



Applications:

- Instrumentation
- Module Assemblies
- Transceivers

Features:

- Variable Bandwidth
- Frequency Coverage up to 110 GHz



Descriptions:

3J Microwave, Inc. offers a complete line of waveguide low-pass, band-pass and high-pass filters in 8 waveguide bands. The Filters feature variable frequency bandwidth with low insertion loss in the pass-band and high rejection in the rejection Band. The frequency coverage of the filters is from

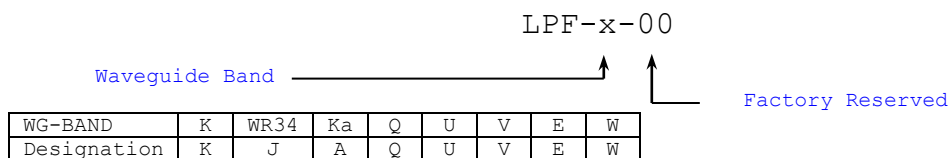
18 GHz up to 110 GHz. They are suitable for the applications of Transceivers, module assemblies and instrumentations. The filters are sorted in the three categories: **LPF** series low-pass filters, **BPF** series band-pass filters and **HPF** series high-pass filters

LPF Series Low-Pass Filters Specifications:

*Model No.	LPF-x-00							
WG Band	WR-42	WR-34	WR-28	WR-22	WR-19	WR15	WR-12	WR-10
**Pass-Band Frequency Range (GHz)	18 to 26.5	22 to 33	26.5 to 40	33 to 50	40 to 60	50 to 75	60 to 90	75 to 110
***Cutoff Frequency (GHz)	33	40	48	59	70	85	100	120
Pass-Band I. L. (dB)	0.7	0.8	1.0	1.2	1.3	1.5	1.8	2.0
Rejection (dB)	-40 @ Cutoff Frequency							
Return Loss (dB)	-15 dB							
WG Flange	UG595/U	UG595/U	UG599/U	UG383/U	UG383/U	UG385/U	UG385/U	UD387/UM
Outline								

- * Please see "how to order" for the model number details
- ** The highest pass-band frequency can be chosen in the specified waveguide band
- *** The cutoff frequency can be chosen in the specified frequency range

How to Order:





Section 4-10: Waveguide Low, Band and High-Pass Filters
www.3jmicrowave.com Frequency Coverage: 18 to 110 GHz

Model No. Example:

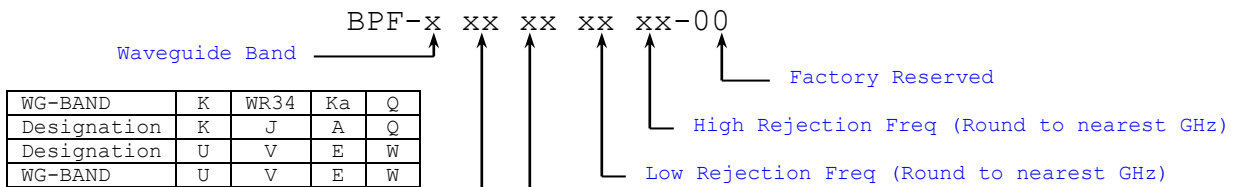
Model Number of a Q-Band Waveguide Low-Pass Filter:
LPF-Q-00

BPF Series Low-Pass Filters Specifications:

Model No*	BPF-xxxxxxxx-00							
WG Band	WR-42	WR-34	WR-28	WR-22	WR-19	WR15	WR-12	WR-10
Center Frequency (GHz)	18 to 26.5	22 to 33	26.5 to 40	33 to 50	40 to 60	50 to 75	60 to 90	75 to 110
3 dB Pass-Band Width (GHz)	1 GHz to Full Waveguide Band							
I. L. (dB)	0.7	0.8	1.0	1.2	1.3	1.5	1.8	2.0
Rejection (dB)	30 dB							
Return Loss (dB)	-15 dB							
WG Flange	UG595/U	UG595/U	UG599/U	UG383/U	UG383/U	UG385/U	UG385/U	UD387/UM
Outline								

* Please see "how to order" for the model number details

How to Order:



Pass-band Center Freq (Round to nearest GHz) 3 dB Pass-Band Width (Round to nearest GHz)
 For 100-109 GHz: B0-B9; For 110 GHz: H0

Model No. Example:

Model Number of a W-Band Waveguide Band-Pass Filter:

Specifications	Model number
Pass-Band Center Frequency: 105 GHz 3 dB Pass-Band Width: 3 GHz Insertion Loss: 2.0 dB Rejection: 30 dB @ 102 GHz 30 dB @ 108 GHz In/Out Connectors: WR-10, UG387/UM	BPF-WB503B2B8-00

HPF Series High-Pass Filters Specifications:

Model No*	HPF-xxxxxx-00							
WG Band	WR-42	WR-34	WR-28	WR-22	WR-19	WR15	WR-12	WR-10
Pass-Band Freq. Range (GHz)**	18 to 26.5	22 to 33	26.5 to 40	33 to 50	40 to 60	50 to 75	60 to 90	75 to 110
Rejection Freq. Range (GHz)***	15 to 25	19 to 31	21 to 38	26 to 48	31 to 58	39 to 72	49 to 87	59 to 107
I. L. (dB)	0.5	0.5	0.8	0.9	1.0	1.2	1.4	1.5
Rejection (dB)	40 @ Rejection Frequency and Below							
Return Loss (dB)	-15 dB							
WG Flange	UG595/U	UG595/UM	UG599/U	UG383/U	UG383/UM	UG385/U	UG385/U	UD387/UM
Outline								

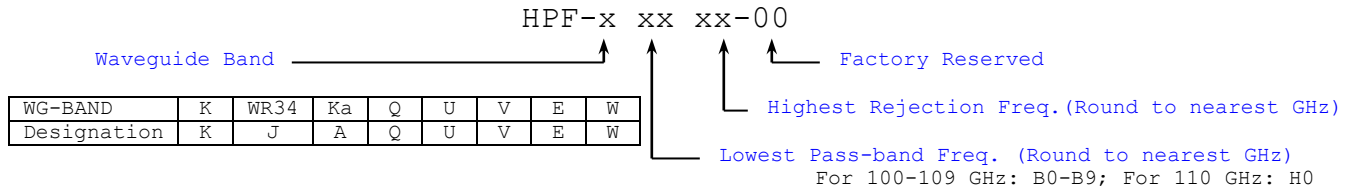
* Please see "how to order" for the model number details



Section 4-10: Waveguide Low, Band and High-Pass Filters
www.3jmicrowave.com Frequency Coverage: 18 to 110 GHz

** The highest pass-band frequency can be chosen in the specified waveguide band

How to Order:



Model No. Example:

Model Number of a V-Band WG High-Pass Filter

Specifications	Model number
Lowest Pass-Band Frequency: 60 GHz Insertion Loss: 1.2 dB Rejection: 40 dB @ 57 GHz In/Out Connectors: WR-15, UG385/U	HPF-V6057-00

Outlines: Please see Section 4-11, Page 31 for outline details