

Double Balanced Mixer

Model MM9xxG-40

Ultra-Broadband

RF 0.5 to 18.0 GHz

Electrical Specifications:⁽¹⁾

Parameter	Conditions			Specifications		
	RF (GHz)	LO (GHz)	IF (MHz)	Min	Typical	Max
SSBM Conversion loss: ^{(2) (3)}	1.0-18.0	1.0-18.0	DC-150		6.5 dB	8.5 dB
	1.0-18.0	1.0-18.0	DC-300		7.0 dB	9.0 dB
	0.5-18.0	0.5-18.0	DC-300		10.0 dB	11.0 dB
Isolation						
	LO to RF:	0.5-1.0		12 dB	20 dB	
		1.0-18.0		20 dB	30 dB	
	LO to IF:	0.5-1.0		5 dB	12 dB	
		1.0-2.5		10 dB	16 dB	
	RF to IF:	2.5-18.0		17 dB	31 dB	
Input 1 dB Compression Point:						
	0.5-18.0	0.5-18.0	DC-300		+2 dBm	MM93
					+5 dBm	MM94
					+8 dBm	MM96
					+12 dBm	MM97
Input Third Order Intercept Point:						
	0.5-18.0	0.5-18.0	DC-300		+11 dBm	MM93
					+14 dBm	MM94
					+18 dBm	MM96
					+23 dBm	MM97
LO Power: ⁽⁴⁾						
	0.5-18.0	0.5-18.0	DC-300		+7 dBm	MM93
					+10 dBm	MM94
					+14 dBm	MM96
					+19 dBm	MM97

Model MM9xxG-40

LO Power

3 = +7 dBm
4 = +10 dBm
6 = +14 dBm
7 = +19 dBm

Drop-In

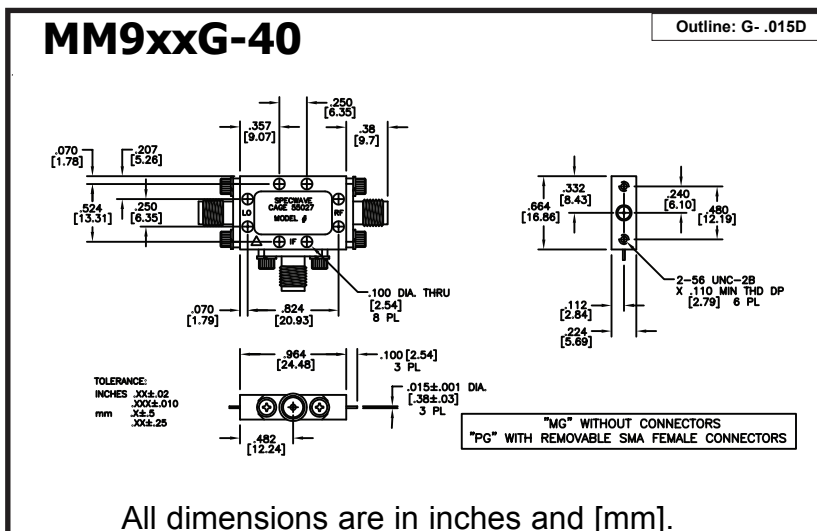
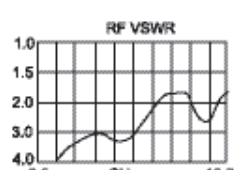
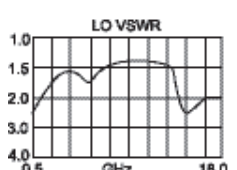
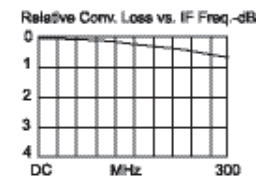
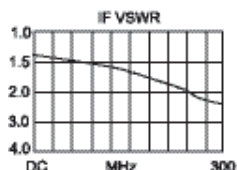
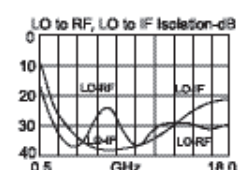
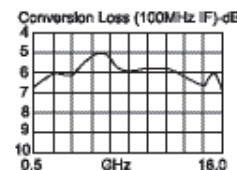
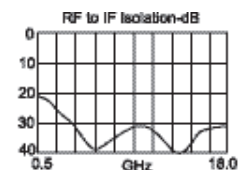
Module or With SMA(F) Connectors

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 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



All dimensions are in inches and [mm].



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, FL 32905 · PH (888) 553-7531 · Fax (888) 553-7532

REV A
11/24/09

www.SpectrumMicrowave.com Spectrum Microwave · 2707 Black Lake Place · Philadelphia, PA 19154 · PH (215) 464-4000 · Fax (215) 464-4001