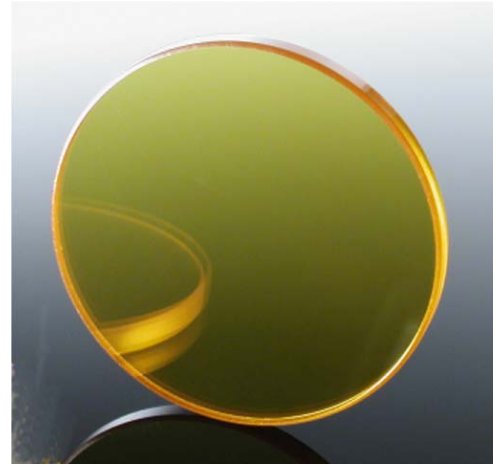
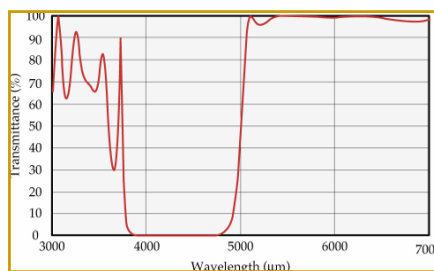


Long & Short Pass Filters for the Infra-red

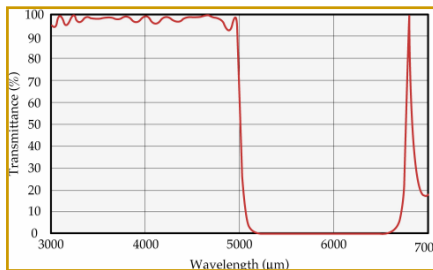


Long-pass and short-pass filters are useful for defining spectral regions or as dichroic beamsplitters.

These are thin film filters deposited onto Zinc Selenide,



Germanium or Calcium Fluoride substrates. They are arranged to have a very sharp cut-off. However,



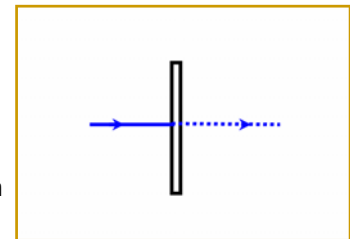
the high reflection region is limited so it is important to specify

clearly the rejection wavelength range required.

Normally high reflection and high transmission wavelengths should be separated by at least 250nm for effective use in the infra-red.

Cut-off points can be selected in the range 4 to 10 μm in 0.5 μm increments.

These filters are circular in shape. Diameters are: 25.4 and 50.8 mm (1" and 2").



Thickness is 2 mm for the 25.4mm diameter filters and 4 mm for the 50.8 mm filters.

Typical Specifications

| | |
|-------------------|------------------------------------|
| Material: | ZnSe, Ge, CaF2 |
| Surface flatness: | $\lambda/20$ @ 10.6 μm |
| Surface quality: | 40/20 |
| Centration: | < 3 arcmin |
| Diameter: | +0.0 / -0.2 mm |
| Thickness: | \pm 0.25 mm |
| Cut-off: | 50% of peak transmittance |
| Accuracy: | \pm 3% of wavelength |
| Clear aperture: | > 85% of diameter |
| Pass band: | Tave > 90% at 0° or >85% at 45° |
| Rejection band: | Rave > 99.5% at 0° or > 99% at 45° |

To request a quote or to order, please specify:

Quantity — Substrate Material — Diameter — Long Pass or Short Pass — Cut-off Wavelength

Optarius

PO Box 2271
Malmesbury SN16 9FA
United Kingdom

Optics for the Infra-Red

Phone: +44 1666 575185
Fax: +44 1666 577424
Email: optarius@optarius.com
Web: www.optarius.com

For a quotation — please phone, fax or email us with details of your requirements.