Bandpass Filters
QFB

Characteristics

- Low Pass-Band Insertion Loss
- High Out-of-Band Rejection
- Wide Range of Bandwidth Options

Product Description

QuinStar Technology's **QFB** series **waveguide bandpass filters** are available in ten waveguide bands covering the frequency range of 18 to 220 GHz. Bandwidths may be specified from 2% to 20% of center frequency. The filters can handle up to one Watt (CW) of RF power. Standard versions are for 2%, 5% and 10% passband bandwidth.

The design ripple is typically 0.1 dB with a Chebychev response. High out-of-band rejection is offered with customer-specific attenuation characteristics. Since filter requirements vary widely, QuinStar Technology is set up to design and supply custom products in a short turn-around time.

Specifications

PERFORMANCE PARAMETER	TYPICAL CHARACTERISTICS
Range of Passband Bandwidth	2% to 20% of center frequency; standard versions 5%, 10%
Passband Attenuation (typ)	Less than 1 dB (Bandwidth & rejection dependent)
Rejection (typ)	20-40 dB at f_c ± bandwidth
Ripple in Passband	0.1 dB to 0.5 dB depending on percent bandwidth and rejection requirements

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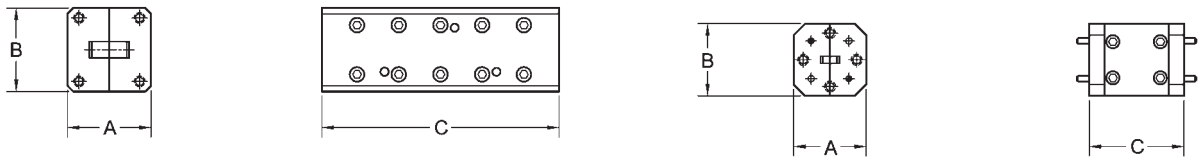
Outline Drawings/Mechanical Specifications



WR-42 and WR-28

WR-22 through WR-5

FREQUENCY BAND	WAVEGUIDE SIZE	FLANGE PATTERN	OUTLINE DIMENSIONS, inches/mm		
			A	B	C[1]
K	WR-42	UG-595/U	0.88/22.4	0.88/22.4	2.00/51.0
Ka	WR-28	UG-599/U	0.75/19.1	0.75/19.1	2.00/51.0
Q	WR-22	UG-383/U	1.12/28.4	1.12/28.4	1.50/38.1
U	WR-19	UG-383/U	1.12/28.4	1.12/28.4	1.50/38.1
V	WR-15	UG-385/U	0.75/19.1	0.75/19.1	1.50/38.1
E	WR-12	UG-387/U	0.75/19.1	0.75/19.1	1.00/25.4
W	WR-10	UG-387/U-M	0.75/19.1	0.75/19.1	1.00/25.4
F	WR-8	UG-387/U-M	0.75/19.1	0.75/19.1	1.00/25.4
D	WR-6	UG-387/U-M	0.75/19.1	0.75/19.1	1.00/25.4
G	WR-5	UG-387/U-M	0.75/19.1	0.75/19.1	1.00/25.4

[1] Standard versions.

Ordering Information

Model Number **QFB -** **AB CD E 0**

Please specify exact center frequency and complete rejection requirements when ordering.

center frequency rounded to nearest GHz
(1A = 100-109 GHz, 1B = 110-119 GHz, etc.)

passband bandwidth rounded to nearest GHz

waveguide band designator

K = K-band	E = E-band
A = Ka-band	W = W-band
Q = Q-band	F = F-band
U = U-band	D = D-band
V = V-band	G = G-band

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