# 640 nm edge BrightLine® single-edge imaging-flat dichroic beamsplitter

# Part Number: FF640-FDi01-25x36





## 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.



#### 640 nm edge BrightLine® single-edge imaging-flat dichroic beamsplitter

BrightLine® image-splitting dichroic beamsplitters offer superb image quality for both transmitted and reflected light when separating beams of light by color for simultaneous capture of multiple images. For applications such as (FRET) and real-time live-cell imaging, users can now separate two, four or even more colors onto as many cameras or regions of a single camera sensor. The exceptional flatness of these filters virtually eliminates aberrations in the reflected beam for most common imaging systems up to a 10 mm beam diameter.

Common Fluorophore Pair to Split: Cy3/Cy5

Part Number	Size	Price1	Stock Status
FF640-FDi01-25x36	25.2 mm x 35.6 mm x 1.1 mm (unmounted)	\$335	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 > 95% 350 - 629.5 nm
Edge Wavelength 1	640 nm
Transmission Band 1	Tavg > 93% 652 - 950 nm
Common Fluorophore Pair to Split	Cy3/Cy5

# **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.
Flatness	Imaging Flat
Steepness	Standard
Effective Index	1.74

### 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