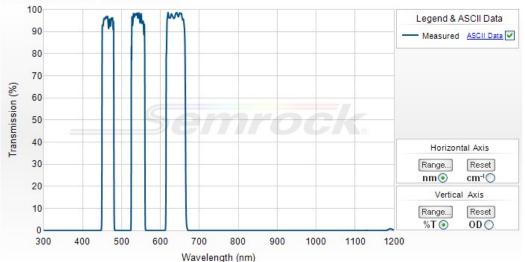
# 464/542/639 nm BrightLine® triple-band bandpass filter

# Part Number: FF01-464/542/639-25





### 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.



#### 464/542/639 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	Price1	Stock Status
FF01-464/542/639-25	25 mm x 3.5 mm	\$435	In Stock
FF01-464/542/639-23.3-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).

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**

Optical Specifications	
Specification	Value
Transmission Band 1	Tavg > 90% 451 – 474 nm
Center Wavelength 1	464 nm
Guaranteed Minimum Bandwidth 1	23 nm
FWHM Bandwidth 1 (nominal)	31.8 nm
Transmission Band 2	Tavg > 90% 530 - 557 nm
Center Wavelength 2	542 nm
Guaranteed Minimum Bandwidth 2	27 nm
FWHM Bandwidth 2 (nominal)	35.3 nm
Transmission Band 3	Tavg > 90% 618 - 660 nm
Center Wavelength 3	639 nm
Guaranteed Minimum Bandwidth 3	42 nm
FWHM Bandwidth 3 (nominal)	50.1 nm
Blocking Band 1	ODavg > 5 275 - 435 nm
Blocking Band 2	ODavg > 3.301 435 – 440 nm
Blocking Band 3	ODavg > 3.301 488 - 493 nm
Blocking Band 4	ODavg > 5 493 - 515 nm
Blocking Band 5	ODavg > 3.301 515 - 520 nm
Blocking Band 6	ODavg > 3.301 570 – 575 nm
Blocking Band 7	ODavg > 5 575 - 602 nm
Blocking Band 8	ODavg > 3.301 602 - 607 nm
Blocking Band 9	ODavg > 3.301 675 - 680 nm
Blocking Band 10	ODavg > 5 680 - 1000 nm
Blocking Band 10	ODavg > 5 680 - 1000 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/cm²) for over 500 hrs.	
Effective Index	1.94	

## 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	