

Double Balanced Mixer

Multi-Octave Band

Model MM4xMS-10

Model MM4xMS-17

RF 2.0 to 9.0 GHz

Electrical Specifications ⁽¹⁾:

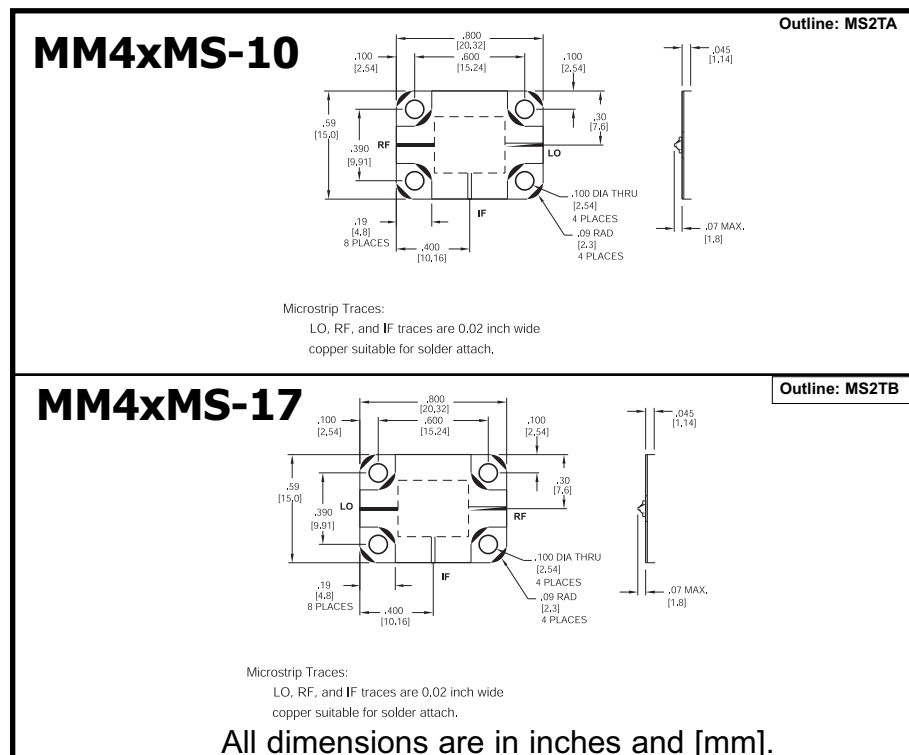
Parameter	Conditions			Specifications	
	RF(GHz)	LO(GHz)	IF(MHz)	Typical	Max
SSB Conversion loss: ^{(2) (3)}	3.0-8.0	3.0-8.0	DC-500	5.0 dB	7.0 dB
	3.0-8.0	3.0-8.0	DC-1000	6.0 dB	8.0 dB
	3.0-8.0	3.0-8.0	DC-1500	7.0 dB	9.0 dB
	2.0-9.0	2.0-9.0	DC-1500	8.0 dB	10.5 dB
Isolation LO to RF: LO to IF: RF to IF:		2.0-9.0		36 dB	
		2.0-9.0		37 dB	
	2.0-9.0			20 dB	
Input 1-dB Compression Point:	2.0-9.0	2.0-9.0	DC-1500	+1 dBm +4 dBm +8 dBm +12 dBm	MM43 MM44 MM46 MM47
Input Third Order Intercept Point:	2.0-9.0	2.0-9.0	DC-1500	+11 dBm +14 dBm +18 dBm +22 dBm	MM43 MM44 MM46 MM47
LO Power: ⁽⁴⁾	2.0-9.0	2.0-9.0	DC-1500	+7 dBm +10 dBm +13 dBm +18 dBm	MM43 MM44 MM46 MM47

→ **LO Power**
 3 = +7 dBm
 4 = +10 dBm
 6 = +13 dBm
 7 = +18 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.

Mixers



Typical Performance at 25°C

