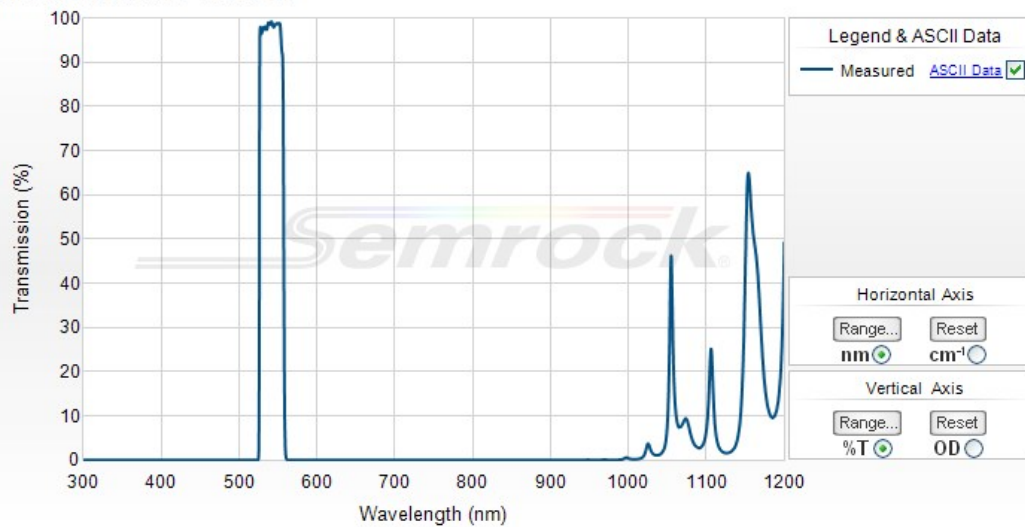


542/27 nm BrightLine® single-band bandpass filter

Part Number: FF01-542/27-25



Semrock, Inc

3625 Buffalo Road, Suite 6
Rochester, New York 14624

Main Phone: +1 585.594.7050 (worldwide)
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.



542/27 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
FF01-542/27-25	25 mm x 3.5 mm	\$305	In Stock
FF01-542/27-25-STR	25 mm threaded ring for Sutter Lambda filter wheel	\$325	2nd Day Ship
FF01-542/27-32	32 mm x 3.5 mm	\$500	2nd Day Ship
FF01-542/27-23.3-D	23.3 mm x 2.0 mm (unmounted)	\$305	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} > 93% 528.5 – 555.5 nm
Center Wavelength 1	542 nm
Guaranteed Minimum Bandwidth 1	27 nm
FWHM Bandwidth 1 (nominal)	33.1 nm
Blocking Band 1	OD _{avg} > 4 200 – 400 nm
Blocking Band 2	OD _{avg} > 4 400 – 488 nm
Blocking Band 3	OD _{avg} > 10 488 – 512 nm (Design specification - measurements are noise-floor limited)
Blocking Band 4	OD > 3.5 520 nm
Blocking Band 5	OD _{avg} > 5 569 – 700 nm
Blocking Band 6	OD _{avg} > 5 700 – 925 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	1.9

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