

Spherical Lenses

Cylindrical Lenses

Lens Kits

Achromatic Doublets

Multi-Element

Micro Optics

Mirrors

Prisms

Substrates & Windows

Beamsplitters

Polarizers

Filter & Apertures

Long and Short Pass Edge Filters

- High transmission and high rejection for complete isolation
- Available at every 50nm throughout the visible and near-IR
- Cut-on and cut-off wavelengths guaranteed to within 10nm
- May be tilt tuned to shorter cut-on/cut-off wavelengths



Edge filters may be tilt tuned just as narrowband filters. The specified center wavelength will shift 50nm towards the blue for increasing angles of incidence. All of these edge filters may be tuned from their center wavelength to the next lower wavelength range.

These are interference filters which provide a sharp cut-off either above or below a particular wavelength. They are useful for isolating regions of the spectrum.

These filters are specified by their center (50% transmission) wavelength. The transmission of the long pass filters is 85% from a wavelength that is 3% greater than the specified wavelength to 2000nm. The transmission of the short pass filters is 85% from a wavelength that is 3% less than the specified wavelength to 425nm (except for the 400nm filter). The width of the transition from cut-on to cut-off is typically 6% or less of the center (specified) wavelength.

The cut-on/cut-off point is shifted to shorter wavelength if the filter is tilted from the normal. This feature can be useful for fine tuning.

Specifications & Tolerances

Diameter: 25mm +0, -0.5mm
 Av. Transmission: 85% (from 50% point)
 Parallelism: 3arcmin
 Cut-on/off: ± 10 nm
 Thickness: ~ 4mm Long Pass
 ~ 1mm Short Pass

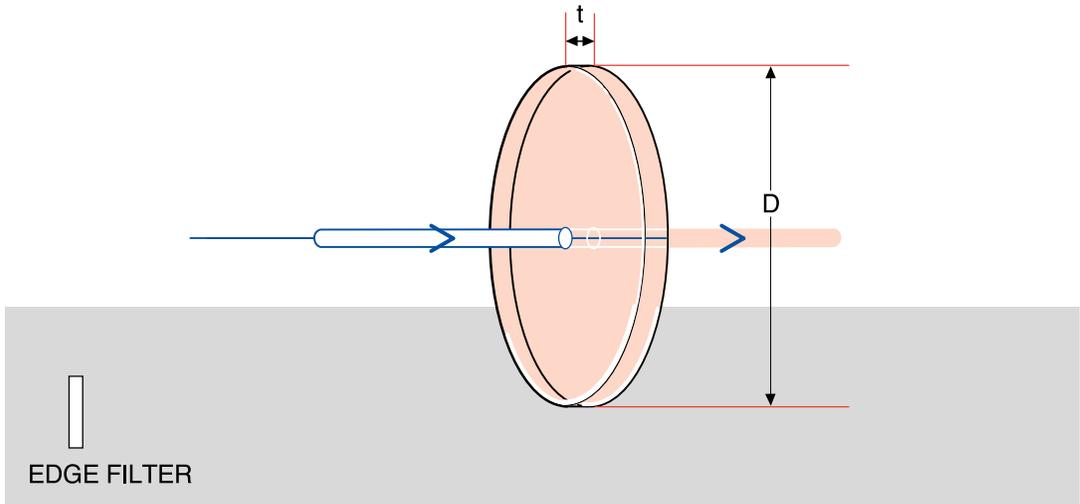
Clear aperture: >95% diameter
 Cut slope: 6% max
 Av. Rejection: 99% (from 50% point)
 Surface quality: 80-50
 Temperature range: -50 to +70°C

These filters are unmounted.

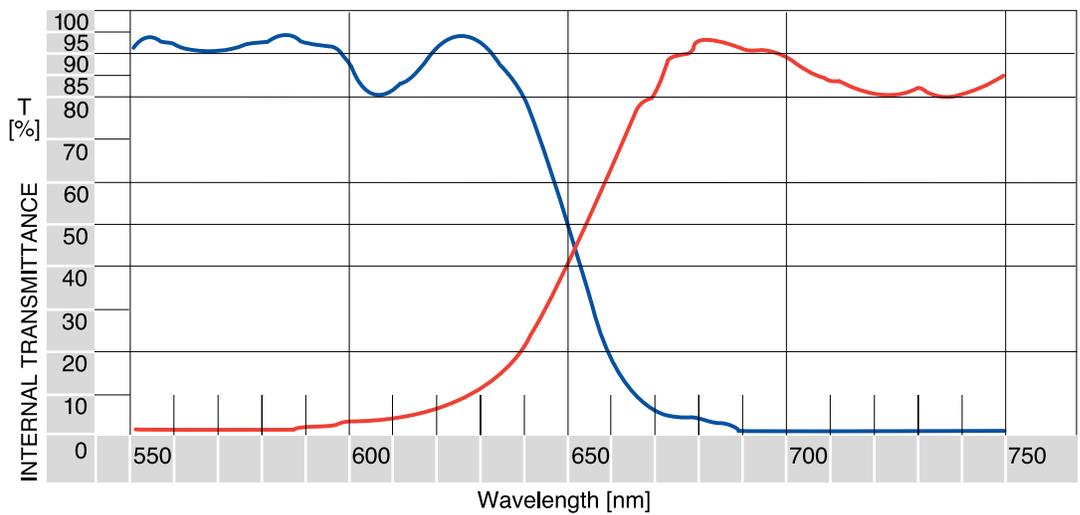
ORDERING
&
TECHNICAL SUPPORT
(949) 851-5881
FAX (949) 851-5058
E-MAIL
sales@optosigma.com
WEB
www.optosigma.com

OPTICAL COMPONENTS

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To keep the cut-on/cut-off transition as narrow as possible, these filters should be used in collimated or near-collimated light.



EDGE FILTER TRANSMITTANCE

Short Pass ———
Long Pass ———

F I L T E R T Y P E

Long and Short Pass Edge Filters **LONG PASS** **SHORT PASS**

Wavelength Cut-off (nm)	Price	PART NUMBER	PART NUMBER
400.0		079-3330	079-4440
450.0		079-3340	079-4450
500.0		079-3350	079-4460
550.0		079-3360	079-4470
600.0		079-3370	079-4480
650.0		079-3380	079-4490
700.0		079-3390	079-4550
750.0		079-3440	079-4560
800.0		079-3450	079-4570
850.0		079-3460	079-4580
900.0		079-3470	079-4590
950.0		079-3480	079-4660
1000.0		079-3490	079-4670

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