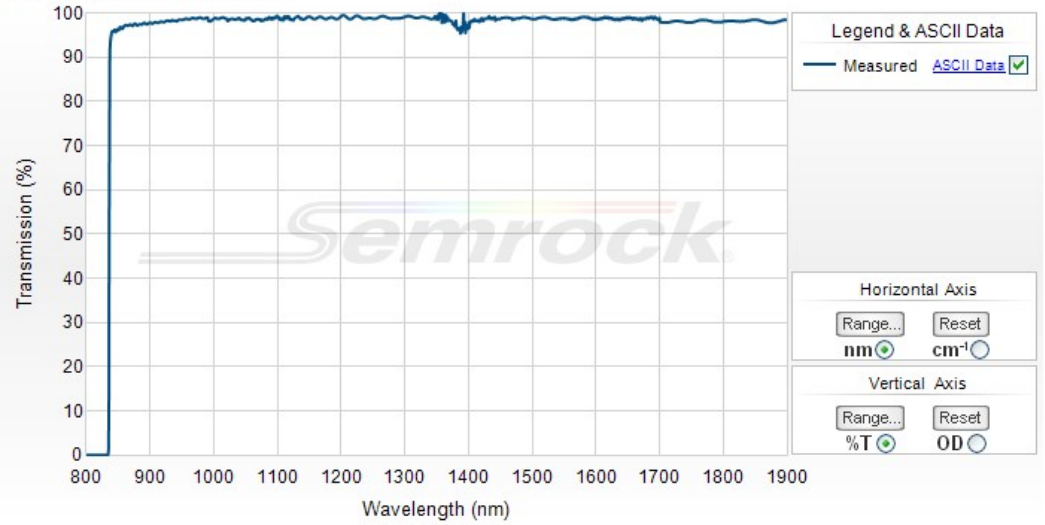
830 nm RazorEdge® ultrasteep long-pass edge filter
Part Number: LP02-830RU-25



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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.
Note that the few % dip in transmission at about 1390 nm is a small absorption loss associated with a vibrational overtone of OH bonds in the fused silica substrate of this optical filter.

830 nm RazorEdge® ultrasteep long-pass edge filter

RazorEdge filters allow you to see the weakest signals closer to the laser line, especially for Raman spectroscopy applications. With their deep laser-line blocking, ultrawide and low-ripple passbands, hard-coated reliability, and high laser damage threshold, they offer lasting performance and value.

Part Number	Size	Price[1]	Stock Status
LP02-830RU-25	25 mm x 3.5 mm	$695	In Stock
LP02-830RU-50	50 mm x 3.5 mm	$1,985	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} > 93% 840.8 – 1872.2 nm
Edge Wavelength 1	836.9 nm
Blocking Band 1	OD_{abs} > 6 830 nm
Blocking Band 2	OD_{avg} > 6 675 – 830 nm (typical)
Transition Width (nm)	8.3 nm
Transition Width (cm-1)	119 cm^{-1}
Edge Steepness (%)	0.5%
Edge Steepness (nm)	4.2 nm
Edge Steepness (cm-1)	59.9 cm^{-1}

General Filter Specifications

Specification	Value
Laser Wavelength 1	830 nm
Angle of Incidence	0 ± 2 degrees
Cone Half-angle	5 degrees
Optical Damage Rating	0.5 J/cm^2 @ 266 nm (10 ns pulse width), 1 J/cm^2 @ 532 nm (10 ns pulse width)
Effective Index	1.77

Physical Filter Specifications (applies to standard sized parts; contact us regarding other sizes)

Specification	Value
Transverse Dimensions (Diameter)	25 mm
Transverse Dimensions 2 (Diameter)	50 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
Clear Aperture 2	≥ 45 mm
Scratch-Dig	60-40
Substrate Type	Fused Silica
Substrate Thickness (unmounted)	2.0 mm
Substrate Thickness Tolerance (unmounted)	± 0.1 mm
Orientation	Arrow on ring indicates preferred direction of propagation of light