

### Applications:

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

### Features:

- Low Conversion Loss
- Various Bandwidth Coverage
- Waveguide Connectors in 8 Waveguide Bands



### Descriptions:

**3J Microwave, Inc.** offers a complete line of Single ended mixers in 8 waveguide bands from K to W. The available state-of-the-art solid-state technologies, devices, advanced techniques are utilized in the single ended mixers. The unique filtering structure and built-in filtering ensure high rejections achieved. Common 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. Coaxial connectors are available in the frequency range below 67 GHz. IF ports are SMA or 2.9 coaxial connectors. The series single ended mixers are designed for the various applications such as up and down converters, transceivers, bench test, & instrumentations etc. The single ended mixers are sorted in category of **SMX** Series Waveguide Single ended Mixers.

### SMX Series Single Ended Mixer Specifications:

Model Number**	RF/LO* Freq (GHz)	RF/LO BW (GHz)	IF Freq (GHz)***	C. L. (dB)	Input P1dB (dBm)	LO-IF Rejection (dB)	RF/LO Connector	Outline
SMX-xxxxxxxxxx-00	18-27	2-9	0-9	6.0	+3.0	> 20 dB	UG595-U	E01
	22-33	2-11	0-11	6.5			UG595-UM	E02
	26-40	3-14	0-14	6.5			UG599-U	E03
	33-50	3-17	0-17	7.0			UG383-U	E04
	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	

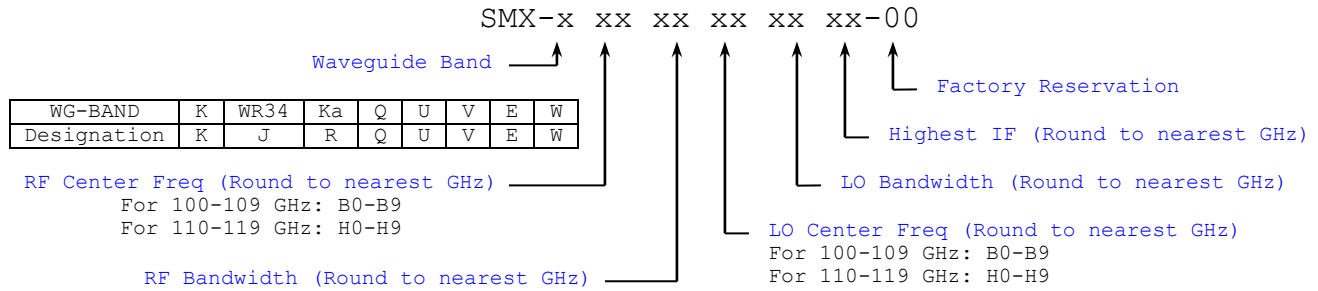
\* All of the data is tested at LO power of +13 dBm  
 \*\* Please see "how to order" for the model number details  
 \*\*\* The IF range can be chosen in the range of 0-35 GHz



# Section 2-3: Single Ended Mixer Series

[www.3jmicrowave.com](http://www.3jmicrowave.com) Frequency Coverage: 18 to 110 GHz

## How to Order:



## SMX Model Number Example:

Model Number of a W-Band Waveguide Single Ended Mixer:

Specifications	Model number
<b>RF Frequency:</b> 75 to 110 GHz <b>LO Frequency:</b> 75 to 110 GHz <b>IF Frequency:</b> 0 to 18 GHz <b>Conversion Lose:</b> 9.0 dB	<b>SMX-W9335933518-00</b>

## Outline:

E01, E02, E03 and E04