

# Triple Balanced Mixer

# Model MM9xxG

Multi-Octave Band

RF 6.0 to 18.0 GHz

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

Parameter	Conditions			Specifications		
	RF (GHz)	LO (GHz)	IF (GHz)	Min	Typical	Max
<b>SSB Conversion loss:</b> <sup>(2) (3)</sup>	6.0-17.0	6.0-17.0	3.0-6.0		6.0 dB	8.5 dB
	6.0-17.0	6.0-17.0	2.0-8.0		7.0 dB	9.5 dB
	6.0-18.0	6.0-18.0	1.5-8.0		7.7 dB	10.5 dB
<b>Isolation</b>	LO to RF: LO to IF: RF to IF: IF to RF:	6.0-18.0		20 dB	28 dB	
		6.0-18.0	1.5-8.0	15 dB	26 dB	
<b>Input 1-dB Compression Point:</b>	6.0-18.0	6.0-18.0	1.5-8.0		+2 dBm	MM93
					+5 dBm	MM94
<b>Input Third Order Intercept Point:</b>	6.0-18.0	6.0-18.0	1.5-8.0		+8 dBm	MM96
					+12 dBm	MM97
<b>LO Power:</b> <sup>(4)</sup>	6.0-18.0	6.0-18.0	1.5-8.0		+15 dBm	MM98
					+7 dBm	MM93
					+10 dBm	MM94
					+13 dBm	MM96
					+17 dBm	MM97
					+21 dBm	MM98

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LO Power

- 3 = +7 dBm
- 4 = +10 dBm
- 6 = +13 dBm
- 7 = +17 dBm
- 8 = +21 dBm

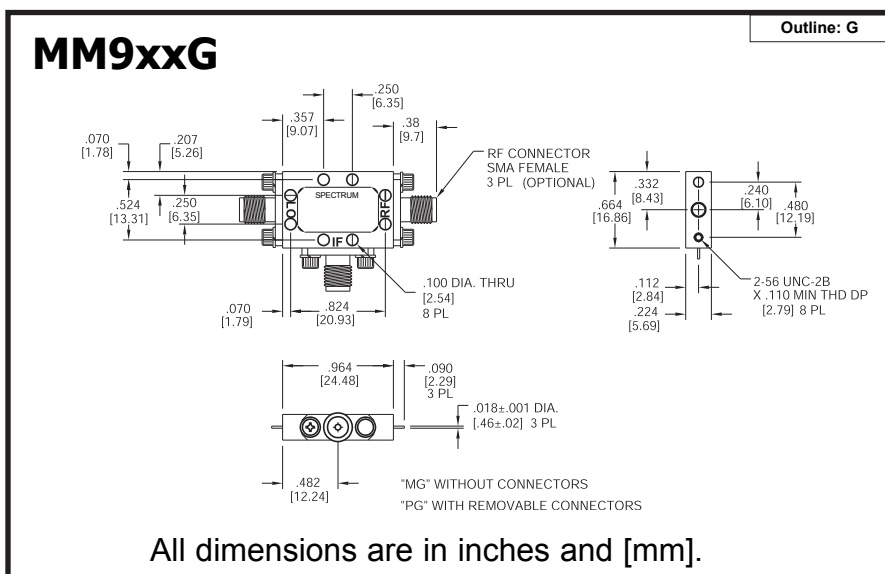
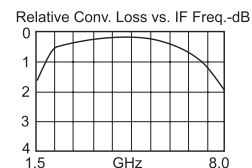
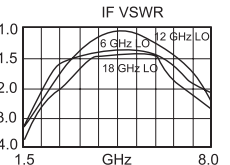
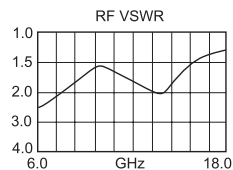
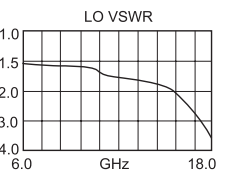
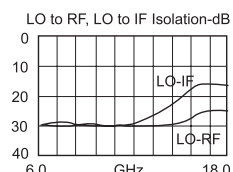
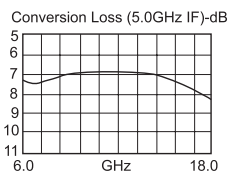
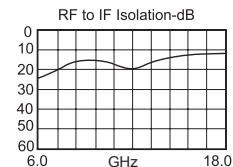
Drop-In Module or With SMA(F) Connectors

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.
- 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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