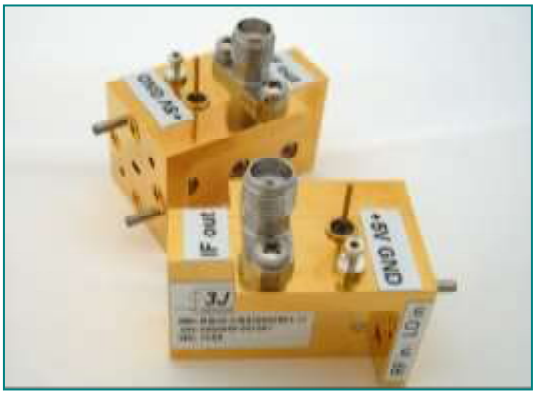
Applications:

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



Features:

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

Descriptions:

3J Microwave, Inc. offers a complete line of DC-Biased single ended mixers in 8 waveguide bands from K to W. The available state-of-the-art solid-state devices, technologies and advanced DC Bias techniques are utilized in the mixers. The filtering structure ensures high rejections achieved. The unique DC Bias technique lowers the LO drive power significantly. 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 DC-biased single ended mixers are designed for the various applications such as up and down converters, transceivers, bench test, & instrumentations etc in the case of enough LO power unavailable. The DC-biased single ended mixers are sorted in category of ***BSMX*** Series Waveguide DC Bias Single Ended Mixers.

BSMX Series DC-Bias Single Ended Mixer Specifications:

Model Number**	RF/LO* Freq (GHz)	RF/LO BW*** (GHz)	IF Freq (GHz)	C. L. (dB)	DC Bias (V/mA)	Input P1dB (dBm)	Rejection (LO-RF LO-IF) (dB)	RF/LO Connector	Outline
BSMX-xxxxxxxxxxx-00	18-27	2-9	0-9	6.0	+5/10	+3.0	> 20 dB	UG595-U	E01-01
	22-33	2-11	0-11	6.5				UG595-UM	E02-01
	26-40	3-14	0-14	6.5				UG599-U	E03-01
	33-50	3-17	0-17	7.0				UG383-U	E04-01
	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 +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

How to Order:

BSMX-x xx xx xx xx xx-00

Waveguide Band

WG-BAND	K	WR34	Ka	Q	U	V	E	W
Designation	K	J	R	Q	U	V	E	W

RF Center Freq (Round to nearest GHz)
For 100-109 GHz: B0-B9
For 110-119 GHz: H0-H9

RF Bandwidth (Round to nearest GHz)

LO Center Freq (Round to nearest GHz)
For 100-109 GHz: B0-B9
For 110-119 GHz: H0-H9

LO Bandwidth (Round to nearest GHz)

Highest IF (Round to nearest GHz)

Factory Reservation

BSMX Model Number Example:

Model Number of a W-Band Waveguide DC-Bias Single Ended 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	***BSMX-W9335933518-00***

Outline:

E01-01, E02-01, E03-01 and E04-01