

## Linear Variable Filters

REO's linear variable filters provide a unique solution for controlling background noise and higher order effects in spectrometers. These filters also open new possibilities in providing enabling technologies for micro-spectrometers.

REO has developed a unique, proprietary, volume scalable technology which enables cost effective production of linearly variable filters over a wide range of sizes. We produce narrow band pass, long pass, short pass and order sorting filters.

Our coatings utilize REO's proprietary Ion Beam Sputtered (IBS) process with fully densified coatings for insensitivity to temperature and humidity.

### Our unique fabrication technology enable fully functional filters typical attributes:

1 – 2% FWHM resolution

±1.0% linearity

60 mm x 25 mm to 3.0 mm x 1.0 mm

CA - Full

Surface Quality 40-20

Temperature range: –196 °C to 400 °C

Attenuation: > OD3

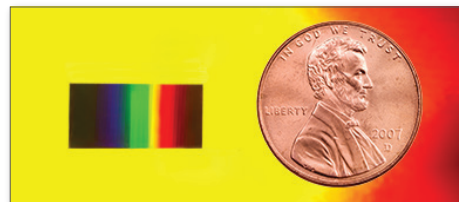
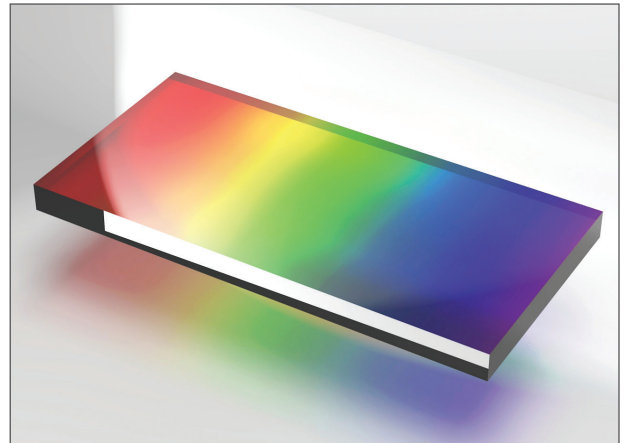
### Narrowband Linear Variable Filter range examples:

400 nm – 700 nm

750 nm – 1100 nm

1.0 μm – 1.7 μm

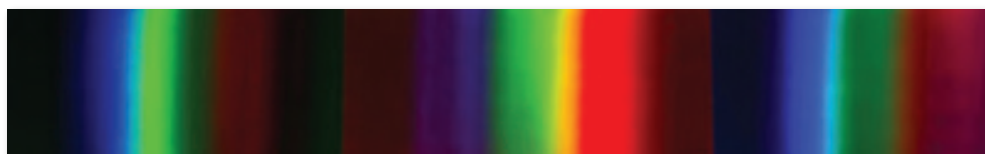
1.5 μm – 2.5 μm



### Full tunability in your system by using the following Linear Variable Filters:

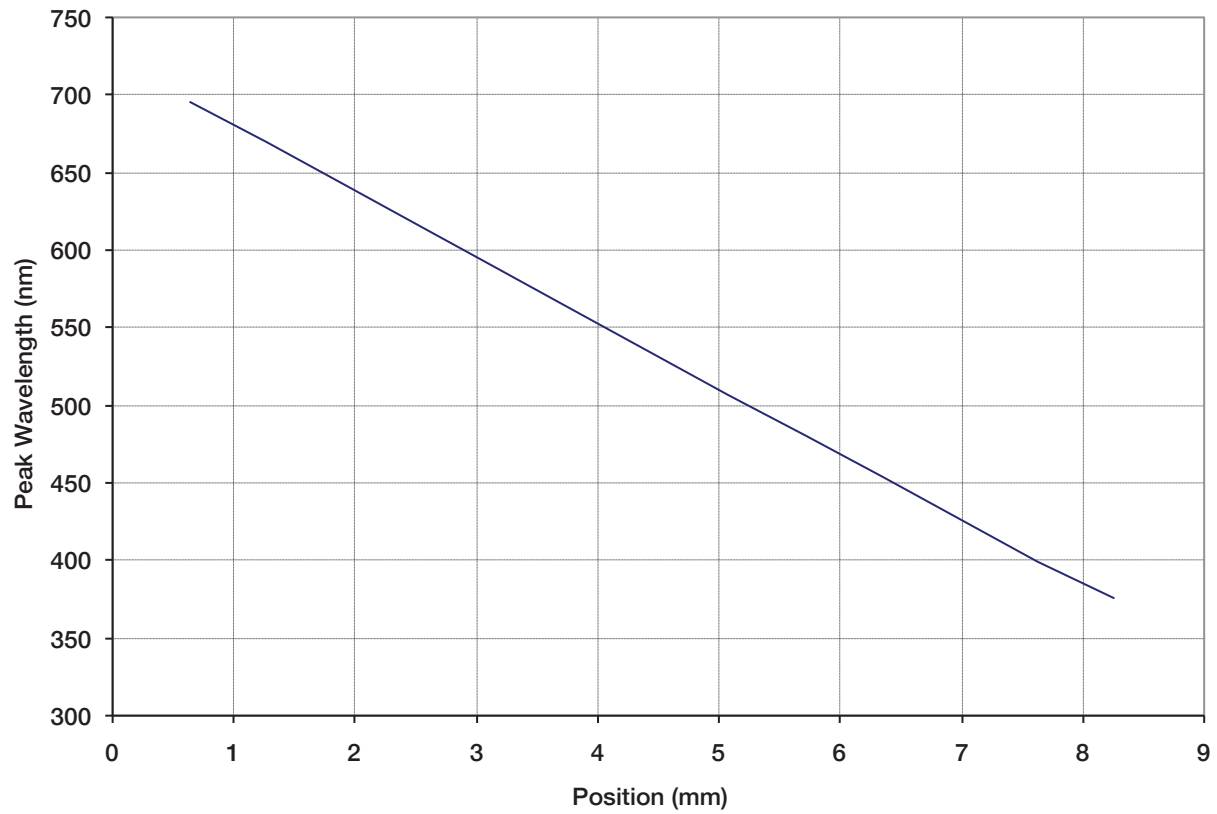
Short Wavelength Pass filter: Edge to be tuned from 380 – 700 nm

Long Wavelength Pass filter: Edge to be tuned from 300 – 850 nm





### Typical Coating Curves:



### Coating Design:

