

Double Balanced Mixer

Model MM8xMS-3

Model MM8xMS-14

Multi-Octave Band

RF 5.0 to 15.0 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
	5.0-15.0	3.0-17.0	DC-2000		8.5 dB	10.0 dB
Isolation						
	LO to RF:	3.0-7.0		16 dB	24 dB	
		7.0-17.0		23 dB	32 dB	
	LO to IF:	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	MM83
					+5 dBm	MM84
					+8 dBm	MM86
Input Third Order Intercept Point:	5.0-15.0	3.0-17.0	DC-1500		+11 dBm	MM83
					+14 dBm	MM84
					+18 dBm	MM86
LO Power: ⁽⁴⁾	5.0-15.0	3.0-17.0	DC-1500		+7 dBm	MM83
					+10 dBm	MM84
					+14 dBm	MM86

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LO Power

3 = +7 dBm

4 = +10 dBm

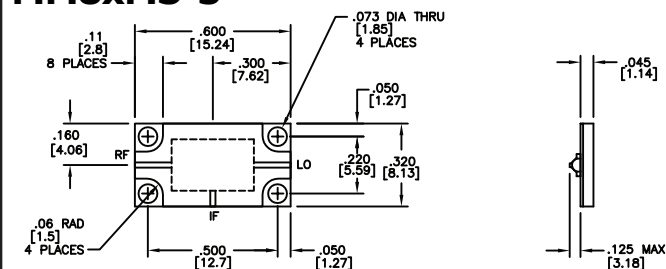
6 = +14 dBm

Notes:

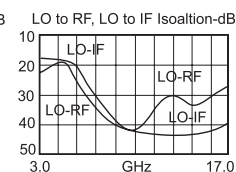
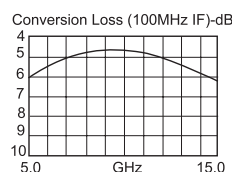
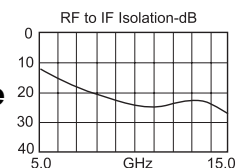
- Specifications are guaranteed when tested as a downconverter in a 50 Ohm system at +25°C with the nominal LO power. Specifications indicated as typical are not guaranteed.
- Noise figure is typically within ±0.5 dB of conversion loss for IF frequencies greater than 10 MHz.
- Conversion loss typically 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.

MM8xMS-3

Outline: MS3C

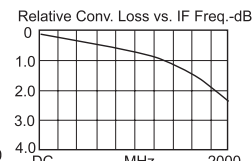
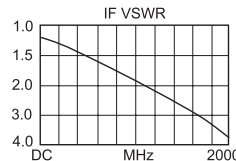
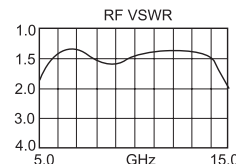
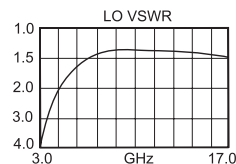
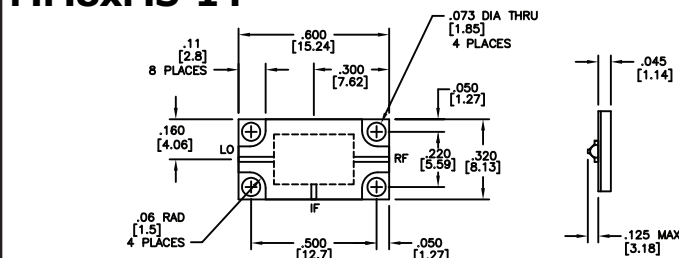


Typical Performance at 25°C



MM8xMS-14

Outline: MS3D



NOTES: (UNLESS OTHERWISE SPECIFIED)
 1. LO, RF, AND IF TRACES ARE .02(0.5) WIDE SOLDER-COATED COPPER, SUITABLE FOR SOLDER ATTACH.

All dimensions are in inches and [mm].



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Rev.
3/6/08

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