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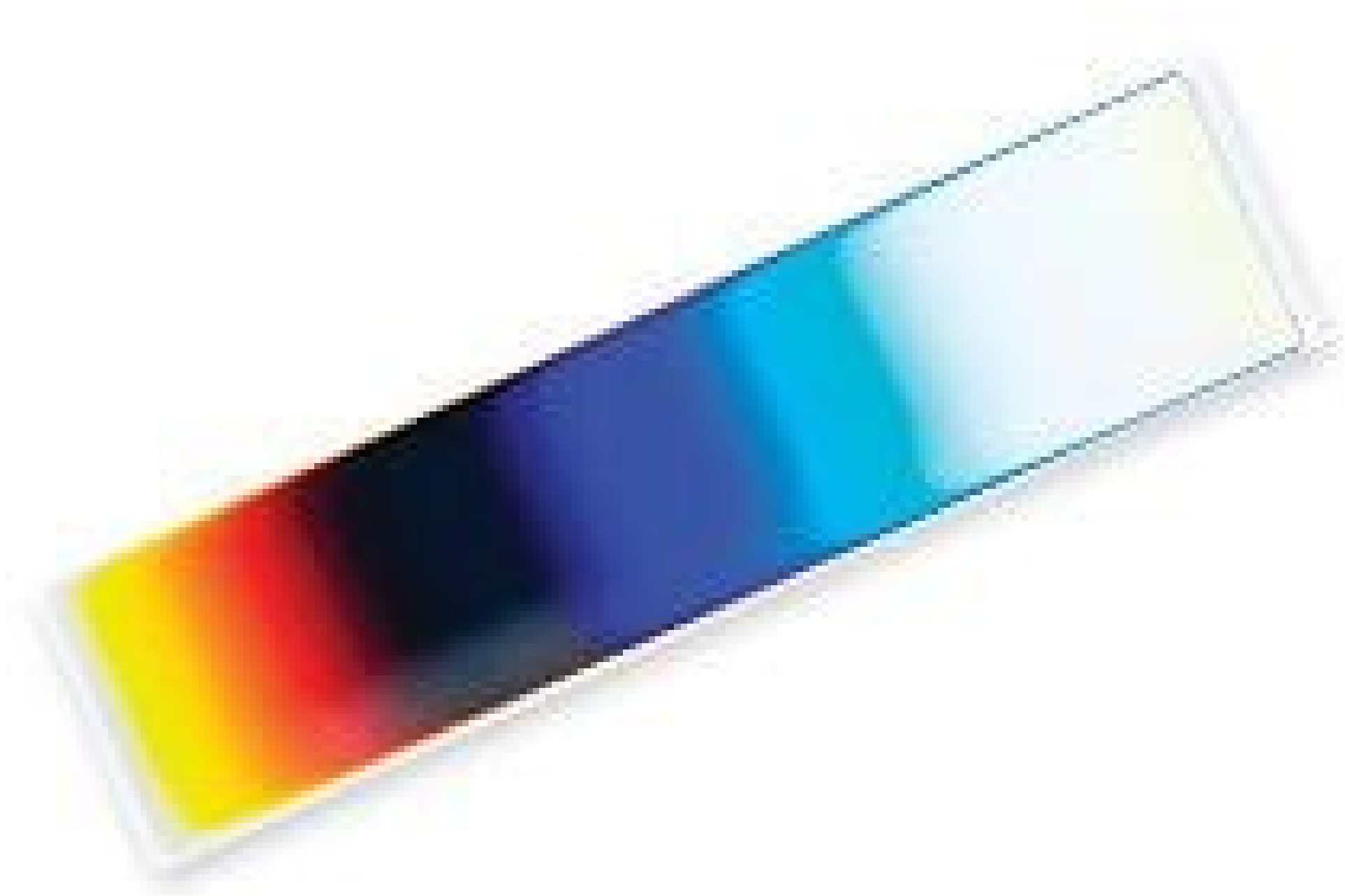
# Linear Variable Shortpass Filter



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## General

**Type:**

Shortpass Filter

## Physical & Mechanical Properties

**Dimensions (mm):**

60.0 x 15.0

**Length (mm):**

60.00

**Thickness (mm):**
3.00

**Width (mm):**
15.00

**Aperture (mm):**
0.2 x 8.0

## Optical Properties

**Optical Density OD (Average):**
≥3.0

**Substrate:**
Fused Silica (Corning 7980)

**Coating:**
Variable

**Optical Density Steps:**
Edge: 340 - 420nm, >3.0 to 725nm
Edge: 420 - 500nm, >3.0 to 850nm
Edge: 500 - 850nm, >3.0 to 860nm

**Transmission (%):**
>70

**Transmission Steps (%):**
Edge: 340 - 420nm, >70% over 20nm
Edge: 420 - 500nm, >85% over 40nm
Edge: 500 - 850nm, >92% over 40nm

**Slope Factor (%):**
1.6

**Linear Dispersion (%):**
0.57

**Wavelength Range (nm):**
340 - 850

## Regulatory Compliance

**RoHS 2015:**
Compliant

**Reach 223:**
Compliant

**Certificate of Conformance:**
View

# Product Details

A Linear Variable Edge Filter has an interference coating intentionally wedged in one direction to create a linear shift of the center wavelength across the length of the substrate. This shift allows for the broad filtering capabilities demonstrated by the linear variable shortpass, longpass, and dichroic edge filters. Shortpass and longpass edge filters work inversely of one another; the shortpass filter passes light throughout the filter's length until a blocking band is reached, whereas the longpass filter blocks light until a transmission band is reached. Blocking and transmission bands are adjustable by reorienting the filter to the light source.

With its broad blocking and transmission range, a single Linear Variable Edge Filter can replace an entire filter set. When synchronized with a single moving grading spectrometer, combined longpass and shortpass edge filters reduce scatter light and harmonics. In addition, combined linear variable filters can be used as a single variable excitation filter for various fluorescence applications using white light sources.

- Use in Pairs to Create High Efficiency Custom Bandpass Filters
- Optimum Input Beam Diameter of 0.2 x 8.0mm
- OD3 Blocking
- Linear Variable Bandpass Filters Also Available

Linear Variable Edge Filters are designed to be used individually or in pairs to selectively block or transmit targeted wavelengths. Linear Variable Edge Filters are available as longpass, shortpass, or dichroic filters. Longpass edge filters transmit wavelengths greater than the cut-on wavelength, whereas shortpass edge filters transmit wavelengths shorter than the cut-off wavelength. Dichroic edge filters operate similarly to longpass edge filters, but ensure that unwanted wavelengths are reflected. When combined, Linear Variable Edge Filters can operate as laser line filters or variable bandpass filters with tunable center wavelengths and bandwidths.

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