

# Double Balanced Mixer

## Multi-Octave Band

# Model MM9xMS

## Model MM9xMS-14

### RF 1.5 to 19.0 GHz

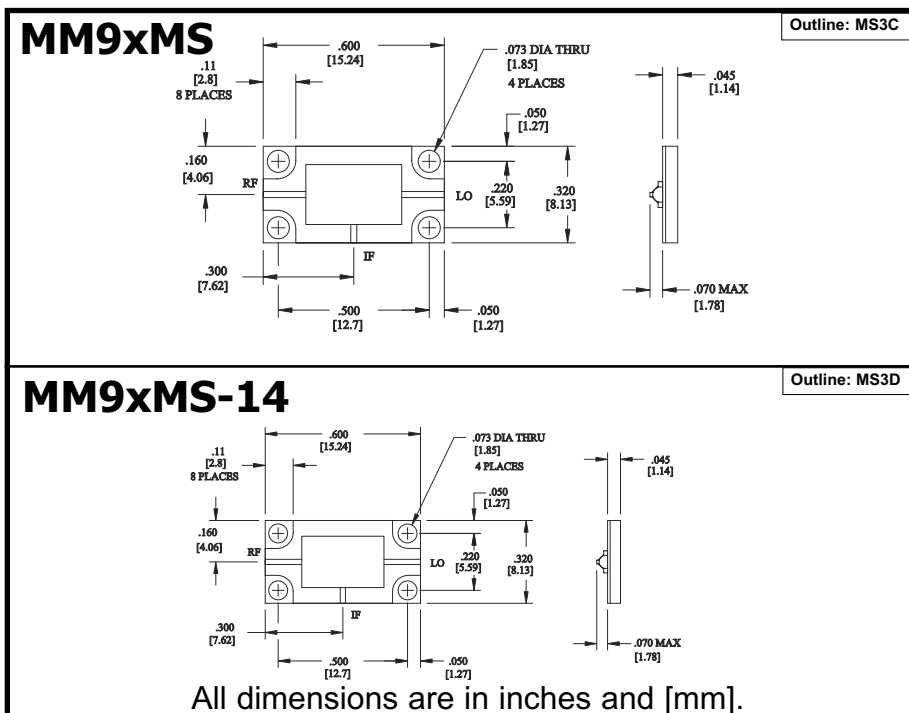
### Electrical Specifications <sup>(1)</sup>:

Parameter	Conditions			Specifications		
	RF(GHz)	LO(GHz)	IF(MHz)	Min	Typical	Max
SSB Conversion loss: <sup>(2) (3)</sup>	2.0-18.0	2.0-18.0	2.0-5.0		6.8 dB	9.0 dB
	2.0-18.0	2.0-18.0	0.5-6.5		7.8 dB	11.0 dB
	1.5-19.0	1.5-19.0	0.5-6.5		8.0 dB	11.5 dB
Isolation	1.5-19.0	LO to RF:	1.5-4.0	17 dB	23 dB	
		LO to IF:	4.0-19.0	20 dB	31 dB	
		RF to IF:	1.5-19.0	20 dB	25 dB	
		IF to RF:	0.5-6.5		27 dB	20 dB
Input 1-dB Compression Point:	1.5-19.0	1.5-19.0	0.5-6.5		+5 dBm +8 dBm +12 dBm +15 dBm	
Input Third Order Intercept Point:	1.5-19.0	1.5-19.0	0.5-6.5		+14 dBm +17 dBm +21 dBm +24 dBm	
LO Power: <sup>(4)</sup>	1.5-19.0	1.5-19.0	0.5-6.5		+10 dBm +13 dBm +17 dBm +21 dBm	

**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 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

