

Double Balanced Mixer

Multi-Octave Band

Model MM8xMS-3

Model MM8xMS-14

RF 5.0 to 14.0 GHz

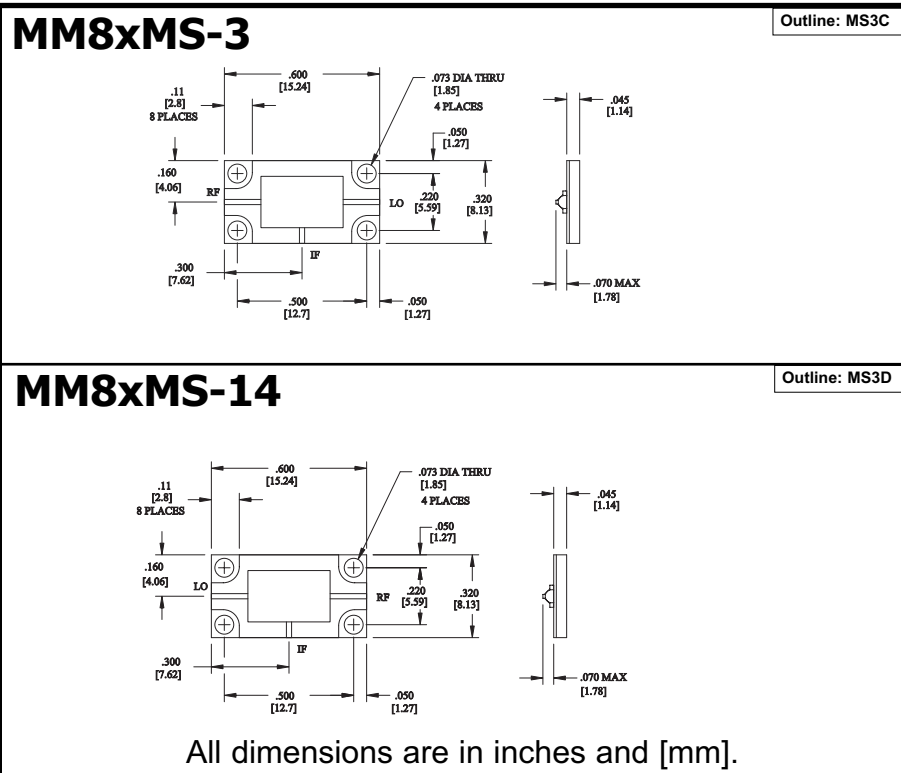
Electrical Specifications ⁽¹⁾:

Parameter	Conditions			Specifications		
	RF(GHz)	LO(GHz)	IF(MHz)	Min	Typical	Max
SSB Conversion loss: ^{(2) (3)}	6.0-14.0	5.5-14.5	DC-500		5.2 dB	7.0 dB
	5.0-14.0	4.0-15.0	DC-1000		6.5 dB	8.5 dB
	5.0-14.0	3.0-16.0	DC-2000		7.0 dB	9.5 dB
	5.0-14.0	3.0-17.0	DC-2000		8.5 dB	10.0 dB
Isolation						
	LO to RF:	3.0-17.0		16 dB	24 dB	
	LO to IF:	7.0-17.0		23 dB	32 dB	
		3.0-7.0		15 dB	18 dB	
		7.0-17.0		25 dB	39 dB	
RF to IF:	5.0-15.0				21 dB	
Input 1-dB Compression Point:	5.0-15.0	3.0-17.0	DC-1500		+2 dBm +5 dBm +8 dBm	MM83 MM84 MM86
Input Third Order Intercept Point:	5.0-15.0	3.0-17.0	DC-1500		+11 dBm +14 dBm +18 dBm	MM83 MM84 MM86
LO Power: ⁽⁴⁾	5.0-15.0	3.0-17.0	DC-1500		+7 dBm +10 dBm +14 dBm	MM83 MM84 MM86

LO Power ←
 3 = +7 dBm
 4 = +10 dBm
 6 = +14 dBm

Notes:

- Specifications are guaranteed when tested as a downconverter in a 50 Ohm system at +25°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.
- See Application Note M112, for aid in selecting the outline and for mounting and installation information.



Typical Performance at 25°C

