

Super Cold Filters

■ Super Cold Filters

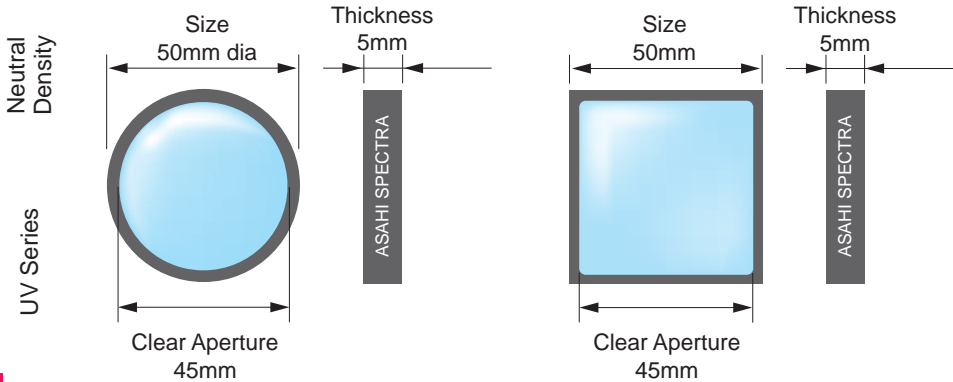


Super Cold Filter is heat-reflective type filter which has much better performance than a conventional heat-absorptive type filter.

They transmit VIS range effectively and there are small ripples in this range. Even with high power light sources, the substrate will be less damaged, because they are made of fused silica.

We have 2 options, which are VIS transmitting type and VIS - NIR transmitting type.

Dimensions



Ordering Information

Order online: www.asahi-spectra.com E-mail: info@asahi-spectra.com

Specifications

Cut-Off Wavelength (nm)	Transmittance Range (nm)	Substrate	Ave. transmittance (%)	Thickness (mm)	Item Number	
					50mm Diameter	50x50mm
750	400-700	Fused Silica	70	5	YSC0750	ZSC0750
1100	400-700	Fused Silica	70	5	YSC1100	ZSC1100

Shortpass

Longpass

Bandpass

Neutral Density

UV Series

Super Cold

Others

Ordering Information

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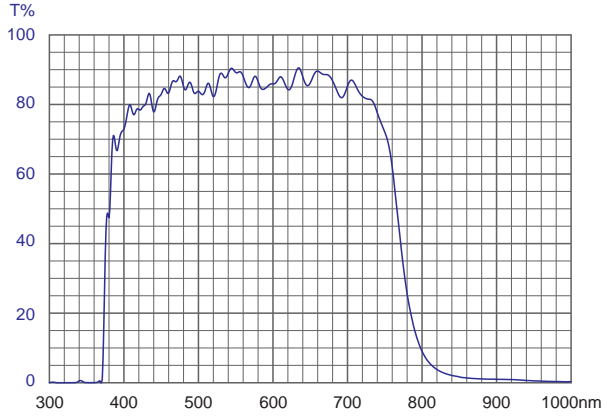
Super Cold Filters

Shortpass

YSC0750
ZSC0750

Longpass

Bandpass



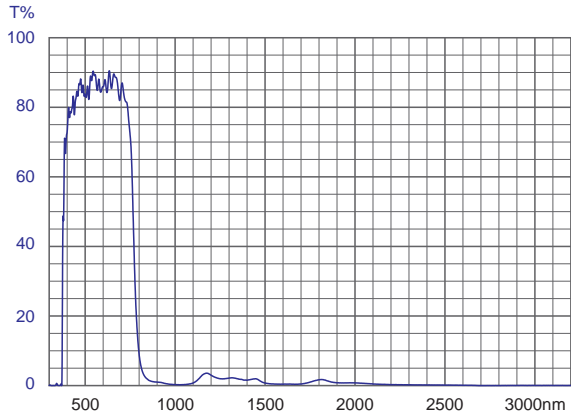
Neutral Density

YSC0750
ZSC0750

UV Series

Super Cold

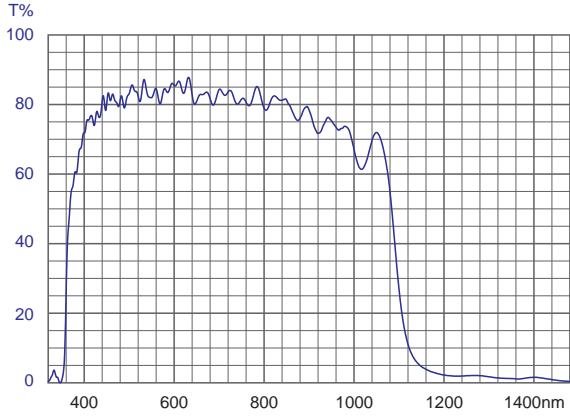
Others



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YSC01100
ZSC01100



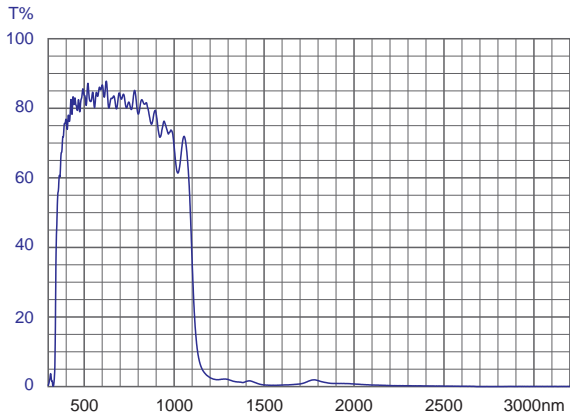
Shortpass

Longpass

Bandpass

Neutral Density

YSC01100
ZSC01100



UV Series

Super Cold

Others

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Others

■ Circular Variable ND Filters

Shortpass

Longpass

Bandpass



Circular variable ND filter achieves OD linear attenuation of light intensity. The optical density (OD) continuously varies from 0.04 to max.3.0 with our proprietary monitoring technology. It is ideal for precise adjustment of light intensity, especially laser.

Applications

*Laser

*Spectrometer

*Any optical experiments in the laboratory

Dimensions

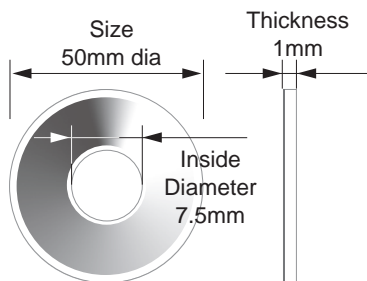
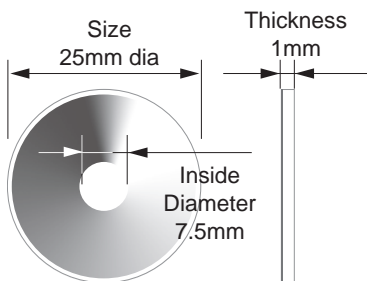
[Unmounted]

Neutral Density

UV Series

Super Cold

Others



Specifications

Optical Density	Waveleght Range (nm)	Substrate	Thickness (mm)	Item Number	
				25mm Diameter	50mm Diameter
0.04-3.0	400-700	B-270	1	XCND3	YCND3

Shortpass

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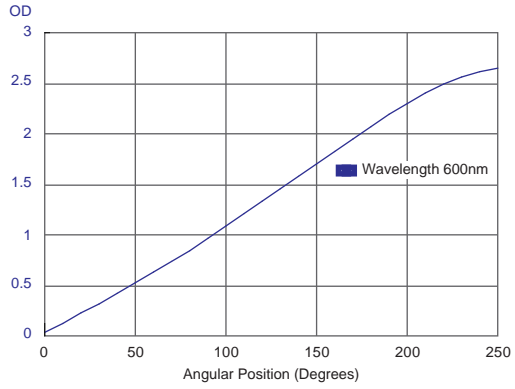
Others

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Circular Variable ND Filters

XCND3
YCND3



Shortpass

Longpass

Bandpass

Neutral
Density

UV Series

Super Cold

Others

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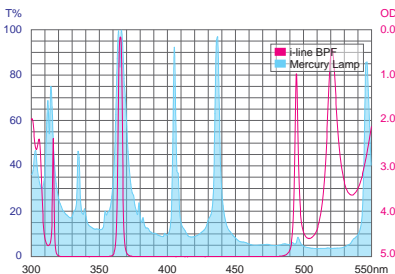
Photolithography Filters

i-line Bandpass Filters

Mercury lamp has several emission lines with great light intensity, and especially i-line (365nm) is the most famous wavelength for photolithography. The i-line bandpass filter for photolithography needs to transmit the monochromatic wavelength, and should be durable and stable to achieve the optimum resolution.

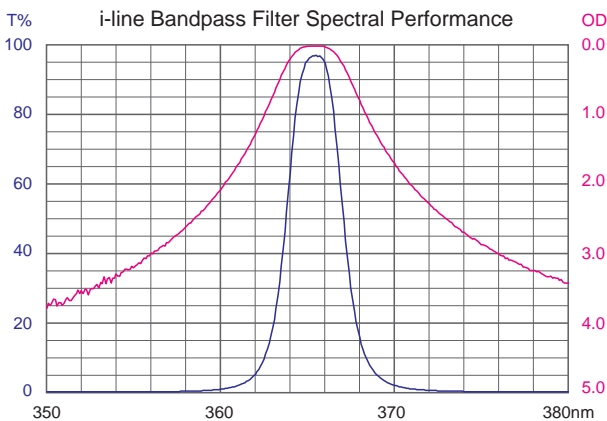
Features

- Durable and stable performance with Ion Assisted Deposition.
- NOT using epoxy glues, avoiding from degradation of performance.
- High throughput to the photomask with our Photolithography Filters.
- Any CWL, FWHM and size are precisely available according to your needs.
- Excellent spectral uniformity across the substrate surface.



Past-Ordered Example

CWL : 365.5 +/-0.5nm
FWHM : 4nm +/-0.5nm
Peak T% : T>95%
Size : 140 dia.mm

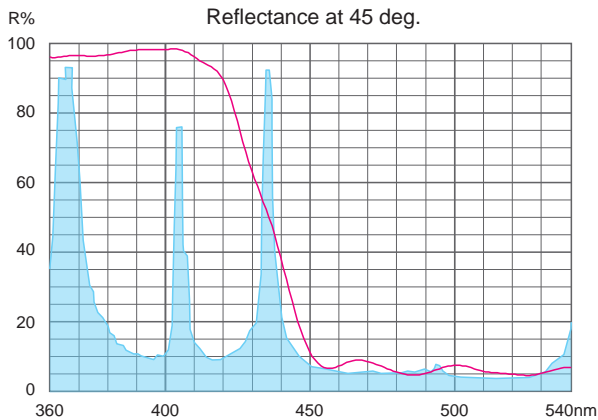
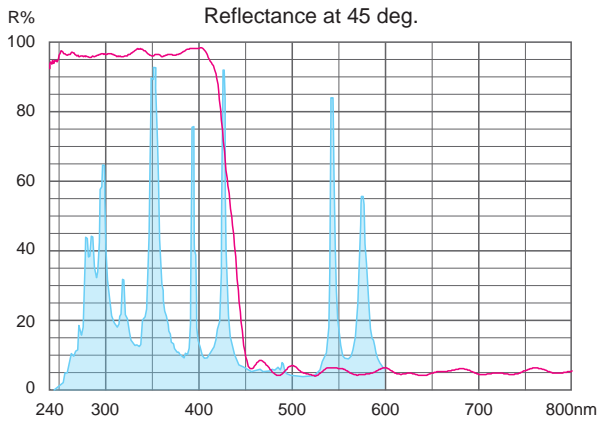


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Cold Mirror

Asahi cold mirrors are designed to have long, flat and more than 90% transmission in VIS-NIR range to eliminate unwanted light before the light goes through the i-line bandpass filter, and also reflects more than 90% in UV range, which results in the highest throughput for your exposure process. The Asahi cold mirror is also made by IAD to assure durability under the high power mercury lamp. Maximum size of 310x310mm still keeps its excellent uniformity.



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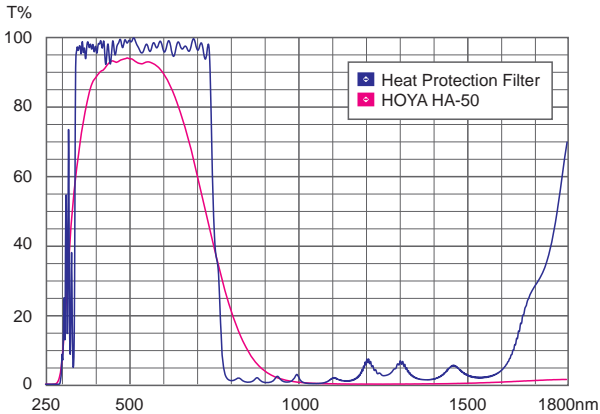
Others

Heat Protection Filters

■ Colored Glass Alternative Filters now come of age

Our Heat Protection Filter has replaced the conventional heat-absorbing glass like KG or HA, and it will open an infinite of possibilities in industrial application.

	Heat Protection Filter	Heat-absorbing Glass
Filter Type	Dielectric Interference Filter	Colored Glass
RoHS Compliance	Yes	No
Thickness	Any Thickness	Standard 2-3mm
Large Size Availability	Max.310x310mm / 438mm diameter	Standard 165x165mm
Transmittance	High(T(ave) > 95%)	Moderate
Cut-off Wavelength	Any Wavelength Available	Fixed
Color in VIS Wavelength	Colorless	Bluish
Heat Blocking Performance	Excellent	Poor (often broken)
Durability	Perfect	Deliquescent without AR
Application	Industrial and Research Application (e.g.Exposure apparatus / xenon, metal halide or mercury light source system)	Only Research Application



Shortpass

Longpass

Bandpass

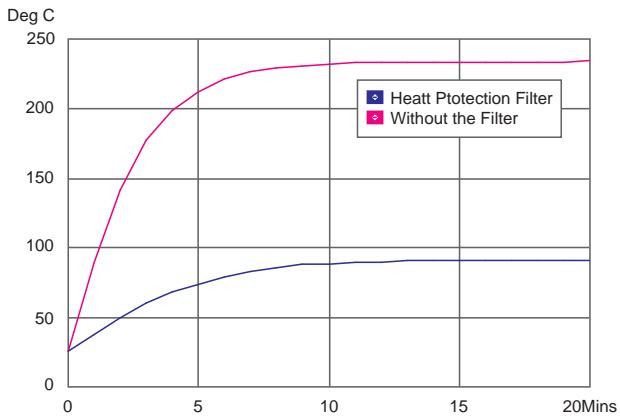
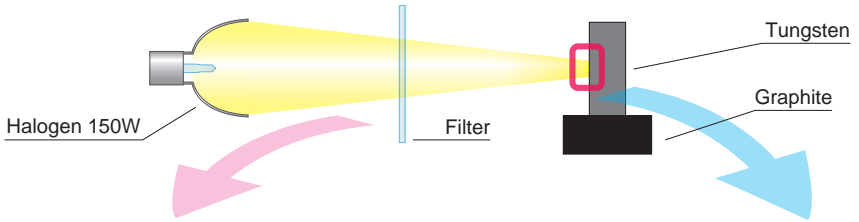
Neutral Density

UV Series

Super Cold

Others

Heat Protection Filters



Regarding heat-absorbring glass, it broke up immediatly.

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