RF Technology Selection Guide

Overview

Spectrum Control offers RF filter solutions including bandpass, low-pass, high-pass, and notch filters. Available responses include Chebyshev, Bessel, Gaussian, Butterworth, and elliptic. Configurations include diplexers, triplexers, multiplexers, and custom packages.

Topology	Freq (GHz)	BW (%)	Loss	Size	Power	LPF	HPF	Notch	Bandpass
Tubular	0.2-20	4-40	Med	Med	Med-High	•			•
Cavity	0.03-40	0.1-50	Very Low	Med-Large	High			•	•
Lumped	0.01-6	10-200	Med	Small-Med	Low-Med	•	•	•	•
Dielectric	0.5-3	1-10	Low	Small	Med			•	•
Waveguide	5-65	1-20	Ultra Low	Very Large	Very High				•
Susp. Sub.	2-18	50-100	Low	Med	Med	•	•	•	•
SAW	0.2-1.5	0.04-60	Med	Very Small	Low				•
High-Q Glass	0.5-10	<10	Low	Very Small	Low-Med	•	•	•	•

Quick Decision Guide

Frequency: <6 GHz ► Lumped/Cavity I 5-40 GHz ► Cavity/Waveguide I >20 GHz ► Waveguide

Bandwidth: Wide ► Lumped/Suspended Substrate I Moderate ► Tubular/Lumped I Narrow ► Cavity/Dielectric/SAW

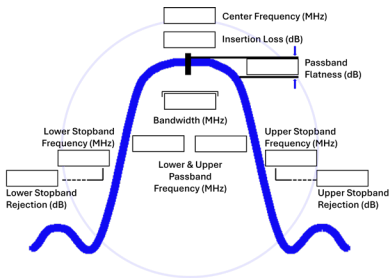
Loss: Lowest ► Waveguide/Cavity

Small: Size ► Lumped/SAW/High-Q Glass

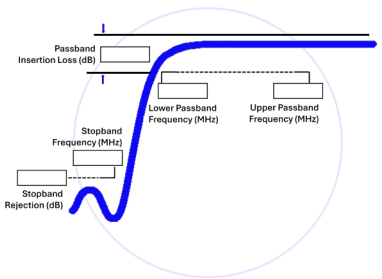
Power: High ► Waveguide/Cavity I Medium ► Tubular/Lumped I Low ► SAW/High-Q Glass

Filter Response Types

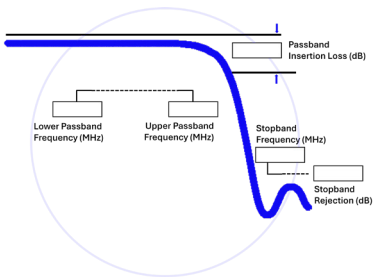
Bandpass



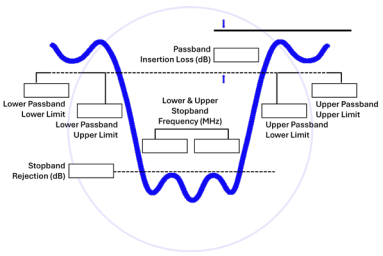
Highpass



Lowpass



Notch



Visit our website to submit your RF filter specifications and connect with our team to develop a solution tailored to your design:
SpectrumControl.com/Custom-RF-Filters