

**475/543/702 nm BrightLine® triple-band bandpass filter**

Part Number: FF01-475/543/702-25



**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.



**475/543/702 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 <sup>1</sup>	Stock Status
FF01-475/543/702-25	25 mm x 3.5 mm	\$435	In Stock
FF01-475/543/702-23.3-D	23.3 mm x 2.0 mm (unmounted)	\$435	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 <sub>avg</sub> > 93% 464 – 486 nm
Center Wavelength 1	475 nm
Guaranteed Minimum Bandwidth 1	22 nm
FWHM Bandwidth 1 (nominal)	27.2nm
Transmission Band 2	T <sub>avg</sub> > 93% 532 – 554 nm
Center Wavelength 2	543 nm
Guaranteed Minimum Bandwidth 2	22 nm
FWHM Bandwidth 2 (nominal)	27.2 nm
Transmission Band 3	T <sub>avg</sub> > 93% 603 – 800 nm
Center Wavelength 3	701.5 nm
Guaranteed Minimum Bandwidth 3	197 nm
FWHM Bandwidth 3 (nominal)	201.3 nm
Blocking Band 1	OD <sub>avg</sub> > 4 275 – 426 nm
Blocking Band 2	OD <sub>avg</sub> > 8 426 – 450 nm (Design specification - <a href="#">measurements are noise-floor limited</a> )
Blocking Band 3	OD > 3.5 458.5 nm
Blocking Band 4	OD > 3.5 491.8 nm
Blocking Band 5	OD <sub>avg</sub> > 8 497.6 – 519.5 nm (Design specification - <a href="#">measurements are noise-floor limited</a> )
Blocking Band 6	OD > 3.5 525.8 nm
Blocking Band 7	OD > 3.5 560.7 nm
Blocking Band 8	OD <sub>avg</sub> > 8 567.4 – 588.6 nm (Design specification - <a href="#">measurements are noise-floor limited</a> )
Blocking Band 9	OD > 3.5 595.8 nm
Blocking Band 10	OD <sub>avg</sub> > 5 810.8 – 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 <sup>2</sup> ) for over 500 hrs.
Effective Index	2.0

## 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