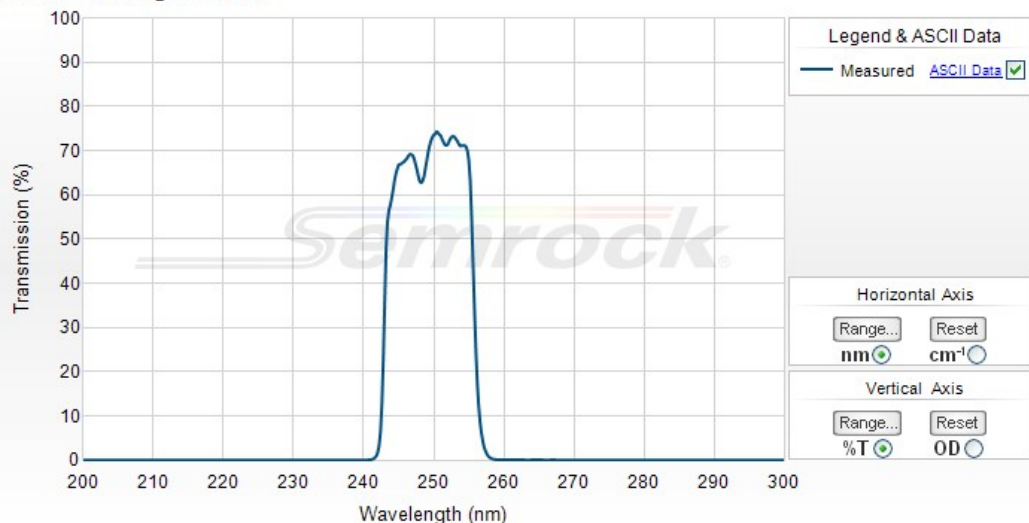


## 254 nm MaxLamp™ Mercury line filter

Part Number: Hg01-254-25



### Semrock, Inc

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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.



### 254 nm MaxLamp™ Mercury line filter

These high-performance mercury line filters are ideal for use with high-power mercury arc lamps for spectroscopy, optical metrology and photolithography mask-aligner and stepper systems. Maximum throughput is obtained by careful optimization for the filter design to allow for use in a variety of different applications. The non-absorbing blocking ensures that all other mercury lines as well as intra-line intensity are effectively eliminated.

Part Number	Size	Price <sup>1</sup>	Stock Status
Hg01-254-25	25 mm x 3.5 mm	\$455	In Stock
Hg01-254-50	50 mm x 3.5 mm	\$1,285	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 <sub>avg</sub> > 65% 244 – 256 nm
Center Wavelength 1	250 nm
Guaranteed Minimum Bandwidth 1	12 nm
FWHM Bandwidth 1 (nominal)	15.2 nm
Blocking Band 1	OD <sub>avg</sub> > 6 200 – 236 nm
Blocking Band 2	OD <sub>avg</sub> > 4 263 – 450 nm
Blocking Band 3	OD <sub>avg</sub> > 2 450 – 600 nm

### General Filter Specifications

Specification	Value
MercuryLine	253.7 nm
Angle of Incidence	0 ± 7 degrees
Cone Half-angle	10 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	2.36

### 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	80-50
Substrate Thickness (unmounted)	2.0 mm
Substrate Thickness Tolerance (unmounted)	± 0.1 mm
Orientation	Arrow on ring indicates preferred direction of propagation of light