

## 685 nm edge BrightLine® single-edge dichroic beamsplitter

Part Number: FF685-Di02-25x36



### 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.



### 685 nm edge BrightLine® single-edge dichroic beamsplitter

Semrock offers a wide range of polarization-insensitive dichroic beamsplitters that exhibit steep edges with very high and flat reflection and transmission bands. Filters are available in versions optimized for wideband light sources, laser sources, multiphoton systems, Raman spectroscopy, image splitting, and laser beam combining and separating.

Part Number	Size	Price <sup>1</sup>	Stock Status
FF685-Di02-25x36	25.2 mm x 35.6 mm x 1.1 mm (unmounted)	\$255	In Stock
FF685-Di02-22x29	22.0 mm x 29.0 mm x 1.1 mm (unmounted)	\$255	2nd Day Ship
FF685-Di02-32x44-FX	32 x 44 x 1.1 mm (corners cut for OFX cube) (unmounted)	\$400	In Stock

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 > 98% 350 – 676 nm
Reflection Band 2	Ravg > 98% 600 – 676 nm
Edge Wavelength 1	685 nm
Transmission Band 1	Tavg > 93% 695 – 950 nm
Transmission Band 2	Tavg > 93% 695 – 810 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

### 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

Filter Thickness Tolerance (unmounted)	$\pm 0.05$ mm
Clear Aperture	$\geq 80\%$
Scratch-Dig	60-40
Substrate Thickness (unmounted)	1.05 mm
Substrate Thickness Tolerance (unmounted)	$\pm 0.05$ mm
Orientation	Reflective surface marked with part number - Orient in direction of incoming light