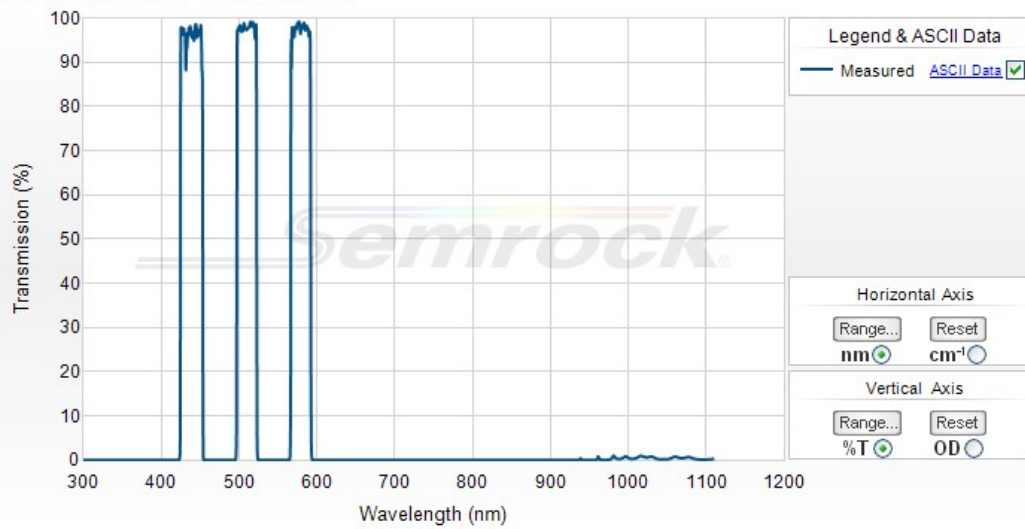


438/509/578 nm BrightLine® triple-band bandpass filter

Part Number: FF01-438/509/578-25



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.



438/509/578 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 ¹	Stock Status
FF01-438/509/578-25	New Product	25 mm x 5.0 mm	\$435	In Stock
FF01-438/509/578-32	New Product	32 mm x 5.0 mm	\$713	Contact Us
FF01-438/509/578-21.8-D	New Product	21.8 mm x 2.0 mm (unmounted)	\$435	Contact Us

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
Transmission Band 1	T _{avg} > 93% 426 – 450 nm
Center Wavelength 1	438 nm
Guaranteed Minimum Bandwidth 1	24 nm
FWHM Bandwidth 1 (nominal)	28.8 nm
Transmission Band 2	T _{avg} > 93% 497.6 – 519.5 nm
Center Wavelength 2	509 nm
Guaranteed Minimum Bandwidth 2	21.9 nm
FWHM Bandwidth 2 (nominal)	25.5 nm
Transmission Band 3	T _{avg} > 93% 567.4 – 588.6 nm
Center Wavelength 3	578 nm
Guaranteed Minimum Bandwidth 3	21.2 nm
FWHM Bandwidth 3 (nominal)	25.2 nm
Blocking Band 1	OD _{avg} > 5 200 – 300 nm
Blocking Band 2	OD _{avg} > 6 300 – 421.1 nm
Blocking Band 3	OD > 3.5 458.5 nm
Blocking Band 4	OD _{avg} > 8 464 – 486 nm (Design specification - measurements are noise-floor limited)
Blocking Band 5	OD > 3.5 491.8 nm
Blocking Band 6	OD > 3.5 525.8 nm
Blocking Band 7	OD _{avg} > 8 532 – 554 nm (Design specification - measurements are noise-floor limited)
Blocking Band 8	OD > 3.5 560.7 nm
Blocking Band 9	OD > 3.5 595.8 nm
Blocking Band 10	OD _{avg} > 8 603 – 800 nm (Design specification - measurements are noise-floor limited)

Blocking Band 11	ODavg > 6 800 – 850 nm
Blocking Band 12	ODavg > 4 850 – 925 nm
Blocking Band 13	ODavg > 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 xenon arc lamp over a 25 mm diameter (corresponding to 1.2 W/cm ²) for over 500 hrs.
Effective Index	1.90

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