

Filters

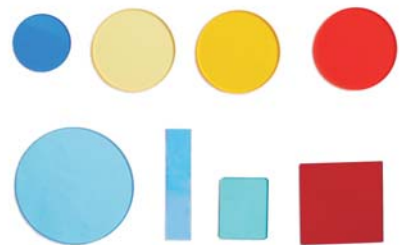
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Colored Glass Filters

CeNing Optics provide a variety of colored glass filters covering the UV, visible and near-infrared wavelength regions. These filters serve as bandpass, broadband, or long-wave pass filters.

General Specifications

Material	Schott , Hoya colored glass or equivalent
Dimension tolerance	± 0.15mm
Parallelism	3 arcmin
Surface flatness	$\lambda / 2$ per 25mm
Surface quality	60-40 S/D
Clear aperture	>85%
Chamfers	0.25x45deg



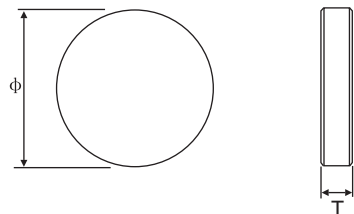
Typical Diameter(mm)

φ 5.0	φ 10.0	φ 12.7	φ 15.0	φ 20.0
φ 25.4	φ 30.0	φ 38.1	φ 50.8	φ 76.2

Typical Thickness(mm)

0.5	1.0	1.5	2.0	3.0
4.0	5.0			

other sizes and shapes are available.



How to order colored glass filters? Example:

Material	KG1
Size	φ 12.7 ± 0.1 mm
Thickness	2 ± 0.1 mm
Parallelism	± 3'
Polishing quality	Quality: 60-40 S/D, Flatness: $\lambda / 2 @ 633nm$

Price on request

Custom Design

Volume Discount

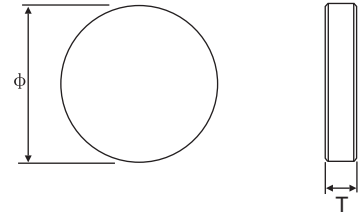
Narrowband Interference Filters

Narrow band pass interference filters only allow a desired narrow range of wavelength passed through, while simultaneously blocking both longer and shorter wavelengths.

FWHM means Full width at half-maximum

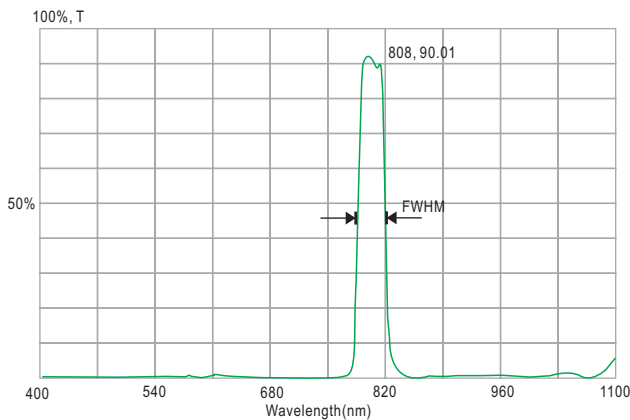
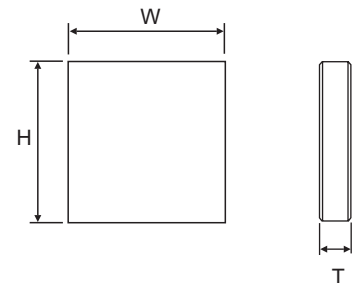
General Specifications

Material	Bk7
Dimension tolerance	± 0.1mm
Parallelism	3 arcmin
Flatness	$\lambda/4$ @633nm
Surface quality	60-40 S/D



Transmission example:

Angle of incidence:	0°
Transmission _(avg) :	T>85%
FWHM:	10nm
Blocking:	T<1%



How to order bandpass filters? Example:

Substrate Material: **BK7**
 Size: **10x10mm, thickness: 1mm**
 Angle of incidence: **0°**
 Transmission_(avg): **T>85% @ 808nm**
 FWHM: **10nm**
 Blocking: **T<1% @400-780nm, 830--1000nm**

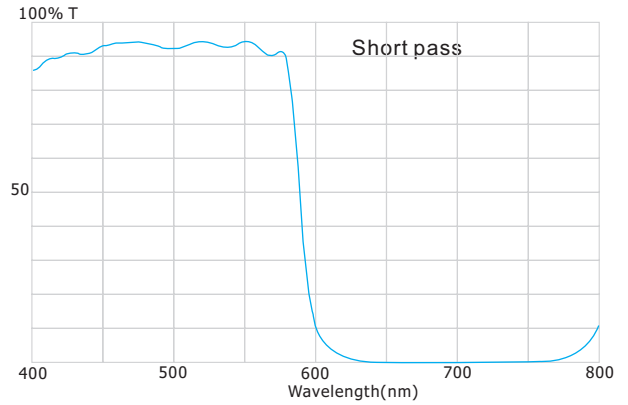
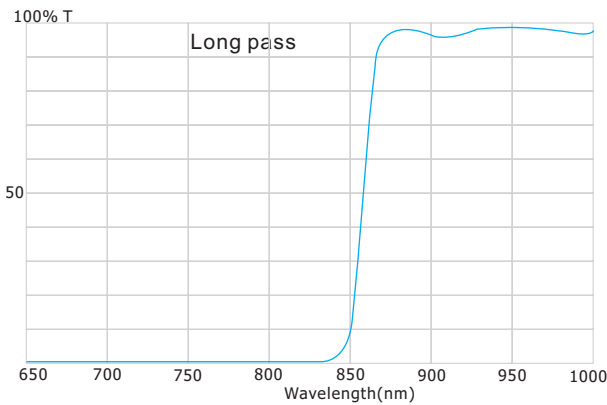
Price on request

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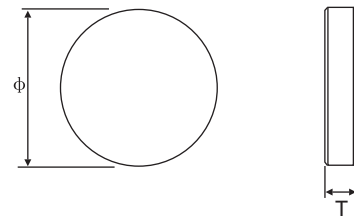
Bandpass Filters

Band pass filter plate are divided into short-pass and long-pass filters according to whether they transmit below or above the transition wavelength. The transition wavelength or cut-on/off wavelength is the wavelength at which the transmission is 50% of its peak value.



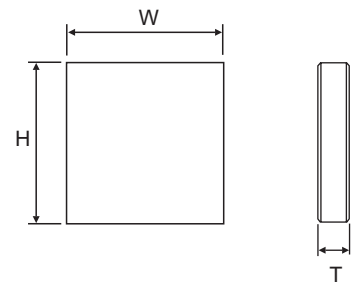
General Specifications

Material	BK7, Fused silica
Dimension tolerance	± 0.1mm
Parallelism	3 arcmin
Flatness	$\lambda / 4 @ 633\text{nm}$
Surface quality	60-40 S/D



Transmission example:

Angle of incidence	0°
Transmission _(avg)	<1% @ 400--480nm
Transmission _(avg)	=50% @ 510 ± 10nm
Transmission _(avg)	>87% @ 530--1000nm



How to order bandpass filters? Example:

Substrate Material: **Bk7**
 Size: **10x10mm, thickness:1mm**
 Angle of incidence: **0°**
 Transmission_(avg): **T<1% @ 400--480nm**
 Transmission_(avg): **T=50% @ 510 ± 10nm**
 Transmission_(avg): **T>87% @ 530--1000nm**

Price on request

Custom Design

Volume Discount