

Double Balanced Mixer

Model MO6xxN

Octave Band

RF 6.0 to 12.5 GHz

Electrical Specifications: ⁽¹⁾

Parameter	Conditions			Specifications		
	RF (GHz)	LO (GHz)	IF (MHz)	Min	Typical	Max
SSB Conversion loss: ^{(2) (3)}	6.0-12.5	5.0-15.0	DC-1000		4.5 dB	7.5 dB
	6.0-12.5	5.0-15.0	DC-2500		5.5 dB	8.5 dB
Isolation						
	LO to RF:	5.0-15.0		25 dB	37 dB	
	LO to IF:	5.0-15.0		22 dB	41 dB	
RF to IF:	6.0-12.5				22 dB	
Input 1-dB Compression Point:	6.0-12.5	5.0-15.0	DC-2500		+1 dBm +4 dBm +8 dBm +12 dBm	MO63 MO64 MO66 MO67
Input Third Order Intercept Point:	6.0-12.5	5.0-15.0	DC-2500		+11 dBm +14 dBm +18 dBm +22 dBm	MO63 MO64 MO66 MO67
LO Power: ⁽⁴⁾	6.0-12.5	5.0-15.0	DC-2500		+7 dBm +10 dBm +14 dBm +19 dBm	MO63 MO64 MO66 MO67

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LO Power

3 = +7 dBm
4 = +10 dBm
6 = +14 dBm
7 = +19 dBm

Drop-In Module or With SMA(F) Connectors

M = Module
P = With Connectors

Revision March 9, 2023
ECN: Lowered LO-RF Isolation from 25 dB to 22 dB.
Raised Conversion Loss from 6.5/7.5 dB to 7.5/8.5 dB.

Notes:

- Specifications are guaranteed when tested as a downconverter in a 50 Ohm system from -55°C to +100°C with the nominal LO power. Specifications indicated as typical are not guaranteed.
- Noise figure is typically within ±0.5 dB of conversion loss for IF frequencies greater than 10 MHz.
- Conversion loss typically degrades less than 0.5 dB at +100°C and improves less than 0.5 dB at -55°C.
- Usable LO drives are up to 2 dB below and 3 dB above nominal.

Typical Performance at 25°C

