

510/42 nm BrightLine® single-band bandpass filter

Part Number: FF01-510/42-25



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.



510/42 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 ¹	Stock Status
FF01-510/42-25	25 mm x 3.5 mm	\$265	In Stock
FF01-510/42-23.3-D	23.3 mm x 2.0 mm (unmounted)	\$265	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% 489 – 531 nm
Center Wavelength 1	510 nm
Guaranteed Minimum Bandwidth 1	42 nm
FWHM Bandwidth 1 (nominal)	47 nm
Blocking Band 1	O _{Davg} > 5 200 – 475 nm
Blocking Band 2	O _{Davg} > 3.3 475 – 480 nm
Blocking Band 3	O _{Davg} > 3.3 545 – 550 nm
Blocking Band 4	O _{Davg} > 5 550 – 720 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	1.98

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)	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