

Triple Balanced Mixer

Model MM4xxN-1

Multi-Octave Band

RF 1.5 to 9.0 GHz

Electrical Specifications:⁽¹⁾

Model MM4xxN-1

| Parameter | Conditions | | | Specifications | | |
|---|------------|----------|----------|----------------|---------|---------|
| | RF (GHz) | LO (GHz) | IF (MHz) | Min | Typical | Max |
| SSB Conversion loss: ^{(2) (3)} | 2.0-8.0 | 2.0-8.0 | 10-2000 | | 6.3 dB | 7.5 dB |
| | 2.0-8.0 | 2.0-8.0 | 10-4500 | | 7.3 dB | 8.5 dB |
| | 1.5-9.0 | 1.5-9.0 | 10-4500 | | 8.0 dB | 10.5 dB |
| Isolation | LO to RF: | 1.5-4.5 | | 10 dB | 17 dB | |
| | | 4.5-9.0 | | 20 dB | 27 dB | |
| | LO to IF: | 1.5-9.0 | | 20 dB | 30 dB | |
| | RF to IF: | 1.5-9.0 | | | 23 dB | |
| IF to RF: | 1.5-9.0 | 10-4500 | | 25 dB | | |
| Input 1 dB Compression Point: | 1.5-9.0 | 1.5-9.0 | 10-4500 | | +5 dBm | MM44 |
| | | | | | +8 dBm | MM46 |
| | | | | | +12 dBm | MM47 |
| | | | | | +15 dBm | MM48 |
| Input Third Order Intercept Point: | 1.5-9.0 | 1.5-9.0 | 10-4500 | | +14 dBm | MM44 |
| | | | | | +17 dBm | MM46 |
| | | | | | +21 dBm | MM47 |
| | | | | | +24 dBm | MM48 |
| LO Power: ⁽⁴⁾ | 1.5-9.0 | 1.5-9.0 | 10-4500 | | +10 dBm | MM44 |
| | | | | | +13 dBm | MM46 |
| | | | | | +17 dBm | MM47 |
| | | | | | +21 dBm | MM48 |

LO Power

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

Drop-In

Module or With SMA(F) Connectors
M = Module
P = With Connectors

Notes:

- Specifications are guaranteed when tested as a downconverter in a 50 Ohm system from -55 C to +100 C with the nominal LO power. Specifications indicated as typical are not guaranteed.
- Noise figure is typically within ± 0.5 dB of conversion loss.
- 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.

Typical Performance at 25 °C

