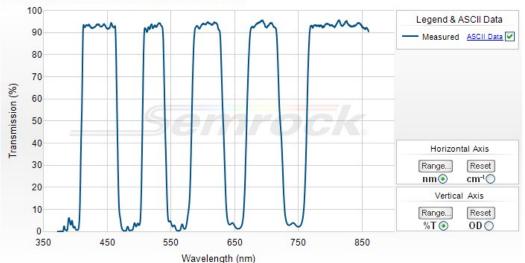
# 408/504/581/667/762 nm BrightLine® penta-edge dichroic beamsplitter

Part Number: FF408/504/581/667/762-Di01-25x36





### Semrock, Inc.

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(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.



## 408/504/581/667/762 nm BrightLine® penta-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	Price1	Stock Status
FF408/504/581/667/762-Di01-25x36	25.2 mm x 35.6 mm x 1.1 mm (unmounted)	\$605	2nd Day Ship
FF408/504/581/667/762-Di01-22x29	22.0 mm x 29.0 mm x 1.1 mm (unmounted)	\$605	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	Ravg > 95% 381.5 – 392.5 nm	
Edge Wavelength 1	408 nm	
Transmission Band 1	Tavg > 90% 420 – 460 nm	
Reflection Band 2	Ravg > 95% 475 – 495 nm	
Edge Wavelength 2	504 nm	
Transmission Band 2	Tavg > 90% 510 – 531 nm	
Reflection Band 3	Ravg > 95% 547 – 572 nm	
Edge Wavelength 3	581 nm	
Transmission Band 3	Tavg > 90% 589.5 – 623.5 nm	
Reflection Band 4	Ravg > 95% 643 – 656 nm	
Edge Wavelength 4	667 nm	
Transmission Band 4	Tavg > 90% 677 – 711.5 nm	
Reflection Band 5	Ravg > 95% 733.5 – 746.5 nm	
Edge Wavelength 5	762 nm	
Transmission Band 5	Tavg > 90% 768.5 – 849.5 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/cm²) for over 500 hrs.	
Eletnose	Ctandard	

Flattiess	Standard		
Steepness	Standard		
Effective Index	1.78		

## 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	