

## 433/517/613 nm BrightLine® triple-band bandpass filter

Part Number: FF01-433/517/613-25



### Semrock, Inc

3625 Buffalo Road, Suite 6  
 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.



### 433/517/613 nm BrightLine® triple-band bandpass filter

Individual multiband fluorescence bandpass filters that utilize Semrock's patented single-substrate construction. These filters have extremely high transmission, steep and well-defined edges, and outstanding blocking between the passbands. All thin-film, hard-coated construction for unsurpassed performance and reliability.

Part Number	Size	Price <sup>1</sup>	Stock Status
FF01-433/517/613-25	25 mm x 3.5 mm	\$435	In Stock
FF01-433/517/613-23.3-D	23.3 mm x 2.0 mm (unmounted)	\$435	2nd Day Ship

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

<sup>1</sup>) 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
Transmission Band 1	T <sub>avg</sub> > 90% 414 – 450 nm
Center Wavelength 1	432 nm
Guaranteed Minimum Bandwidth 1	36 nm
FWHM Bandwidth 1 (nominal)	43.5 nm
Transmission Band 2	T <sub>avg</sub> > 90% 505 – 528 nm
Center Wavelength 2	516.5 nm
Guaranteed Minimum Bandwidth 2	23 nm
FWHM Bandwidth 2 (nominal)	31.4 nm
Transmission Band 3	T <sub>avg</sub> > 90% 584 – 645 nm
Center Wavelength 3	614.5 nm
Guaranteed Minimum Bandwidth 3	61 nm
FWHM Bandwidth 3 (nominal)	70.5 nm
Blocking Band 1	OD <sub>avg</sub> > 6 300 – 393 nm
Blocking Band 2	OD > 3.5 403.5 nm
Blocking Band 3	OD > 3.5 459 nm
Blocking Band 4	OD <sub>avg</sub> > 6 466 – 490 nm
Blocking Band 5	OD > 3.5 497.5 nm
Blocking Band 6	OD > 3.5 538 nm
Blocking Band 7	OD <sub>avg</sub> > 6 546 – 565 nm
Blocking Band 8	OD > 3.5 573.5 nm
Blocking Band 9	OD <sub>avg</sub> > 6 664 – 750 nm
Blocking Band 10	OD <sub>avg</sub> > 6 750 – 850 nm

## General Filter Specifications

Specification	Value
Angle of Incidence	0 ± 5 degrees
Cone Half-angle	7 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.
Effective Index	1.9

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

Specification	Value
Transverse Dimensions (Diameter)	25 mm
Transverse Tolerance (mounted)	+ 0.0 / - 0.1 mm
Filter Thickness (Mounted)	3.5 mm
Filter Thickness Tolerance (Mounted)	± 0.1 mm
Clear Aperture	≥ 22 mm
Scratch-Dig	60-40
Substrate Thickness (unmounted)	2.0 mm
Substrate Thickness Tolerance (unmounted)	± 0.1 mm
Orientation	Arrow on ring indicates preferred direction of propagation of light