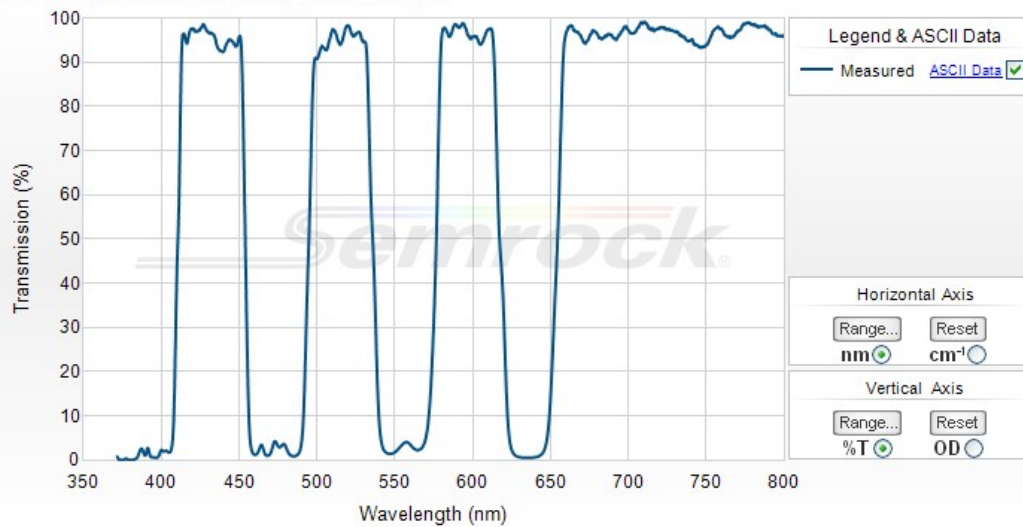


## 409/493/573/652 nm BrightLine® quad-edge dichroic beamsplitter

Part Number: FF409/493/573/652-Di01-25x36



### Semrock, Inc

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Rochester, New York 14624

Main Phone: +1 585.594.7050 (worldwide)  
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.



### 409/493/573/652 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 <sup>1</sup>	Stock Status
FF409/493/573/652-Di01-25x36	25.2 mm x 35.6 mm x 1.1 mm (unmounted)	\$515	In Stock
FF409/493/573/652-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 <sub>avg</sub> > 95% 380 – 404 nm
Edge Wavelength 1	409 nm
Transmission Band 1	T <sub>avg</sub> > 93% 414 – 450 nm
Reflection Band 2	R <sub>avg</sub> > 95% 461 – 487.5 nm
Edge Wavelength 2	493 nm
Transmission Band 2	T <sub>avg</sub> > 93% 499.5 – 530 nm
Reflection Band 3	R <sub>avg</sub> > 95% 543 – 566 nm
Edge Wavelength 3	573 nm
Transmission Band 3	T <sub>avg</sub> > 93% 580 – 611 nm
Reflection Band 4	R <sub>avg</sub> > 95% 626 – 644 nm
Edge Wavelength 4	652 nm
Transmission Band 4	T <sub>avg</sub> > 93% 659.5 – 800 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 <sup>2</sup> ) for over 500 hrs.
Flatness	<a href="#">Standard</a>
Steepness	Standard
Effective Index	1.75

**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