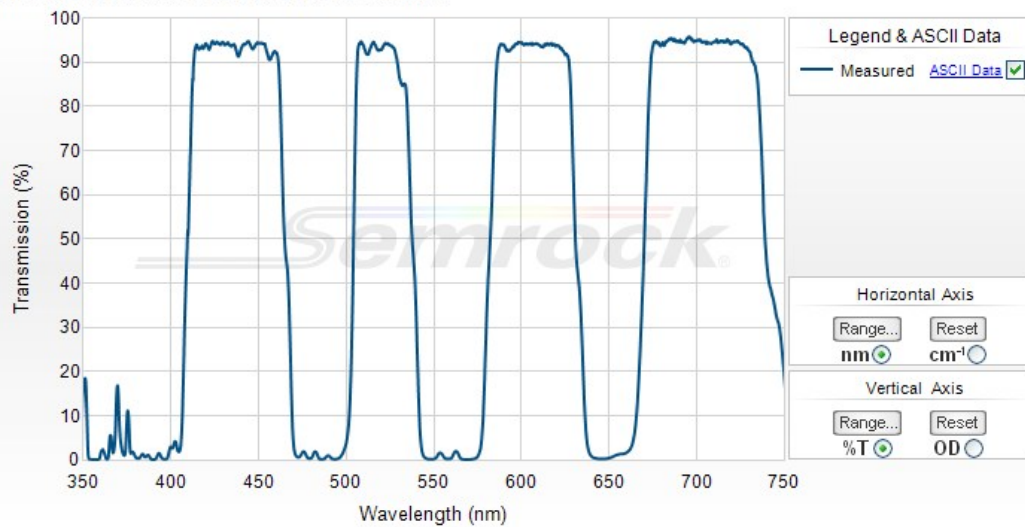


410/504/582/669 nm BrightLine® quad-edge dichroic beamsplitter

Part Number: FF410/504/582/669-Di01-25x36



Semrock, Inc

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Toll Free Phone: 866.736.7625 (866-SEMROCK)
(within US and Canada)

Your filter spectrum may differ slightly from the typical spectrum above, but is certified to meet the optical specifications noted below.



410/504/582/669 nm BrightLine® quad-edge dichroic beamsplitter

Multi-edge dichroics have two or more transitions from high reflectance to high transmission. These polarization-insensitive dichroic beamsplitters for 45° angle-of-incidence exhibit steep edges with very high and flat reflection and transmission bands. More complete reflection and transmission mean less stray light for lower background and improved signal-to-noise ratio. These filters are optimized for fluorescence microscopes and instrumentation, and may also be used for a variety of other applications that require beam combining and separation based on wavelength. They are based on Semrock's highly reliable hard-coating technology on ultralow-autofluorescence fused-silica substrates.

Part Number	Size	Price ¹	Stock Status
FF410/504/582/669-Di01-25x36	25.2 mm x 35.6 mm x 1.1 mm (unmounted)	\$515	In Stock
FF410/504/582/669-Di01-22x29	22.0 mm x 29.0 mm x 1.1 mm (unmounted)	\$515	2nd Day Ship

Don't see a size you need? Contact us for custom sizing – available in less than a week (sizing fee applies).

1) US domestic pricing only. If you are ordering from outside the US, please contact your nearest [regional distributor](#) for the correct list price.

Optical Specifications

Specification	Value
Reflection Band 1	R _{avg} > 95% 381.5 – 392.5 nm
Edge Wavelength 1	410 nm
Transmission Band 1	T _{avg} > 90% 420 – 460 nm
Reflection Band 2	R _{avg} > 95% 475 – 495 nm
Edge Wavelength 2	504 nm
Transmission Band 2	T _{avg} > 90% 510 – 531 nm
Reflection Band 3	R _{avg} > 95% 547 – 572 nm
Edge Wavelength 3	582 nm
Transmission Band 3	T _{avg} > 90% 589.5 – 623.5 nm
Reflection Band 4	R _{avg} > 95% 643 – 656 nm
Edge Wavelength 4	669 nm
Transmission Band 4	T _{avg} > 90% 677 – 722 nm

General Filter Specifications

Specification	Value
Angle of Incidence	45 ± 1.5 degrees
Cone Half-angle	2 degrees
Optical Damage Rating	Testing has proven to show no signs of degradation when exposed to at least 6.0 W of power from an unfiltered xenon arc lamp over a 25 mm diameter (corresponding to 1.2 W/cm ²) for over 500 hrs.
Flatness	Standard
Steepness	Standard
Effective Index	1.8

Physical Filter Specifications (applies to standard sized parts; contact us regarding other sizes)

Specification	Value
Transverse Dimensions (L x W)	25.2 mm x 35.6 mm
Transverse Tolerance	± 0.1 mm
Filter Thickness (unmounted)	1.05 mm
Filter Thickness Tolerance (unmounted)	± 0.05 mm
Clear Aperture	≥ 80% (elliptical)
Scratch-Dig	60-40
Substrate Thickness (unmounted)	1.05 mm
Substrate Thickness Tolerance (unmounted)	± 0.05 mm
Orientation	Reflective surface marked with part number - Orient in direction of incoming light