

Double-Balanced Mixer,
5 - 500 MHz

Rev. V4

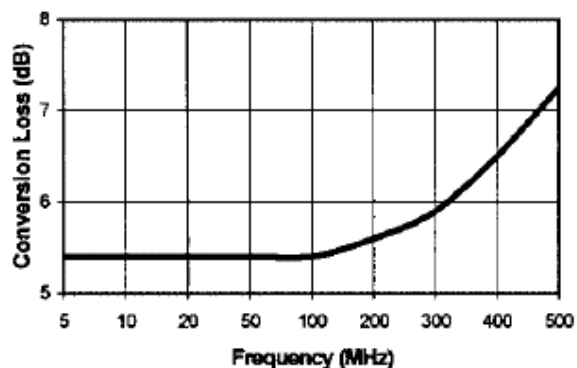
Electrical Specifications¹: $T_A = -55^{\circ}\text{C}$ to $+85^{\circ}\text{C}$

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Frequency Range	RF, LO Ports IF Port	5 - 500 DC - 500	MHz MHz	— —	— —	— —
Conversion Loss		5 - 150 MHz 150 - 500 MHz	dB dB	— —	— —	7.0 9.0
Isolation	LO to RF	5 - 150 MHz 150 - 500 MHz	dB dB	40 35	— —	— —
	LO to IF	5 - 150 MHz 150 - 500 MHz	dB dB	35 25	— —	— —
	RF to IF	5 - 150 MHz 150 - 500 MHz	dB dB	25 20	— —	— —
DC Polarity	Negative	—	—	—	—	—
DC Offset			mV	—	≤1	—
RF Input	1 dB Compression 1 dB Desensitization		dBm dBm	— —	+2.5 0	— —
SSB Noise Figure	Within 1 dB of Conversion Loss Max.	—	—	—	—	—
Typical Two Tone IM Ratio	With -10 dBm input, each input 25 MHz and 35 MHz IF	100 - 350 MHz 350 - 500 MHz	dB dB	— —	≥55 ≥40	— —

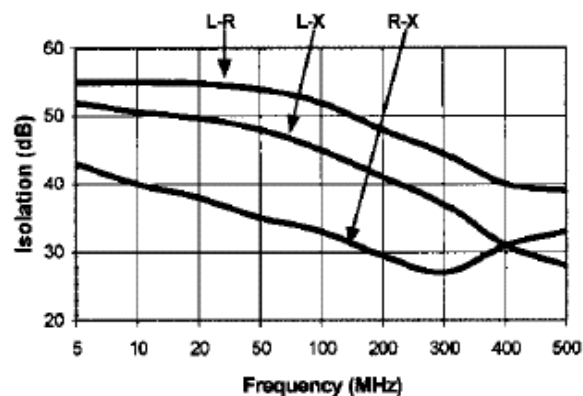
1. All specifications apply when operated at +7 dBm available LO power with 50 ohm source and load impedance.

Typical Performance Curves

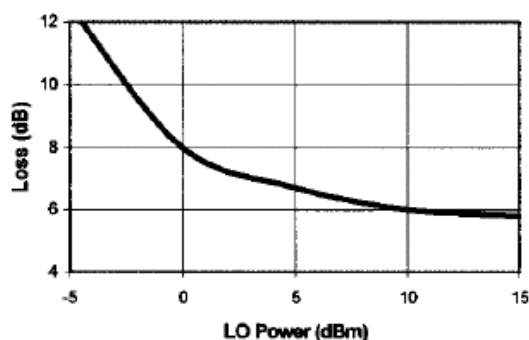
**Conversion Loss (LO = +7 dBm,
RF = -5 dBm, IF = 5 MHz)**



Isolation (Input = +7 dBm)



**Conversion Loss vs. LO Power
(LO = 200 MHz, RF = 140 MHz @ -10
dBm, IF = 60 MHz)**



Ordering Information

Part Number	Package
MD-108 PIN	RH-3

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