

Applications:

- Microwave and Millimeter
- Up and down conversion
- Instrumentations
- Test Bench

Features:

- Low Conversion Loss
- Various Bandwidth Coverage
- +5dBm Low LO Drive Power
- Low harmonics and spurious
- Waveguide Connectors in 8 Waveguide Bands



Descriptions:

3J Microwave, Inc. offers a complete line of DC-Biased balanced mixers in 8 waveguide bands from K to W. The available state-of-the-art solid-state technologies, devices, advanced balance-design and DC Bias techniques are utilized in the mixers. The unique balanced structure and built-in filtering diplexer ensure high rejections achieved. The unique DC Bias technique lowers the LO drive power significantly. Waveguide LO and RF connectors are designed to

cover eight waveguide bands from K to W-Band in the frequency range of 18 to 110 GHz. IF ports are SMA or 2.9 coaxial connectors depending on the IF frequencies. The series DC-biased mixers are designed for the various applications such as up and down conversion, transceivers, bench test & instrumentations etc in the case of enough LO power unavailable. The DC-biased mixers are sorted in category of **BMX** Series Waveguide DC Bias Balanced Mixers.

BMX Series Waveguide DC Bias Mixer Specifications:

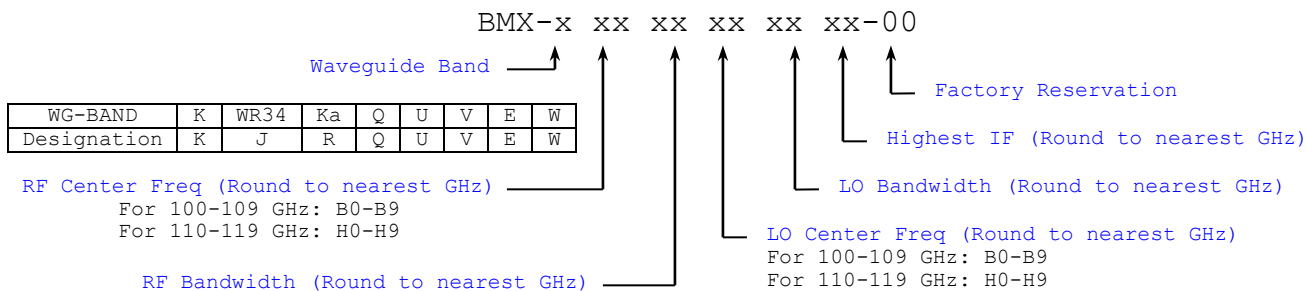
Model Number**	RF/LO* Freq (GHz)	RF/LO BW*** (GHz)	IF Freq (GHz)	C. L. (dB)	DC Bias (V/mA)	Input PldB (dBm)	Rejection (LO-RF LO-IF) (dB)	RF/LO Connector	Outline
BMX-xxxxxxxxxxx-00	18-27	2-9	0-9	6.0	+5/10	+3.0	> 20 dB	UG595-U	D01-01
	22-33	2-11	0-11	6.5				UG595-UM	D02-01
	26-40	3-14	0-14	6.5				UG599-U	D03-01
	33-50	3-17	0-17	7.0				UG383-U	D04-01
	40-60	3-20	0-20	7.5				UG383-UM	
	50-75	5-25	0-25	8.5				UG385-U	
	60-90	5-30	0-30	8.5				UG387-U	
	75-110	5-35	0-35	9.0				UG387-UM	

* All of the data is tested at LO power of +5 dBm
 ** Please see "how to order" for the model number details
 *** The IF range can be chosen in the range of 0-35 GHz



Section 2-2: DC-Biased Balanced Mixer Series
www.3jmicrowave.com Frequency Coverage: 18 to 110 GHz

How to Order:



BMX Model Number Example:

Model Number of a W-Band Waveguide Balanced Mixer:

Specifications	Model number
RF Frequency: 75 to 110 GHz LO Frequency: 75 to 110 GHz IF Frequency: 0 to 18 GHz Conversion Lose: 9.0 dB	BMX-W9335933518-00

Outline:

D01-01, D02-01, d3-01 and D04-01