

### 350 - 1100 nm MaxMirror® ultrabroadband mirror

Part Number: MM3-311S-t6-25



#### 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.



#### 350 - 1100 nm MaxMirror® ultrabroadband mirror

High-performance laser mirror optimized for life sciences application, that covers an exceptionally broad range of wavelengths, and is designed to replace three or more conventional laser mirrors. Highly reflecting over near-UV, all visible, and near-IR wavelengths. MaxMirrors simultaneously reflect all states of polarization and all angles of incidence from 0 – 50° inclusive.

Part Number	Size	Price <sup>1</sup>	Stock Status
MM3-311S-t6-25	25 mm x 6.0 mm (unmounted)	\$179	2nd Day Ship
MM3-311S-t6-12.5	12.5 mm x 6.0 mm (unmounted)	\$99	In Stock
MM3-311S-t6-12.7	12.7 mm x 6.0 mm (unmounted)	\$99	In Stock
MM3-311S-t6-25.4	25.4 mm x 6.0 mm (unmounted)	\$179	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
Reflection Band 1	Ravg > 99% 350 – 1100 nm
Reflection Band 1 (s-pol)	Ravg > 99% 350 – 1100 nm
Reflection Band 1 (p-pol)	Ravg > 99% 350 – 1100 nm
Angle of Incidence	0.0 ± 5 degrees & 45.0 ± 2.5 degrees
Reflection Band 1 (wide angle)	Rabs > 98.5% 350 – 1100 nm
Reflection Band 1 (wide angle, s-pol)	Rabs > 98% 350 – 1100 nm
Reflection Band 1 (wide angle, p-pol)	Rabs > 98% 350 – 1100 nm
Angle of Incidence	0 – 50 degrees

#### General Filter Specifications

Specification	Value
Optical Damage Rating	1 J/cm <sup>2</sup> (10 ns pulse width) (Typical)
Pulse Dispersion	The MaxMirror will not introduce appreciable pulse broadening for most laser pulses that are > 1 picosecond; however, pulse distortion is likely for significantly shorter laser pulses, including femtosecond pulses.
Flatness	λ/5 PV @ 632.8 nm

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

Specification	Value
Transverse Dimensions (Diameter)	25.0 mm

Transverse Dimensions 2 (Diameter)	25.4 mm
Transverse Dimensions 3 (Diameter)	12.5 mm
Transverse Dimensions 4 (Diameter)	12.7 mm
Transverse Tolerance (25.0 mm; 25.4 mm - unmounted)	+ 0.0 / - 0.25 mm
Transverse Tolerance 2 (12.5 mm; 12.7 mm - unmounted)	+ 0.0 / - 0.1 mm
Filter Thickness (unmounted)	6.0 mm
Filter Thickness Tolerance (unmounted)	± 0.2 mm
Clear Aperture	≥ 90%
Scratch-Dig	40-20 (Mirror Side Surface Quality)
Substrate Thickness (unmounted)	6.0 mm
Substrate Thickness Tolerance (unmounted)	± 0.2 mm