### 1319 nm RazorEdge® ultrasteep long-pass edge filter

#### Part Number: LP02-1319RU-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.

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.



#### 1319 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	Price1	Stock Status
LP02-1319RU-25	25 mm x 3.5 mm	\$695	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	Tavg > 93% 1336.1 – 2000 nm
Edge Wavelength 1	1327.7 nm
Blocking Band 1	ODabs > 6 1319.0 nm
Blocking Band 2	ODavg > 6 1032 – 1319 nm (typical)
Transition Width (nm)	13.2 nm
Transition Width (cm-1)	75 cm-1
Edge Steepness (%)	0.5%
Edge Steepness (nm)	6.6 nm
Edge Steepness (cm-1)	38 cm-1

# **General Filter Specifications**

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Specification	Value	
Laser Wavelength 1	1319.0 nm	
Angle of Incidence	0 ± 2 degrees	
Cone Half-angle	5 degrees	
Optical Damage Rating	0.5 J/cm <sup>2</sup> @ 266 nm (10 ns pulse width), 1 J/cm <sup>2</sup> @ 532 nm (10 ns pulse width)	
Effective Index	1.82	

## 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