

# **TRIPLE-BALANCED MIXERS**

M2-0226



#### Features

- LO/RF 2.0 to 26.5 GHz
- IF .001 to 6.0 GHz
- 7.5 dB Typical Conversion Loss
- 25 dB Typical LO to RF Isolation
- Ultra-Broadband RF, LO, and IF

Electrical Specifications - Specifications guaranteed from -55 to +100°C,	measured in a 50-Ohm system.
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Parameter	LO (GHz)	<b>RF</b> (GHz)	<b>IF</b> (GHz)	Min	Тур	Max	Diode Option LO drive level (dBm)
Conversion Loss (dB)	2.0-26.5	2.0-26.5	.001-2.0		7.5	10.0	
	2.0-26.5	2.0-26.5	2.0-4.0		8.5	11.0	
	2.0-26.5	2.0-26.5	4.0-6.0		9.5	12.0	
Isolation (dB)							
LO-RF	2.0-26.5	2.0-26.5		12	25		
LO-RF	4.0-19.0	4.0-19.0		18	28		
LO-IF	2.0-26.5	2.0-26.5			28		
RF-IF	2.0-26.5	2.0-26.5			30		
Input 1 dB Compression (dBm)	2.0-26.5	2.0-26.5			+5		L (+10 to +13)
					+8		M (+13 to +16)
Input Two-Tone Third Order	2.0-26.5	2.0-26.5			+15		L (+10 to +13)
Intercept Point (dBm)					+18		M (+13 to +16)

### **Part Number Options**

Please specify diode level and package style by adding to model number.								
Package Styles		Examples						
Connectorized	A	M2-0226LA, M2-0226LE-2						
Microstrip <sup>1,2</sup>	E	<u>M2-0226</u>	Ŀ	Ē	<u>-2</u>			
		(Model)	(Diode Option)	(Package)	(I-Port Configuration)			

<sup>1</sup>Connectorized test fixtures available for most microstrip and surface mount packages. Consult factory. <sup>2</sup>For non-connectorized packages, specify I-port configuration by adding –1 or –2 suffix to model number. Default is –2 configuration when not specified.

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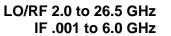
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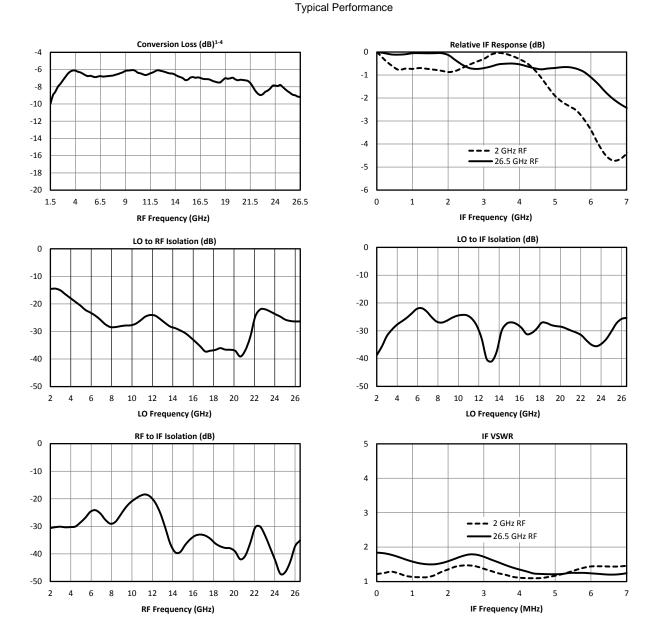


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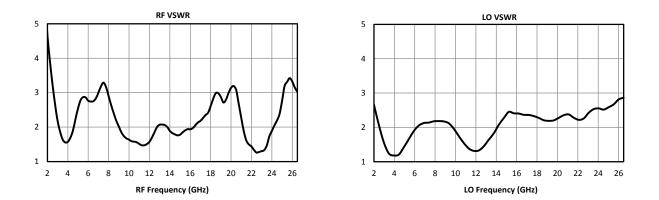
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LO/RF 2.0 to 26.5 GHz IF .001 to 6.0 GHz

Typical Performance (cont.)



#### DATA SHEET NOTES:

- 1. Mixer Conversion Loss Plot IF frequency is 100 MHz.
- 2. Mixer Noise Figure typically measures within +0.5 dB of conversion loss for IF frequencies greater than 5 MHz.
- 3. Conversion Loss typically degrades less than 0.5 dB for LO drives 2 dB below the lowest and 3 dB above highest nominal LO drive levels.
- 4. Conversion Loss typically degrades less than 0.5 dB at +100°C and improves less than 0.5 dB at -55°C.
- 5. Maximum input power is +26 dBm at +25°C, derated linearly to +23 dBm at +100°C.
- 6. Specifications are subject to change without notice. Contact Marki Microwave for the most recent specifications and data sheets.
- 7. Standard configuration for A and B Outlines are with connectors and bottom spacer.
- 8. Catalog mixer circuits are continually improved. Configuration control requires custom mixer model numbers and specifications.

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