



## Specifications

FREQUENCY BAND	K	Ka	Q	U	V	E	W
Frequency Range (GHz)	18-26.5	26.5-40	33-50	40-60	50-75	60-90	75-110
Conversion Loss (dB typ) <sup>1</sup>	6-8	6-8	6-8	6-8	7-9	8-10	8-10
RF Output Power (dBm Sat. SSB)	4	4	4	4	4	3	3
Bandwidth (GHz typ) <sup>2</sup>	0.5-8.0	0.5-8.0	0.5-8.0	0.5-8.0	0.5-10.0	0.5-10.0	0.5-10.0
IF for SSB (GHz typ)	1-4	1-4	1-4	1-4	1-5	1-5	1-5
LO Input Power (dBm typ/min)	17/13	17/13	17/13	17/13	17/13	15/11	15/11
Maximum IF input Power (dBm) <sup>3</sup>	17	17	17	17	15	13	13
LO plus IF Power (dBm max)	20	20	20	20	18	16	16
LO to RF Isolation (dB typ)	30	30	0	30	30	30	30
LO to IF Isolation (dB typ)	35	35	35	35	35	35	35

Custom Products available. Contact us at [sales@quinstar.com](mailto:sales@quinstar.com) or submit an RFQ.

Other waveguide sizes are available.

As specifications are dependent on application-specific configurations, typical ranges are tabulated.

1. Conversion loss is measured at IF input power of -10 dBm.
2. Standard product RF/IF bandwidth is typically 2 GHz. Single sideband (SSB) upconverters must have IF band selection consistent with sideband filtering requirements. Contact QuinStar with your exact requirements to obtain an optimal solution.
3. IF input power range is determined by application requirements, intermod and linearity considerations. Compression and saturation occur at high IF power levels.



### Mechanical Specifications

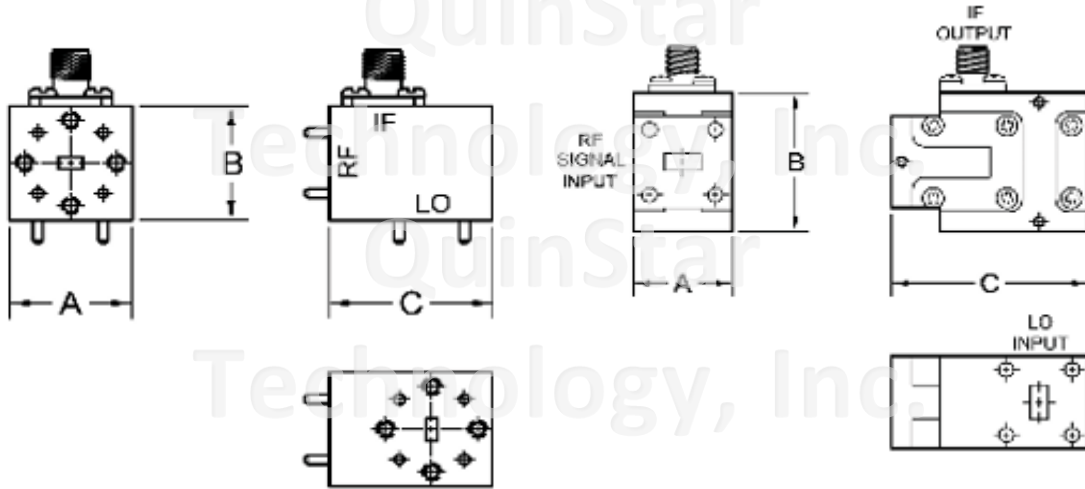
FREQUENCY BAND	WAVEGUIDE SIZE	FLANGE PATTERN	IF INPUT	OUTLINE DIMENSIONS, inches/mm		
				A	B	C
K	WR-42	UG-595/U	SMA JACK	0.88/22.4	1.19/30.2	1.89/48.0
Ka	WR-28	UG-599/U	SMA JACK	0.75/19.1	1.13/28.7	1.50/38.1
Q	WR-22	UG-383/U	SMA JACK	1.13/28.7	1.13/28.7	1.50/38.1
U	WR-19	UG-383/U	SMA JACK	1.13/28.7	1.13/28.7	1.50/38.1
V	WR-15	UG-385/U	SMA JACK	0.75/19.1	0.75/19.1	1.00/25.4
E	WR-12	UG-387/U	SMA JACK	0.75/19.1	0.75/19.1	1.00/25.4
W	WR-10	UG-387/U	SMA JACK	0.75/19.1	0.75/19.1	1.00/25.4

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Note: Filter dimensions for single sideband upconverters available upon request. Please see series QFB for approximate size.

QuinStar  
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**Outline Drawings**



**WR-42 and WR-28**

**WR-22 through WR-10**

**Double sideband version (without SSB filter)**