

## What is a Bandpass Filter?

A bandpass filter allows signal wavelengths (colors) to pass through (transmit) while blocking unwanted light of other wavelengths.

## Why choose an Omega Filter?

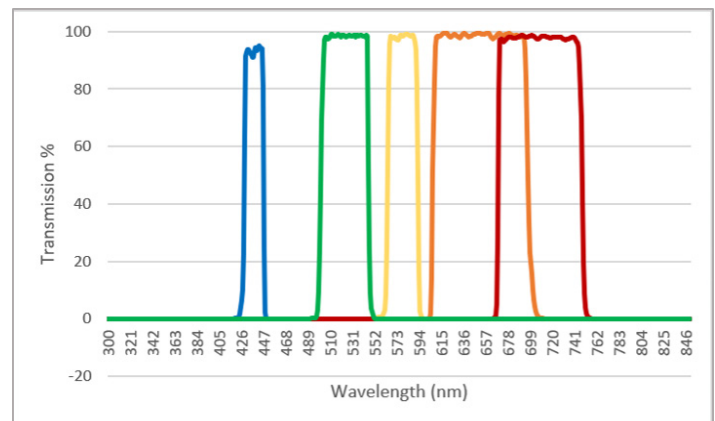
- Use Omega to design and manufacture **custom filters** that will differentiate your product
- 50 years of engineering services to optimize your filter needs
- Experience with unusual materials to provide superior Angle of Incidence (AOI) performance
- Extensive inventory for rapid prototyping and development
- High-volume production
- In house optic shop for custom sizes, shapes and substrates
- USA made, ITAR and ISO registered

## Bandpass Filter Features

- **Center Wavelength (CWL)**—the wavelength at the center of the passband
- **Full Width at Half Maximum (FWHM)**—the bandwidth at 50% of the maximum transmission
- **Peak Transmission (T)**—the wavelength of maximum transmission
- **Edge Steepness**- how fast the filter transitions from blocking to transmission
- **Pass-band ripple**- how flat the transmission region is
- **Blocking**- the degree to which unwanted light is removed

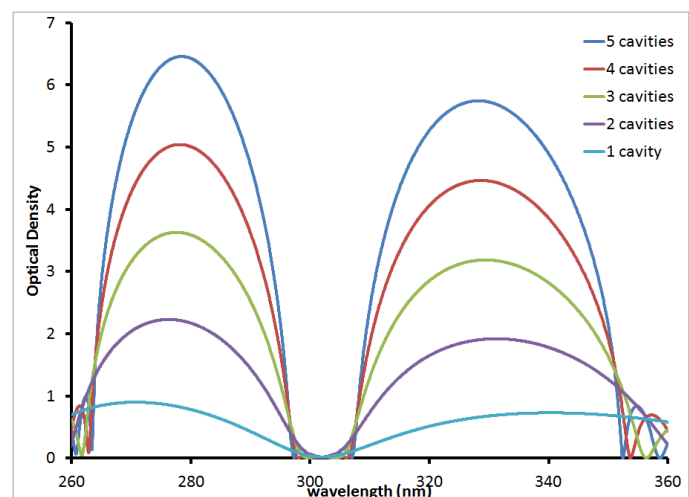
## Bandpass Filter Types

- UV Bandpass down to ~200 nm
- VIS Bandpass (400- 700 nm)
- IR Bandpass (700 nm- 10 micron)
- Multiband filters (dual-, triple-, quadruple-bandpass)
- NarrowBand filters (< 2 nm FWHM)



## Blocking for Bandpass Filters

Blocking is the wavelength region that needs to be attenuated. Attenuation is measured in Optical Density- a log scale related to % T. The higher the OD, the deeper the blocking. To learn more about optical density, read our technical note here: [omegafilters.com/library](http://omegafilters.com/library).



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