Double Balanced Mixer

Multi-Octave Band

Model MM9xSMx
Model MM9xSMx-14

RF 6.0 to 18.0 GHz

Electrical Specifications:[1]

Parameter	Conditions RF (GHz)	LO (GHz)	IF (MHz)	Specifications Min	Typical	Max
SSB Conversion loss:[2][3]	6.0-18.0 6.0-18.0	6.0-18.0 6.0-18.0	DC-1300 DC-2500		5.7 dB 6.9 dB	8.0 dB 9.0 dB
Isolation **LO to RF:** **LO to IF:** **RF to IF:**	 6.0-18.0	6.0-13.0 13.0-18.0 6.0-18.0		28 dB 24 dB	32 dB 28 dB 30 dB 30 dB	
Input 1 dB Compression Point:	6.0-18.0	6.0-18.0	DC-2500		+1 dBm +4 dBm +8 dBm	MM93 MM94 MM96
Input Third Order Intercept Point:	6.0-18.0	6.0-18.0	DC-2500		+11 dBm +14 dBm +18 dBm	MM93 MM94 MM96
LO Power:[4]	6.0-18.0	6.0-18.0	DC-2500		+7 dBm +10 dBm +14 dBm	MM93 MM94 MM96

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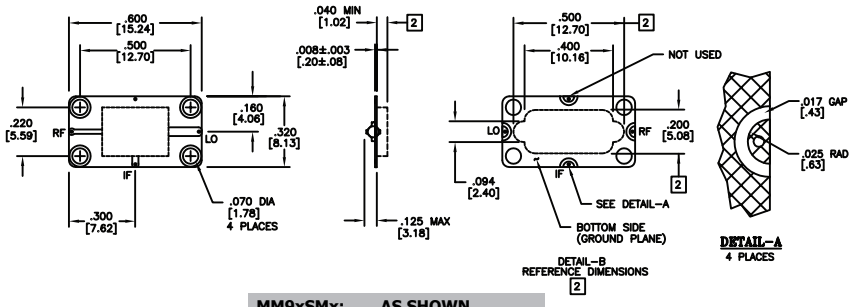
LO Power
3 = +7 dBm
4 = +10 dBm
6 = +14 dBm

Drop-In Module or With SMA(F) Connectors
D = No Cover
H = With Cover

Notes:
1. 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.
2. Noise figure is typically within ±0.5 dB of conversion loss for IF frequencies greater than 10 MHz.
3. Conversion loss typically degrades less than 0.5 dB at +100˚C and improves less than 0.5 dB at -55˚C.
4. Usable LO drives are up to 2 dB below and 3 dB above nominal.
5. See Application Note M112, for aid in selecting the outline and for mounting and installation information.

MM9xSMD

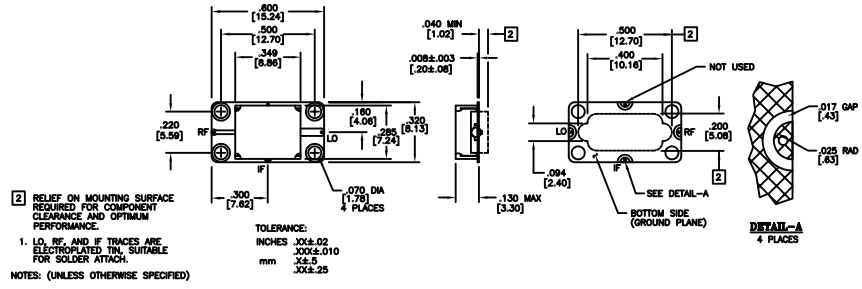
Outline: SMMD3A: AS SHOWN
SMMD3B: RF & LO REVERSED



MM9xSMx: AS SHOWN
MM9xSMx-14: RF & LO REVERSED

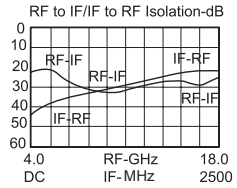
MM9xSMH

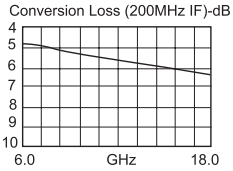
Outline: SMMH3A: AS SHOWN
SMMH3B: RF & LO REVERSED

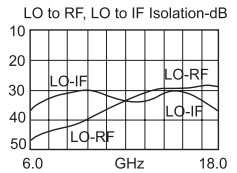


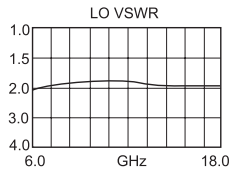
All dimensions are in inches and [mm].

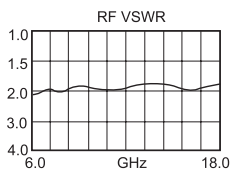
Typical Performance at 25˚C

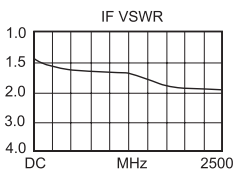


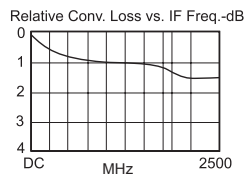












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