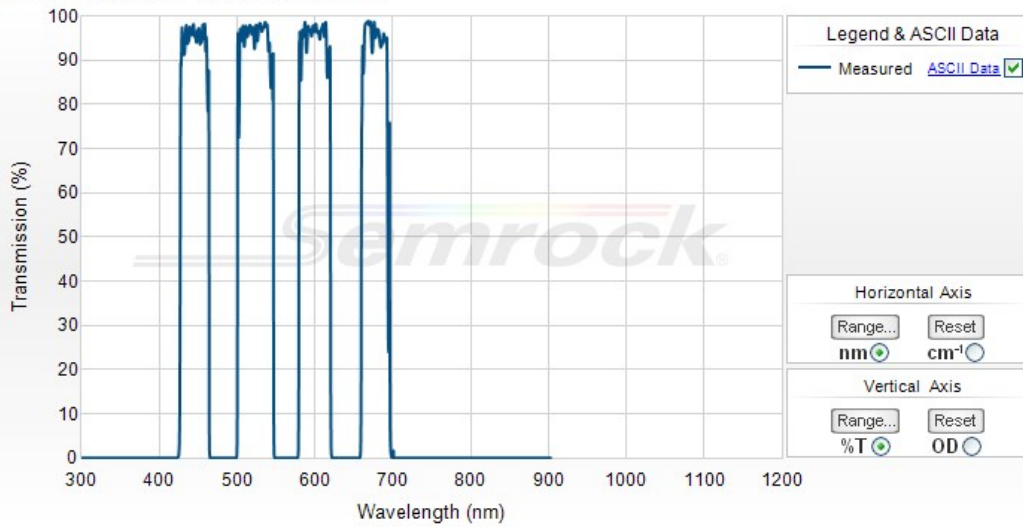


446/523/600/677 nm BrightLine® quad-band bandpass filter

Part Number: FF01-446/523/600/677-25



Semrock, Inc

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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.



446/523/600/677 nm BrightLine® quad-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
FF01-446/523/600/677-25	25 mm x 3.5 mm	\$495	In Stock
FF01-446/523/600/677-23.3-D	23.3 mm x 2.0 mm (unmounted)	\$495	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

Specification	Value
Transmission Band 1	T _{avg} > 90% 429.5 – 462.0 nm
Center Wavelength 1	446 nm
Guaranteed Minimum Bandwidth 1	32.5 nm
FWHM Bandwidth 1 (nominal)	36.9 nm
Transmission Band 2	T _{avg} > 90% 502.5 – 544.5 nm
Center Wavelength 2	523.5 nm
Guaranteed Minimum Bandwidth 2	42 nm
FWHM Bandwidth 2 (nominal)	46.4 nm
Transmission Band 3	T _{avg} > 90% 582 – 617.5 nm
Center Wavelength 3	600 nm
Guaranteed Minimum Bandwidth 3	35.5 nm
FWHM Bandwidth 3 (nominal)	40.8 nm
Transmission Band 4	T _{avg} > 90% 663 – 690.5 nm
Center Wavelength 4	677 nm
Guaranteed Minimum Bandwidth 4	27.5 nm
FWHM Bandwidth 4 (nominal)	34.4 nm
Blocking Band 1	OD _{avg} > 4 200 – 370 nm
Blocking Band 2	OD _{avg} > 8 370 – 410 nm (Design specification - measurements are noise-floor limited)
Blocking Band 3	OD > 3.5 419.8 nm
Blocking Band 4	OD > 3.5 467.5 nm
Blocking Band 5	OD _{avg} > 8 473 – 491 nm (Design specification - measurements are noise-floor limited)
Blocking Band 6	OD > 3.5 496.8 nm
Blocking Band 7	OD > 3.5 551.8 nm

Blocking Band 8	OD _{avg} > 8 559 – 568.2 nm (Design specification - measurements are noise-floor limited)
Blocking Band 9	OD > 3.5 575 nm
Blocking Band 10	OD > 3.5 625.3 nm
Blocking Band 11	OD _{avg} > 8 632.8 – 647.1 nm (Design specification - measurements are noise-floor limited)
Blocking Band 12	OD > 3.5 655 nm
Blocking Band 13	OD _{avg} > 5 706 – 900 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	2.07

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