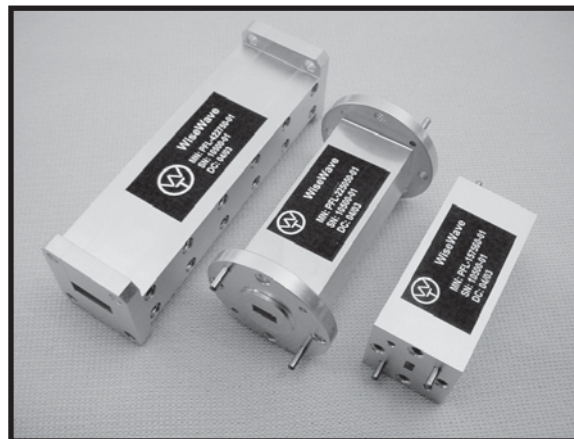


FEATURES

- ❖ High rejection
- ❖ Low insertion loss
- ❖ Frequency up to 110 GHz
- ❖ Rugged mechanical construction

APPLICATIONS

- ❖ Test systems
- ❖ Subsystems
- ❖ Transceivers



PFL Series

DESCRIPTION

PFL series waveguide low pass filters are available in millimeterwave bands to cover the frequency range up to 110 GHz. The high pass nature of waveguide dictates the low end cut off for standard model. Both low end and high end cut off frequencies can be specified as a custom order. In fact, the waveguide low pass filters are the bandpass filters with very broad pass band. They are ideally suited for broad band system applications, such as EW system, instrumentation and harmonic and spurious rejections, etc.

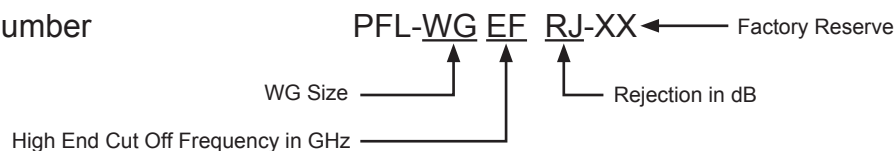
7

STANDARD PRODUCT SPECIFICATIONS

Frequency Band	K	Ka	Q	U	V	E	W
Model Numbers	PFL-42-01	PFL-28-01	PFL-22-01	PFL-19-01	PFL-15-01	PFL-12-01	PFL-10-01
Waveguide	WR-42	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10
Passband (GHz)	16 to 26.5	22 to 40	28 to 50	33 to 60	42 to 75	50 to 90	62 to 110
Insertion Loss (dB)	1.0	1.0	1.0	1.0	1.2	1.5	1.8
Rejection Band (GHz)	< 14 & > 33	< 20 & > 47	< 25 & > 56	< 29 & > 66	< 38 & > 80	< 45 & > 98	< 56 & > 118
Rejection (dB, Min)	40	40	40	40	40	40	40
Outline Drawing	WT-E-4	WT-E-4	WT-E-4	WT-E-4	WT-E-4	WT-E-4	WT-E-4

CUSTOM ORDER

Specify Model Number



Example: To order a WR-28 bandpass filter with 38 GHz high end cut off frequency, 45 dB rejection, specify PFL-283845-XX.

WT-E-1

WAVEGUIDE W/FLANGE
4 PLS

WiseWave
MIN: XXXXXX
S/N: XXXXXX
D/C: XXXXX

BAND	L	H	A	H0
K	1.20	1.04	1.00	0.44
Ka	1.00	0.88	0.85	0.38
Q & U	1.40	1.27	1.16	0.57
V,E & W	1.00	0.88	0.80	0.38

4-40 x 0.25 DP
4 PLS

Dimensions are in inches

WT-E-2

WAVEGUIDE W/FLANGE
2 PLS

BAND	K	Ka	Q & U	V,E & W
L	Vary per Specifications			

Dimensions are in inches

WT-E-3

High Pass

WAVEGUIDE W/FLANGE
2 PLS

BAND	K	Ka	Q & U	V,E & W
L	3.00	2.60	2.20	1.80

Dimensions are in inches

WT-E-4

Low Pass

WAVEGUIDE W/FLANGE
2 PLS

BAND	K	Ka	Q & U	V,E & W
L	3.00	2.50	2.00	1.60

Dimensions are in inches

WT-E-5

COAXIAL CONNECTOR

WR-15 WAVEGUIDE
W/UG385/U FLANGE

BAND	X	WR-75	WR-62	K/WR-34	Ka,Q & U	V
L	1.40	1.25	1.20	0.85	1.00	1.05
L0	1.00	0.90	0.95	0.60	0.75	0.80

NOTES:
BOTH MALE AND FEMALE COAXIAL CONNECTORS ARE AVAILABLE FOR ALL BANDS

Dimensions are in inches

WT-E-6

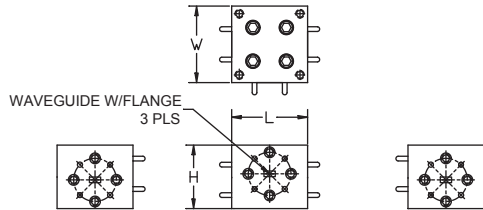
WAVEGUIDE W/FLANGE

PTW	BIGGER WAVEGUIDE BAND	K	Ka	Q	U	V	E
L		2.00	2.00	1.50	1.50	1.00	1.00

PRC	RECTANGULAR WG BAND	K	Ka	Q	U	V	E	W
L		2.00	1.50	1.30	1.30	1.10	1.10	1.10

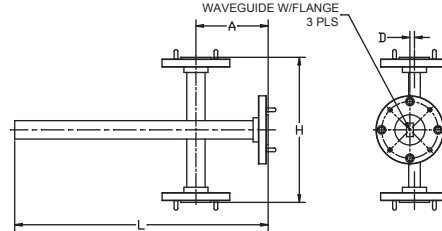
Dimensions are in inches

The flange pattern shown is for illustration purpose. Refer to Technical Reference Section for flange pattern details. The outline drawings shown are standard versions. Contact factory for your specific package requirements.

WT-E-7


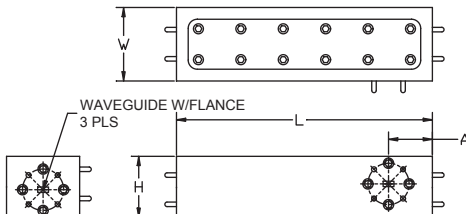
BAND	K	Ka	Q	U	V	E	W
L	1.20	1.00	1.30	1.30	1.00	1.00	1.00
W	1.20	1.00	1.30	1.30	1.00	1.00	1.00
H	1.06	0.90	1.25	1.23	0.83	0.82	0.81

Dimensions are in inches

WT-E-8


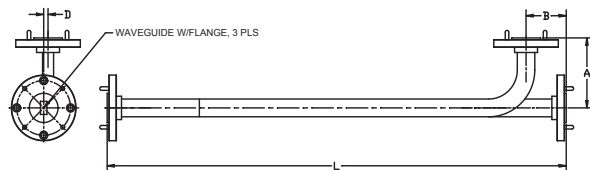
Band	X	WR-75	Ku	K	Ka	Q	U	V	E	W
L	5.46	4.80	4.66	4.24	3.46	3.26	2.66	2.56	2.56	2.46
A	1.73	1.65	1.58	1.52	1.23	1.23	0.98	0.98	0.98	0.98
D	0.45	0.43	0.35	0.21	0.18	0.15	0.13	0.11	0.10	0.09
H	3.46	3.30	3.16	3.04	2.46	2.46	1.96	1.96	1.96	1.96

Dimensions are in inches

WT-E-9


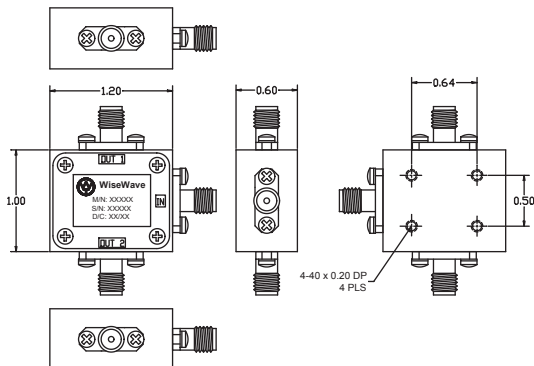
BAND	Q	U	V	E	W
L	5.50	5.50	3.50	3.50	3.50
W	1.30	1.30	1.00	1.00	1.00
H	1.25	1.23	0.83	0.82	0.81
A	0.80	0.80	0.60	0.60	0.60

Dimensions are in inches

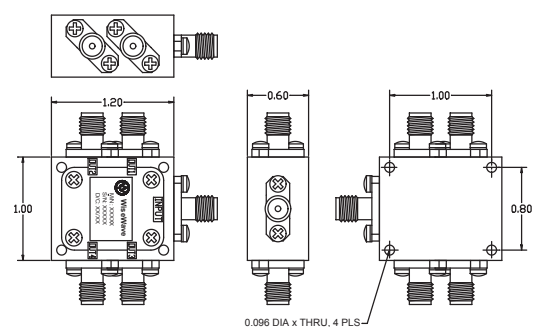
WT-E-10


Band	X	WR-75	Ku	K	Ka	Q	U	V	E	W
L	19.50	16.50	13.00	11.00	10.00	8.00	6.50	6.00	5.50	5.00
A	1.90	1.85	1.75	1.50	1.40	1.20	1.20	1.00	1.00	1.00
B	0.95	0.95	0.90	0.70	0.60	0.70	0.70	0.60	0.60	0.60
D	0.45	0.43	0.35	0.21	0.18	0.15	0.13	0.11	0.10	0.09

Dimensions are in inches

WT-E-11


Dimensions are in inches

WT-E-12


Dimensions are in inches

The flange pattern shown is for illustration purpose. Refer to Technical Reference Section for flange pattern details. The outline drawings shown are standard versions. Contact factory for your specific package requirements.