

## 554/23 nm BrightLine® single-band bandpass filter

Part Number: FF01-554/23-25



### 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.



### 554/23 nm BrightLine® single-band bandpass filter

Individual fluorescence bandpass filters that have been optimized for use in a variety of fluorescence instruments. All thin-film, hard-coated construction for unsurpassed performance and reliability.

Part Number	Size	Price <sup>1</sup>	Stock Status
FF01-554/23-25	25 mm x 5.0 mm	\$305	In Stock
FF01-554/23-25-STR	25 mm threaded ring for Sutter Lambda filter wheel	\$325	2nd Day Ship
FF01-554/23-32	32 mm x 5.0 mm	\$500	Contact Us
FF01-554/23-21.8-D	21.8 mm x 2.0 mm (unmounted)	\$305	Contact Us

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> > 93% 543.0 – 566.0 nm
Center Wavelength 1	554.5 nm
Guaranteed Minimum Bandwidth 1	23 nm
FWHM Bandwidth 1 (nominal)	28.1 nm
Blocking Band 1	OD <sub>avg</sub> > 5 200 – 300 nm
Blocking Band 2	OD <sub>avg</sub> > 6 300 – 530 nm
Blocking Band 3	OD <sub>avg</sub> > 8 414 – 450 nm (Design specification - <a href="#">measurements are noise-floor limited</a> )
Blocking Band 4	OD <sub>avg</sub> > 8 499.5 – 530 nm (Design specification - <a href="#">measurements are noise-floor limited</a> )
Blocking Band 5	OD > 3.5 536.5 nm
Blocking Band 6	OD > 3.5 573 nm
Blocking Band 7	OD <sub>avg</sub> > 8 580 – 611 nm (Design specification - <a href="#">measurements are noise-floor limited</a> )
Blocking Band 8	OD <sub>avg</sub> > 8 659.5 – 800 nm (Design specification - <a href="#">measurements are noise-floor limited</a> )
Blocking Band 9	OD <sub>avg</sub> > 6 611 – 850 nm
Blocking Band 10	OD <sub>avg</sub> > 4 850 – 925 nm
Blocking Band 11	OD <sub>avg</sub> > 2 925 – 1100 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

Optical Damage Rating xenon arc lamp over a 25 mm diameter (corresponding to 1.2 W/cm<sup>2</sup>) for over 500 hrs.

Effective Index 1.98

**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)	5.0 mm
Filter Thickness Tolerance (Mounted)	± 0.1 mm
Clear Aperture	≥ 21 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