

## 590/104 nm BrightLine® single-band bandpass filter

Part Number: FF01-590/104-25



### 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.



### 590/104 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 <sup>1</sup>	Stock Status
FF01-590/104-25	25 mm x 3.5 mm	\$405	In Stock

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	$T_{avg} > 90\%$ 538 – 642 nm
Center Wavelength 1	590 nm
Guaranteed Minimum Bandwidth 1	104 nm
FWHM Bandwidth 1 (nominal)	108.7 nm
Blocking Band 1	$OD_{avg} > 6$ 300 – 520 nm
Blocking Band 2	$OD_{avg} > 6$ 660 – 740 nm
Blocking Band 3	$OD_{avg} > 5$ 740 – 1100 nm
Blocking Band 4	$OD_{avg} > Z$ XXX – YYY nm

### General Filter Specifications

Specification	Value
Angle of Incidence	$0 \pm 5$ 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	2.38

### 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)	$\pm 0.1$ mm
Clear Aperture	$\geq 22$ 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