

# Double Balanced Mixer

# Model MM134xG-1

Ultra-Broadband

RF 1.5 to 26.5 GHz

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

Parameter	Conditions			Specifications		
	RF (GHz)	LO (GHz)	IF (MHz)	Min	Typical	Max
<b>SSB Conversion loss:</b> <sup>(2) (3)</sup>	2.0-26.5	2.0-26.5	DC-500		7.5 dB	9.5 dB
	1.5-26.5	1.5-26.5	DC-700		8.5 dB	10.0 dB
	1.5-26.5	1.5-26.5	DC-1250		9.5 dB	11.5 dB
<b>Third LO Harmonic Conversion Loss:</b> <sup>(2) (3)</sup>	6.0-20.0	2.0-6.5	DC-500		17.5 dB	22 dB
	6.0-20.0	2.0-6.5	DC-700		18.5 dB	23 dB
	6.0-20.0	2.0-6.5	DC-1250		19.5 dB	24 dB
	20.0-26.5	6.5-9.0	DC-1250		30.0 dB	33 dB
<b>Isolation</b>	<b>LO to RF:</b>	1.5-3.0		18 dB	25 dB	
		3.0-26.5		20 dB	30 dB	
	<b>LO to IF:</b>	1.5-4.0		18 dB	25 dB	
		4.0-18.0		20 dB	35 dB	
	<b>RF to IF:</b>	1.5-4.0			23 dB	
		4.0-26.5			35 dB	
<b>Input 1-dB Compression Point:</b>	1.5-26.5	1.5-26.5	DC-1250		+3 dBm	
<b>Input Third Order Intercept Point:</b>	1.5-26.5	1.5-26.5	DC-1250		+12 dBm	
<b>LO Power:</b> <sup>(4)</sup>	1.5-26.5	1.5-26.5	DC-1250		+9 dBm	

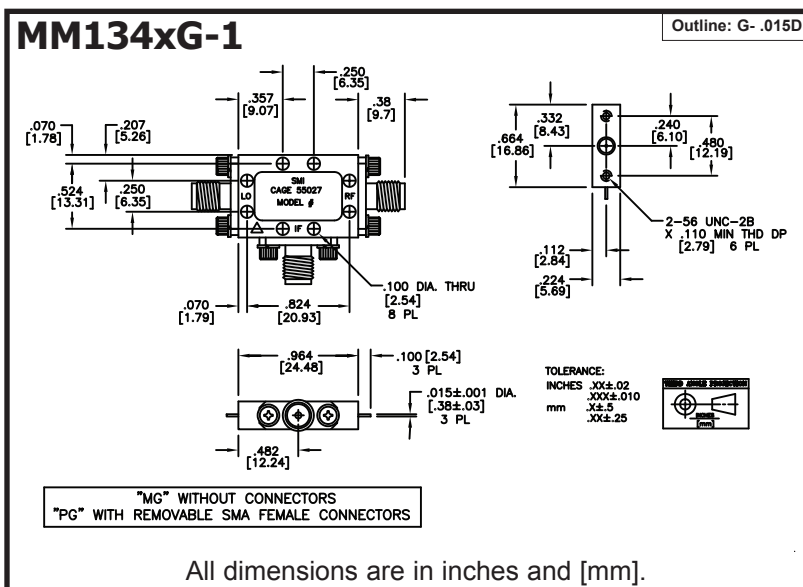
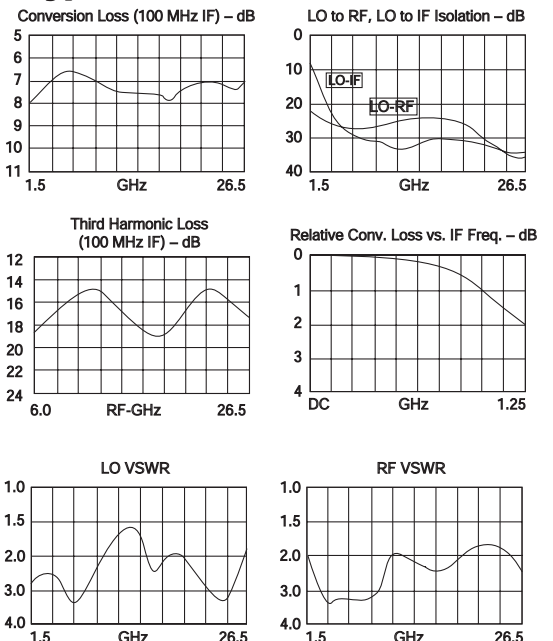
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**Drop-In** ←  
**Module or With SMA(F) Connectors**  
 M = Module  
 P = With Connectors

**Notes:**

- Specifications are guaranteed when tested as a downconverter in a 50 Ohm system 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



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 5/20/10