

REMEC

Double Balanced Mixer

Multi-Octave Band

RF 5.0-15.0 GHz
 LO 3.0-17.0 GHz
 IF DC-2000 MHz

Electrical Specifications ⁽¹⁾:

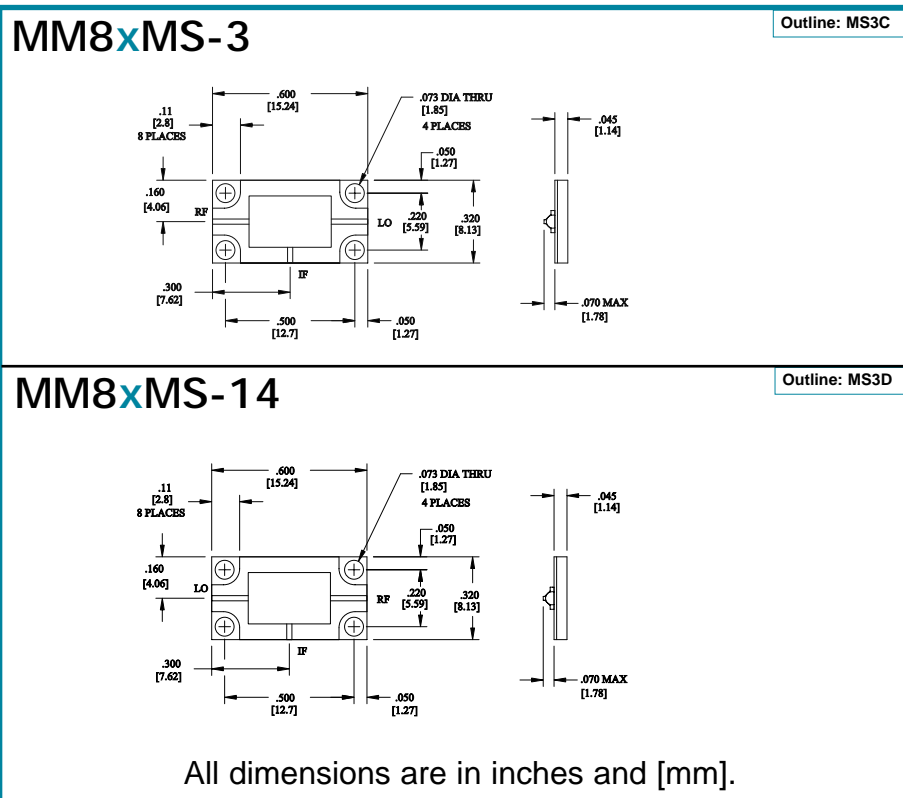
| Parameter | Conditions | | | Specifications | | | |
|---|------------|----------------------|---------|----------------|-------------------------------|----------------------|-----------|
| | RF(GHz) | LO(GHz) | IF(MHz) | Min | Typical | Max | |
| SSB Conversion loss: ^{(2) (3)} | 6.0-14.0 | 5.5-14.5 | 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 | | 3.0-17.0 7.0-17.0 | | 16 dB 23 dB | 24 dB 32 dB | | |
| | | | | | | | LO to RF: |
| | | | | | | | LO to IF: |
| RF to IF: | 5.0-15.0 | 3.0-17.0 | DC-1500 | | 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 | |

MM8xMS-3
 MM8xMS-14

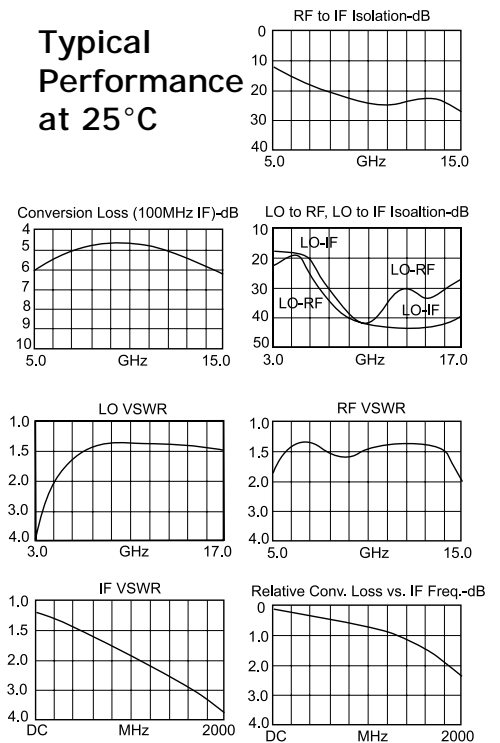
LO Power ←
 3 = +7 dBm
 4 = +10 dBm
 6 = +14 dBm

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



Specifications subject to change without notice.