

Double Balanced Mixer

Multi-Octave Band

Model MM9xMS
Model MM9xMS-14
 RF 1.5 to 19.0 GHz

Electrical Specifications:⁽¹⁾

Parameter	Conditions			Specifications		
	RF (GHz)	LO (GHz)	IF (MHz)	Min	Typical	Max
SSB Conversion loss: ^{(2) (3)}	2.0-18.0	2.0-18.0	2.0-5.0		6.8 dB	9.0 dB
	2.0-18.0	2.0-18.0	0.5-6.5		7.8 dB	11.0 dB
	1.5-19.0	1.5-19.0	0.5-6.5		8.0 dB	11.5 dB
Isolation LO to RF: LO to IF: RF to IF: IF to RF:	1.5-19.0	1.5-4.0	0.5-6.5	17 dB	23 dB	
		4.0-19.0		20 dB	31 dB	
		1.5-19.0		20 dB	25 dB	
					27 dB	
Input 1-dB Compression Point:	1.5-19.0	1.5-19.0	0.5-6.5		+5 dBm	MM94 MM96 MM97 MM98
					+8 dBm	
					+12 dBm	
					+15 dBm	
Input Third Order Intercept Point:	1.5-19.0	1.5-19.0	0.5-6.5		+14 dBm	MM94 MM96 MM97 MM98
					+17 dBm	
					+21 dBm	
					+24 dBm	
LO Power: ⁽⁴⁾	1.5-19.0	1.5-19.0	0.5-6.5		+10 dBm	MM94 MM96 MM97 MM98
					+13 dBm	
					+17 dBm	
					+21 dBm	

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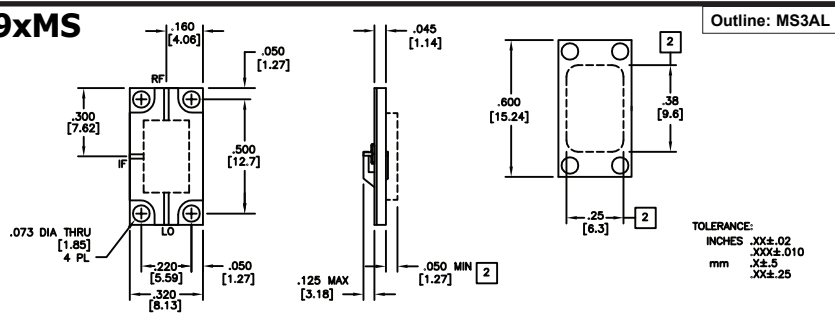
LO Power

4 = +10 dBm
 6 = +13 dBm
 7 = +17 dBm
 8 = +21 dBm

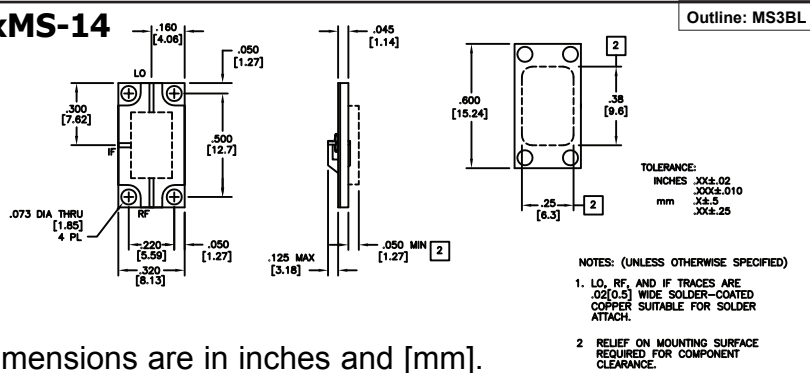
Notes:

- 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.

MM9xMS

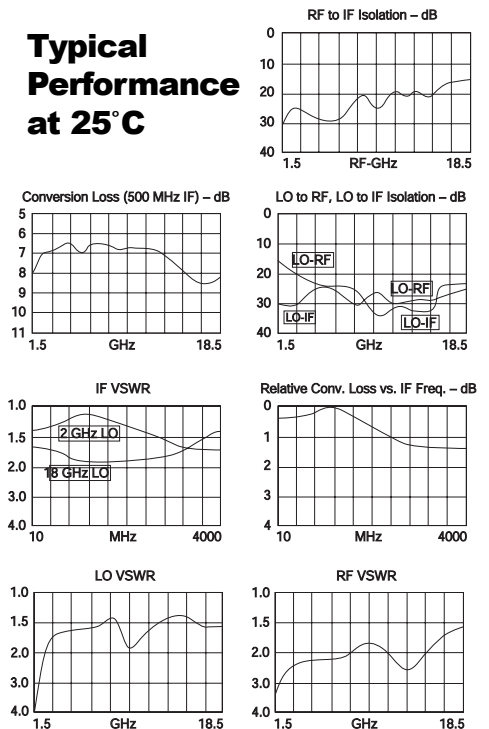


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All dimensions are in inches and [mm].

Typical Performance at 25°C



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