

Double Balanced Mixer

Model MM9xxN-11

Multi-Octave Band

RF 6.0 to 18.0 GHz

Electrical Specifications :⁽¹⁾

Parameter	Conditions			Specifications		
	RF (GHz)	LO (GHz)	IF (MHz)	Min	Typical	Max
SSB Conversion loss: ^{(2) (3)}	6.0-18.0	5.0-18.0	DC-1000		5.5 dB	7.5 dB
	6.0-18.0	4.0-18.0	DC-3000		6.0 dB	8.0 dB
	6.0-18.0	4.0-18.0	DC-4000		6.5 dB	8.5 dB
	6.0-18.0	4.0-18.0	DC-4500		7.0 dB	9.0 dB
Isolation						
	LO to RF:		4.0-14.0 14.0-18.0	25 dB 22 dB	40 dB 35 dB	
	LO to IF: RF to IF:	6.0-18.0	4.0-18.0	20 dB	24 dB 22 dB	
Input 1 dB Compression Point:	6.0-18.0	4.0-18.0	DC-4500		+2 dBm +5 dBm +8 dBm +12 dBm	MM93 MM94 MM96 MM97
Input Third Order Intercept Point:	6.0-18.0	4.0-18.0	DC-4500		+11 dBm +14 dBm +18 dBm +23 dBm	MM93 MM94 MM96 MM97
LO Power: ⁽⁴⁾	6.0-18.0	4.0-18.0	DC-4500		+7 dBm +10 dBm +14 dBm +19 dBm	MM93 MM94 MM96 MM97

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LO Power ←

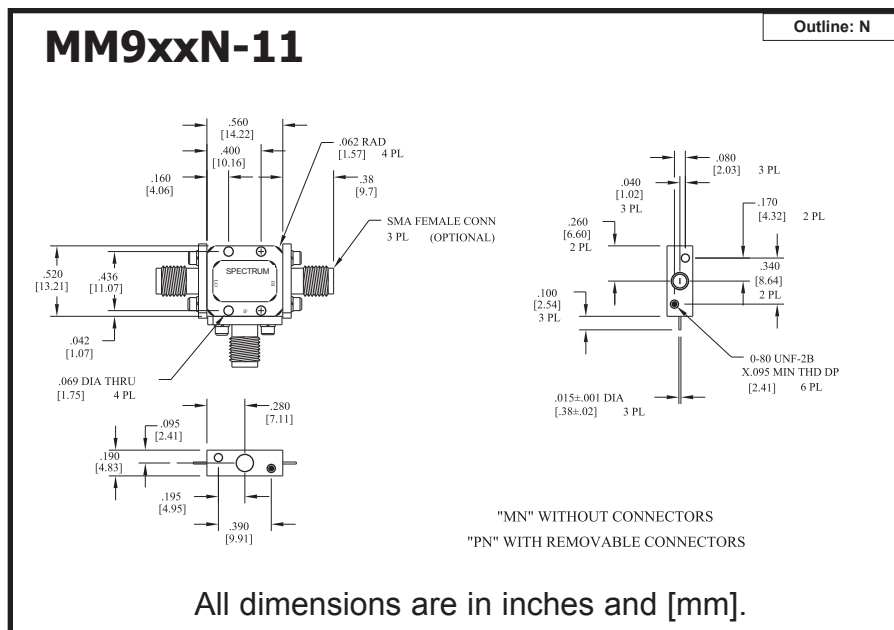
3 = +7 dBm
4 = +10 dBm
6 = +14 dBm
7 = +19 dBm

→ **Drop-In Module or With SMA(F) Connectors**

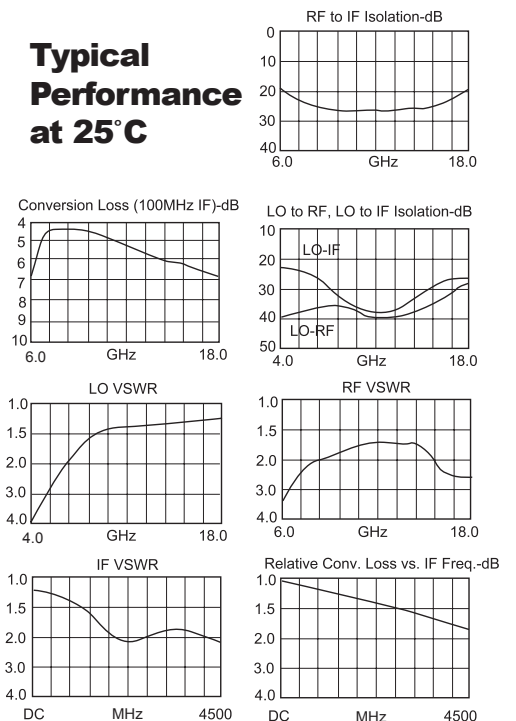
M = Module
P = With Connectors

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 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.



Typical Performance at 25°C



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, FL 32905 · PH (888) 553-7531 · Fax (888) 553-7532

www.SpectrumMicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, PA 19154 · PH (215) 464-4000 · Fax (215) 464-4001