

# Triple Balanced Mixer

# Model MM9xMS-6

# Model MM9xMS-15

Ultra-Broadband

RF 2.0 to 19.0 GHz

## Electrical Specifications:<sup>(1)</sup>

Parameter	Conditions			Specifications		
	RF (GHz)	LO (GHz)	IF (GHz)	Min	Typical	Max
SSB Conversion loss: <sup>(2) (3)</sup>	3.0-19.0	3.0-19.0	2.0-7.0		6.5 dB	9.0 dB
	2.0-19.0	2.0-19.0	1.0-9.0		8.0 dB	11.0 dB
Isolation	LO to RF:	2.0-4.0	1.0-9.0	18 dB	23 dB	
		4.0-19.0		20 dB	31 dB	
	LO to IF:	2.0-4.0	1.0-9.0	15 dB	21 dB	
		4.0-19.0		19 dB	23 dB	
	RF to IF:	2.0-19.0	1.0-9.0		27 dB	
IF to RF:					27 dB	
Input 1-dB Compression Point:	2.0-19.0	2.0-19.0	1.0-9.0		+5 dBm +8 dBm +12 dBm +15 dBm	MM94 MM96 MM97 MM98
Input Third Order Intercept Point:	2.0-19.0	2.0-19.0	1.0-9.0		+14 dBm +17 dBm +21 dBm +24 dBm	MM94 MM96 MM97 MM98
LO Power: <sup>(4)</sup>	2.0-19.0	2.0-19.0	1.0-9.0		+10 dBm +13 dBm +17 dBm +21 dBm	MM94 MM96 MM97 MM98

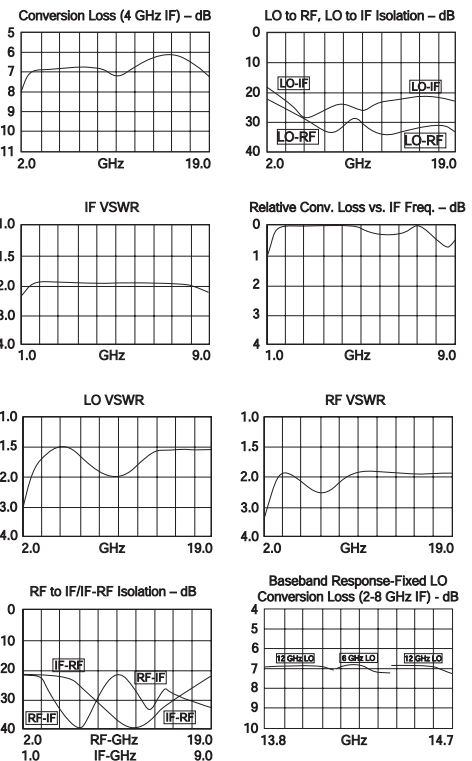
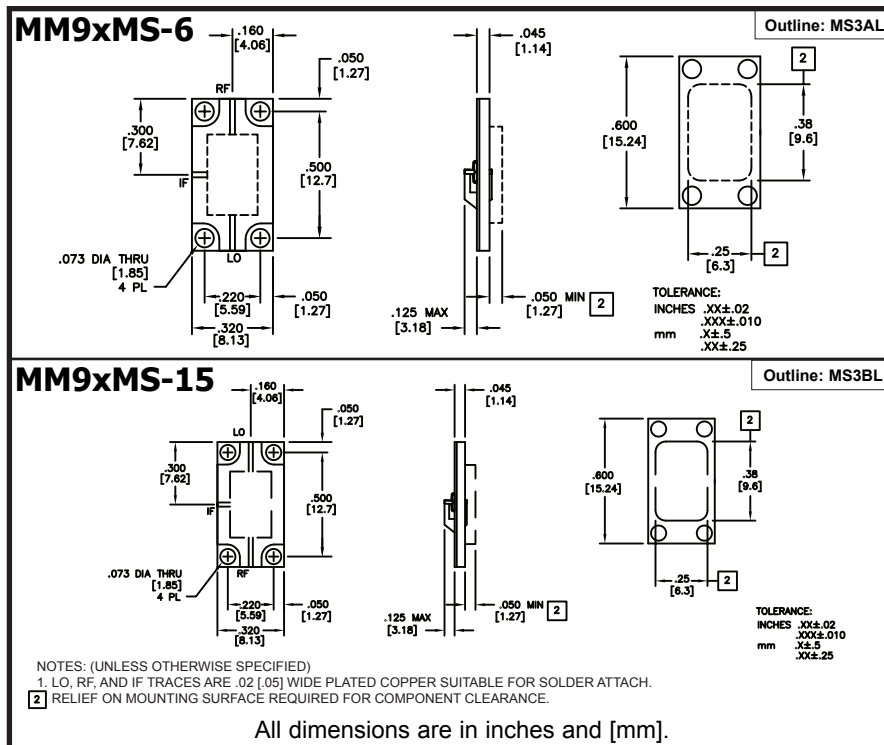
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LO Power ←  
4 = +10 dBm  
6 = +13 dBm  
7 = +17 dBm  
8 = +21 dBm

### Notes:

- 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.
- 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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