 3 GHz and LO Power of +20 dBm

The FMMX1006 is a broadband double balanced mixer that operates across an RF and LO frequency range from 5 to 20 GHz with an IF frequency range of DC to 3 GHz and supports an LO drive level of +20 dBm typical. The 50 ohm design utilizes high performance GaAs Schottky diodes in a balanced configuration that's DC coupled. Exceptional typical performance includes 10 dB conversion loss, 30 dB LO to RF Isolation, and 17 dB LO to IF Isolation. The compact and rugged drop-in pin package supports field replaceable SMA connectors, 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.

Electrical Specifications +25°C, 50 Ohm System

Description	Min	Typ	Max	Units
RF Frequency Range	5		20	GHz
LO Frequency Range	5		20	GHz
IF Frequency Range	DC		3	GHz
Impedance		50		Ohms
Conversion Loss		10		dB
LO to RF Isolation		30		dB
LO to IF Isolation		17		dB
RF Input Power			+10	dBm
LO Input Power		+20		dBm
IF Input Power			+10	dBm

Mechanical Specifications

Weight 0.046 lbs [20.87 g]

Configuration

Design	Double Balanced
Package Type	Connectorized
Connector Option	Field Replaceable
RF Connector	SMA Female
LO Connector	SMA 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
Altitude	MIL-STD-202F, Method 105C, Condition B



Features:

- Double Balanced Mixer Module
- RF/LO Frequency 5 to 20 GHz
- Wide IF Bandwidth DC to 3 GHz
- Balanced Design utilizes GaAs Schottky Diodes
- No external components or matching circuitry
- MIL-Spec Compliant
- DC Coupled Design
- LO Drive level +20 dBm
- Conversion loss 10 dB
- LO to RF Isolation 30 dB
- Field Replaceable SMA Connectors
- RF/IF Input up to +10 dBm
- Operating Temperature Range 0°C to +50°C

Applications:

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

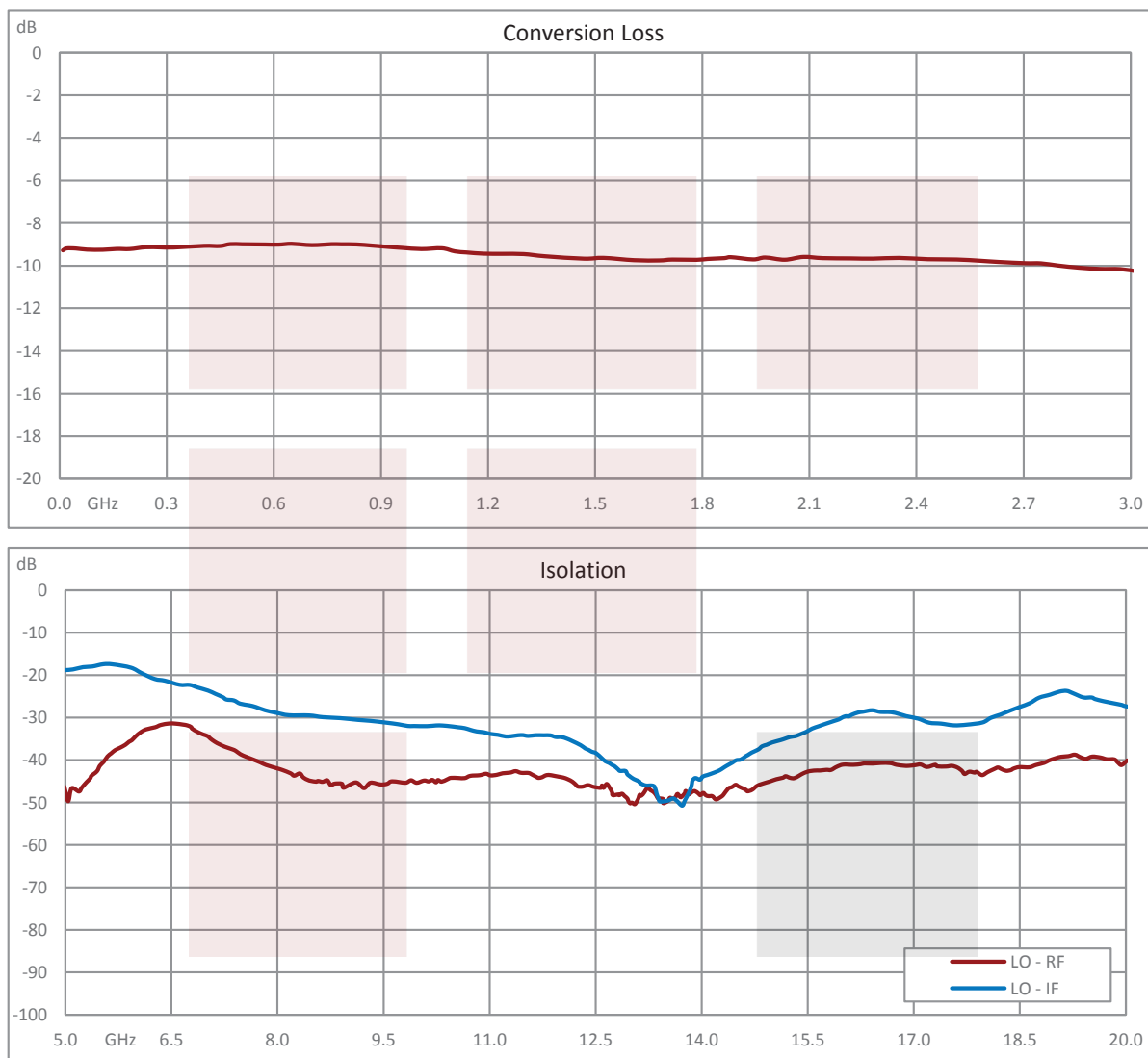
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data



Field Replaceable SMA Mixer from 5 GHz to 20 GHz with an IF Range from DC to 3 GHz and LO Power of +20 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 SMA Mixer from 5 GHz to 20 GHz with an IF Range from DC to 3 GHz and LO Power of +20 dBm FMMX1006](#)

URL: <https://www.fairviewmicrowave.com/field-replaceable-sma-mixer-20-dbm-fmmx1006-p.aspx>

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