

Double Balanced Mixer

Model MM4xxL-10

Multi-Octave Band

RF 2.0 to 8.0 GHz

Electrical Specifications: ⁽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	DC-500		5.4 dB	7.5 dB
	2.0-8.0	2.0-8.0	DC-1200		6.4 dB	8.5 dB
	2.0-8.0	2.0-8.0	DC-1500		6.7 dB	9.0 dB
Isolation						
	LO to RF:	2.0-8.0		25 dB	33 dB	
	LO to IF:	2.0-3.0		18 dB	24 dB	
		3.0-8.0		25 dB	34 dB	
RF to IF:	2.0-8.0				22 dB	
Input 1 dB Compression Point:	2.0-8.0	2.0-8.0	DC-1500		+1 dBm +4 dBm +8 dBm +12 dBm	MM43 MM44 MM46 MM47
Input Third Order Intercept Point:	2.0-8.0	2.0-8.0	DC-1500		+11 dBm +14 dBm +18 dBm +22 dBm	MM43 MM44 MM46 MM47
LO Power: ⁽⁴⁾	2.0-8.0	2.0-8.0	DC-1500		+7 dBm +10 dBm +14 dBm +19 dBm	MM43 MM44 MM46 MM47

Model MM4xxL-10

LO Power ←

3 = +7 dBm

4 = +10 dBm

6 = +14 dBm

7 = +19 dBm

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

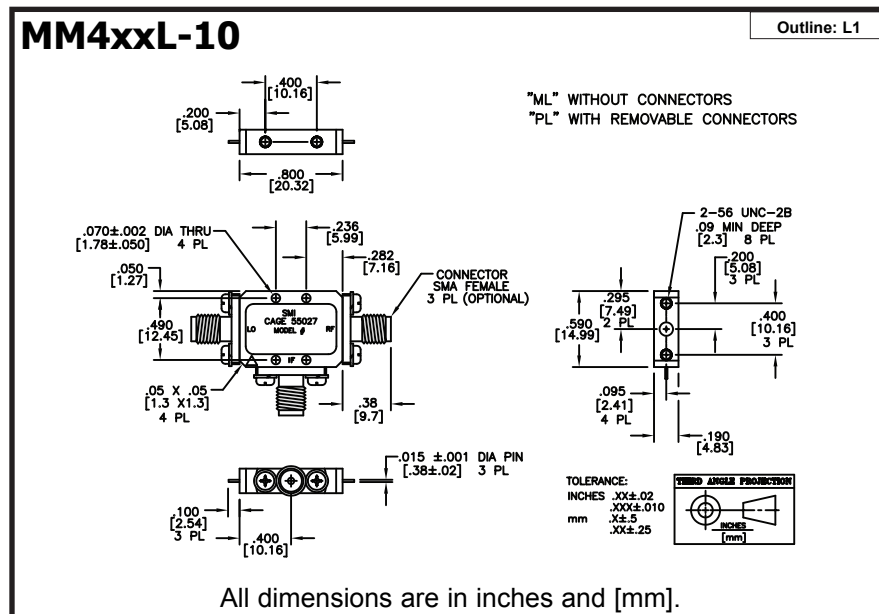
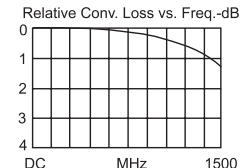
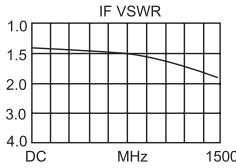
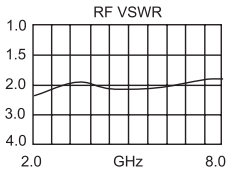
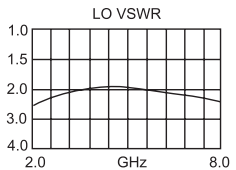
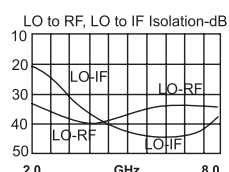
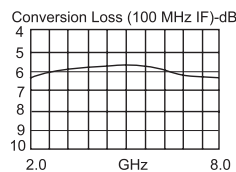
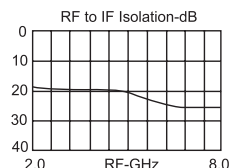
M = Module

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 · 2707 Black Lake Place · Philadelphia, PA 19154 · PH (215) 464-4000 · Fax (215) 464-4001

REV B
9/22/10