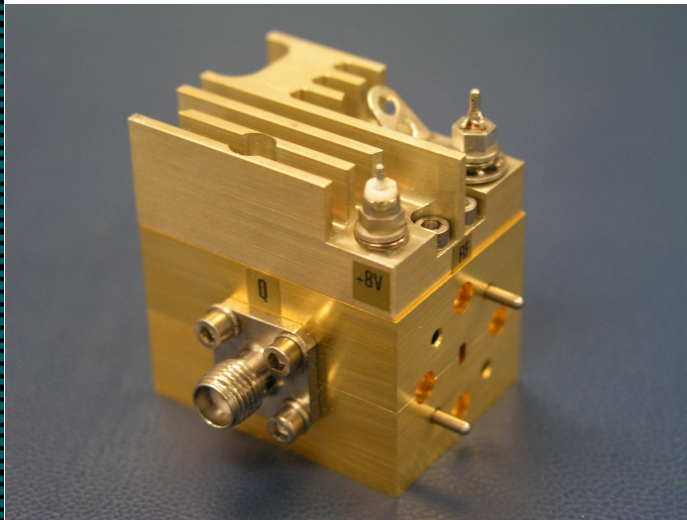


## MIQ-10-RLNA0 W-BAND I/Q MIXER W/LNA



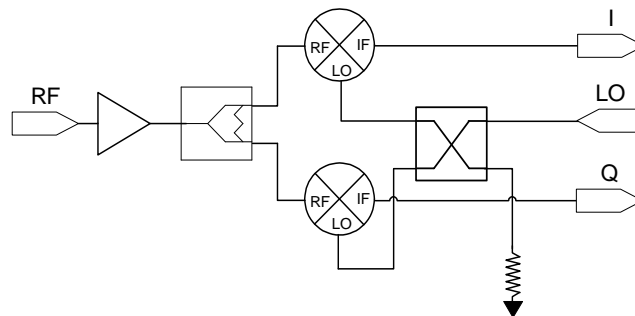
### FEATURES:

- Integrated RF Low-Noise Amplifier (LNA)
- 6dB Noise Figure
- 4dB Conversion Gain
- Internally Regulated
- Standard WR-10 Round Flanges on LO and RF

### APPLICATIONS:

- SSB Downconverter
- FMCW Radar

### DIAGRAM



### DESCRIPTION

These W Band I/Q mixers are ideal for High Frequency Radar Receiver applications and Single-Sideband Downconverters. The LO port is split by a 90-degree hybrid to the two mixers. The RF input has a Low Noise Amplifier (LNA) for optimal conversion gain.

In-phase and quadrature IF ports are SMA-compatible.

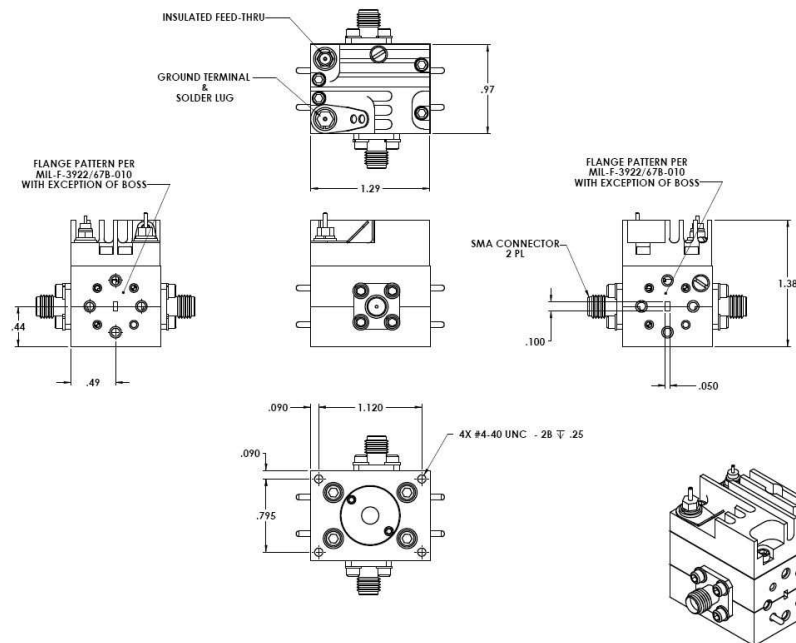
**\*The product represented by this datasheet is subject to U.S. Export Law as contained in the ITAR.**

## ELECTRICAL SPECIFICATIONS

	PERFORMANCE	UNITS
Frequency Range, RF	92 – 96	GHz
Frequency Range, LO	92 – 96	GHz
Frequency Range, IF	10 KHz – 3 GHz	
*Conversion Gain	7 typ.	dB
*Noise Figure	5.7 typ.	dB
Amplitude Balance	0.8 typ.	dB
Phase Balance	$\pm 10$	Degrees
Input P1	-12	dBm
LO Drive	13 min	dBm
Supply Voltage	8 to 15	Volts
Supply Current	50 typ.	mA
Max Pin (no damage)	-5	dBm

\*When used as an Image Reject mixer with lossless external IF hybrid.

## OUTLINE DRAWING



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## HOW TO ORDER

**Specify Model Number**  
**MIQ-10-RLNA0**

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