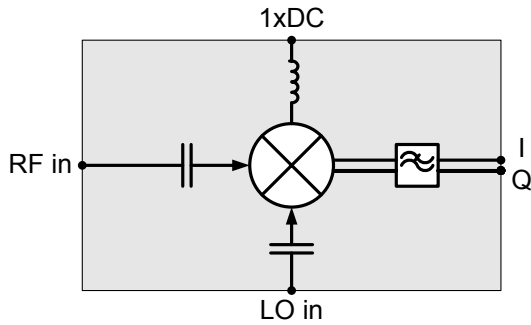


Description



The MQR0011 is an image reject mixer covering the full E-band. It can be used as a transmitter or a receiver. IF port has an IQ in/output ranging from DC and beyond 12 GHz. Image rejection level is about 24 dB throughout the E-band. LO input power level of 5 dBm is required.

Applications

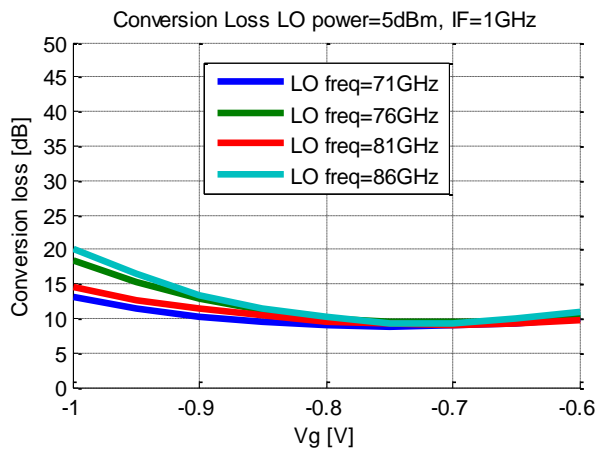
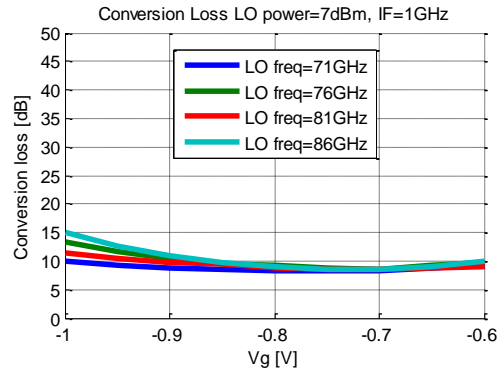
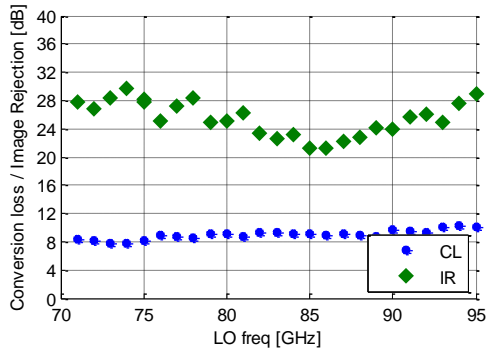
- E-band point to point communication links.
- 77 GHz automotive radar.

Performance, Ta = + 25 C

Parameter	Typical
Conversion loss	10 dB
IF Bandwidth	0 to 12 GHz
RF Bandwidth	70-95 GHz
Image suppression	24 dB
LO input power	+ 5 dBm
IIP3	+ 15 dBm
DC power	0 mW

Measured Performance:

IF = 1 GHz, - 5 dBm, LO = +7 dBm



Bias settings

Pad	Bias voltage		
	Min	Typ.	Max
Vg		-0.75 V (0 mA)	

Absolute Maximum Ratings

Gate bias voltage	-5 to + 0.7 V
IF in (I/Q)	+ 4 dBm/ch.
LO drive	+ 12 dBm
Operating temperature	-40 to + 85 C
Storage temperature	-65 to +150 C

For more information, prices or to place orders please contact sales@gotmic.se

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Outline drawing

Distances are in mm. Drawing is also available in dwg format upon request. RF probe pitches from 100 μ m on the output and to 150 μ m at the input for easy on-chip testing and DC probe pitch 150 μ m. Substrate thickness is 50 μ m (GaAs).

