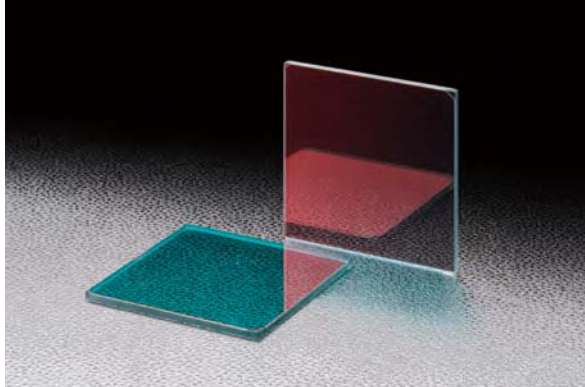


Cold Filters | CLDF

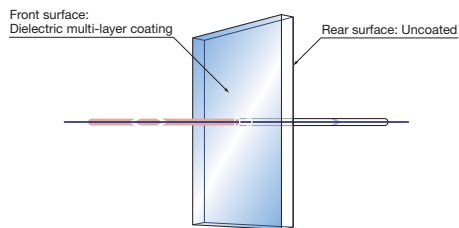
RoHS

The principle of the cold filter is similar to the glass that is used in a halogen lamp to protect the heat. It enables the visible range to transmit and cut-off the IR range (heat).

- The feature of the dielectric optical coating filter is to have a steep decline of transmittance from the visible range to IR range. In addition to this; the heat absorbing filter is efficient for transmitting at the visible range and cutting off the IR range.
- It is frequently used as a IR cut filter on a CCD sensor.
- It is also used as a filter to cut-off the heat from the illumination in a biological microscope to avoid heating up the specimen.

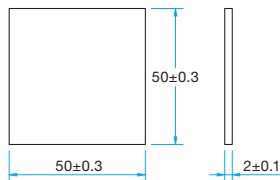


Schematic



Outline Drawing

(in mm)



Specifications

Part Number	High transmittance range (normal incident) [nm]	Transmittance (normal incident) [%]	Cutoff range (normal incident) [nm]	Transmittance of cutoff range (normal incident) [%]	Wavelength at 50% [nm]
CLDF-50S	400 – 600	>80	800 – 2000	<10	700±20

Specifications

Material	Heat-absorbing glass
Incident angle	0°
Wavelength Range	400 – 2000nm (Cut off more than 900nm)
Surface Quality (Scratch-Dig)	60–40
Clear aperture	90% of external dimension of the square inscription circle

Guide

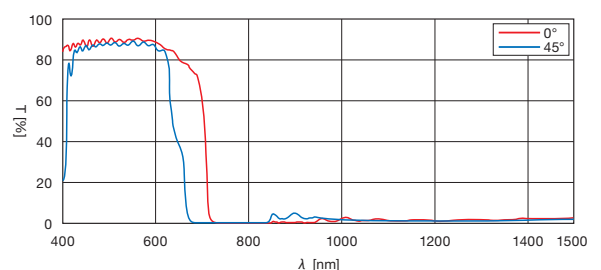
- ▶ Different size, wavelength and deviation ratio that are not mentioned on-line or in our catalog are available as custom products upon request.
- ▶ For a specific filter holder, please contact our Sales Division.

Attention

- ▶ The transmittance graph drops on the long side of the visible range when the incident angle is slightly slanting.
- ▶ When placing the filter too close to a light source, the heat absorption may damage the filter due to a rapid change of the temperature.
- ▶ The backside of the cold filter is not coated with AR. The absorption filter may have a backside reflectance value of 4%, a total of 20% of loss can occurred.

Typical Transmittance Data

T: Transmission



Compatible Optic Mounts

FHS-50 / CHA-60

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Etalon