

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	1.5-9.0	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 +8 dBm +12 dBm +15 dBm	MM44 MM46 MM47 MM48
Input Third Order Intercept Point:	1.5-9.0	1.5-9.0	10-4500		+14 dBm +17 dBm +21 dBm +24 dBm	MM44 MM46 MM47 MM48
LO Power: ⁽⁴⁾	1.5-9.0	1.5-9.0	10-4500		+10 dBm +13 dBm +17 dBm +21 dBm	MM44 MM46 MM47 MM48

LO Power

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

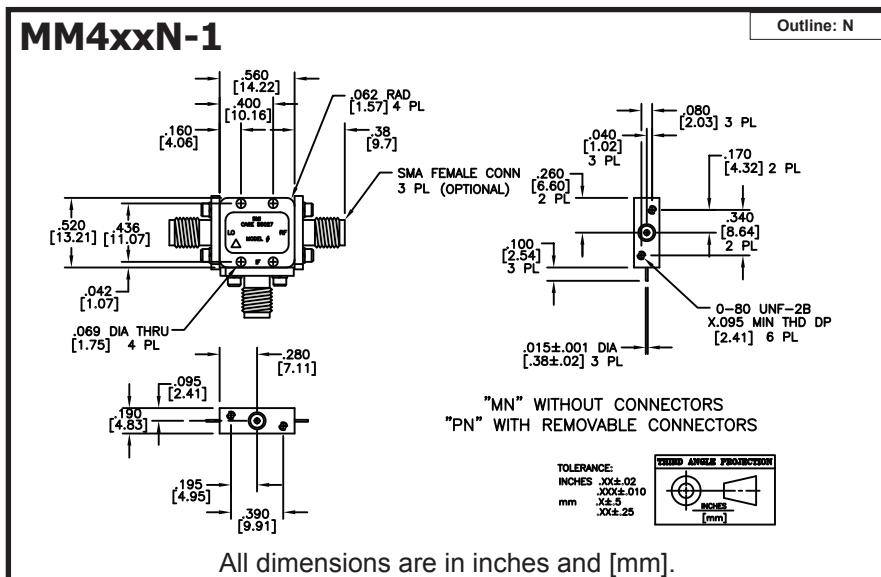
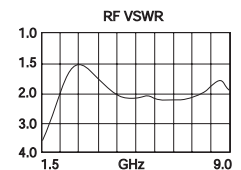
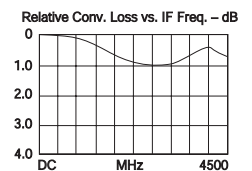
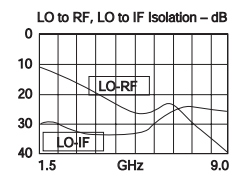
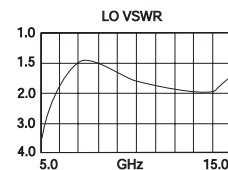
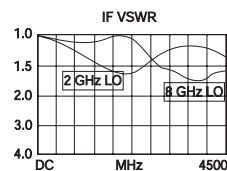
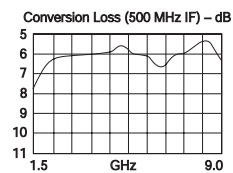
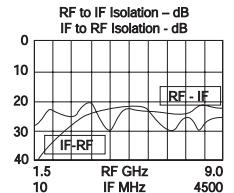
Drop-In

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



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10/28/09