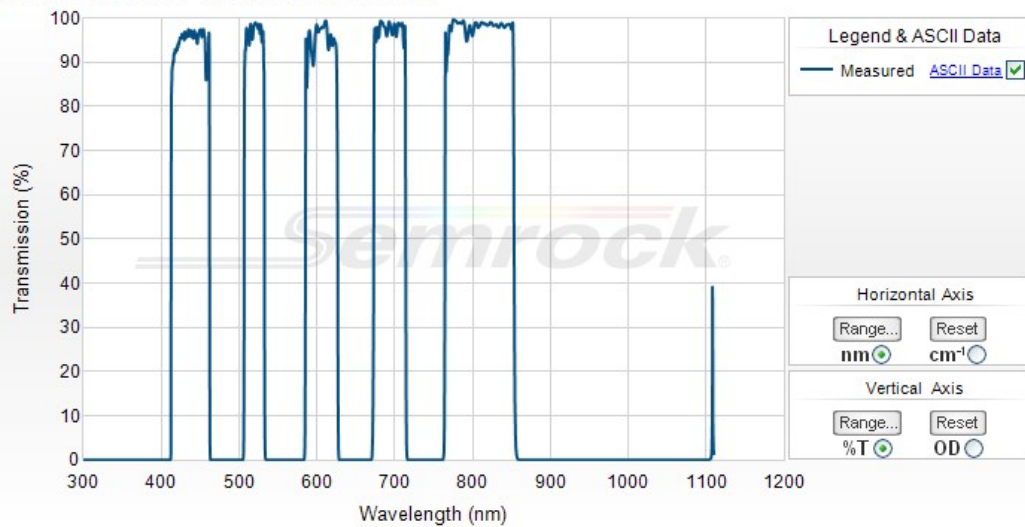


440/521/607/694/809 nm BrightLine® penta-band bandpass filter

Part Number: FF01-440/521/607/694/809-25



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.



440/521/607/694/809 nm BrightLine® penta-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
FF01-440/521/607/694/809-25	25 mm x 3.5 mm	\$575	In Stock
FF01-440/521/607/694/809-23.3-D	23.3 mm x 2.0 mm (unmounted)	\$575	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% 420 – 460 nm
Center Wavelength 1	440 nm
Guaranteed Minimum Bandwidth 1	40 nm
FWHM Bandwidth 1 (nominal)	49.9 nm
Transmission Band 2	T _{avg} > 90% 510 – 531 nm
Center Wavelength 2	520.5 nm
Guaranteed Minimum Bandwidth 2	21 nm
FWHM Bandwidth 2 (nominal)	25.9 nm
Transmission Band 3	T _{avg} > 90% 589.5 – 623.5 nm
Center Wavelength 3	606.5 nm
Guaranteed Minimum Bandwidth 3	34 nm
FWHM Bandwidth 3 (nominal)	41.1 nm
Transmission Band 4	T _{avg} > 90% 677 – 711.5 nm
Center Wavelength 4	694.3 nm
Guaranteed Minimum Bandwidth 4	34.5 nm
FWHM Bandwidth 4 (nominal)	41.7 nm
Transmission Band 5	T _{avg} > 90% 768.5 – 849.5 nm
Center Wavelength 5	809 nm
Guaranteed Minimum Bandwidth 5	81 nm
FWHM Bandwidth 5 (nominal)	89.1 nm
Blocking Band 1	OD _{avg} > 4 200 – 381.5 nm
Blocking Band 2	OD _{avg} > 8 381.5 – 392.5 nm (Design specification - measurements are noise-floor limited)
Blocking Band 3	OD _{avg} > 8 475 – 495 nm (Design specification - measurements are noise-floor limited)

Blocking Band 4	ODavg > 8 547 – 572 nm (Design specification - measurements are noise-floor limited)
Blocking Band 5	ODavg > 8 643 – 656 nm (Design specification - measurements are noise-floor limited)
Blocking Band 6	ODavg > 8 733.5 – 746.5 nm (Design specification - measurements are noise-floor limited)
Blocking Band 7	ODavg > 5 869.3 – 900 nm
Blocking Band 8	ODavg > 5 900 – 1080 nm
Blocking Band 9	ODavg > 2 1080 – 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	2.17

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