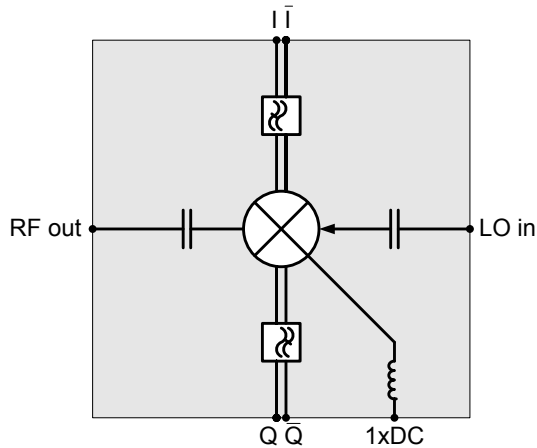


Description



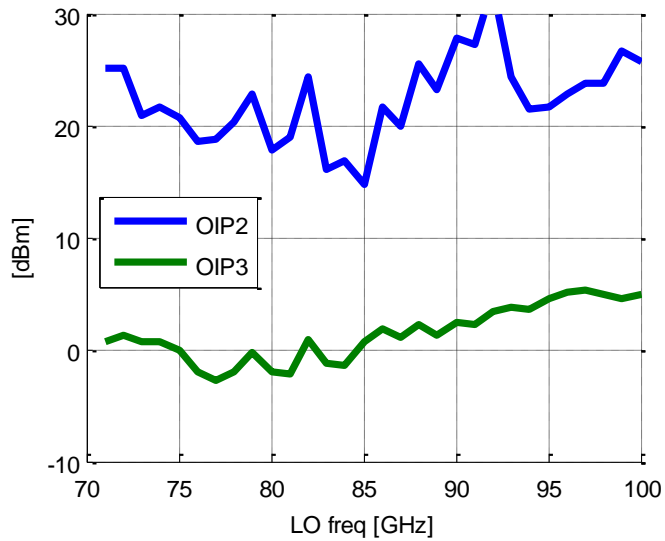
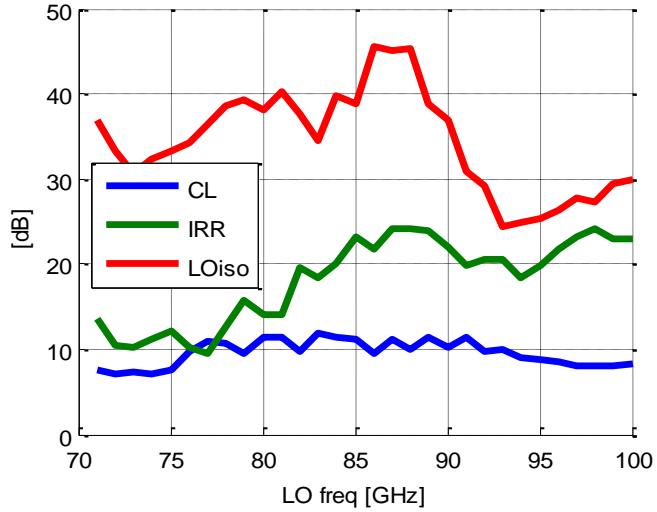
The gMDR0013 is a direct IQ modulator or a demodulator that covers the full E- and W band. Baseband inputs are IQ and IQ complementary signals from DC up to 12 GHz. Both LO and image suppression are excellent throughout these bands. LO-RF isolation features 35 dB and image suppression 20 dB. LO drive power is at modest 7 dBm.

Applications

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

Performance

Parameter	Specification
Conversion loss	10 dB
IF Bandwidth	0 to 12 GHz
RF Bandwidth	71-100 GHz
LO to RF isolation	Typ. 35 dB
Image rejection	Typ. 20 dB
IOP2/3 & 95 GHz	Typ. +22/+5 dBm
LO input power	7 dBm
DC power	0 mW



Bias settings

Pad	Bias voltage		
	Min	Typ.	Max
DC	-5	-0.75 V	+0.7

Outline drawing, to be defined

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).

