

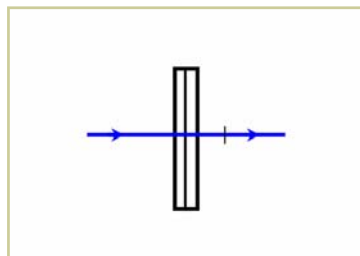
Dichroic Polarizers



Polymer films can make good polarizers. If a thin sheet of dichroic polymer is stretched in one direction the long molecules of the polymer become aligned. This induces a filtering effect in which oscillations parallel to the long axis of the molecules are preferentially transmitted.

In these dichroic polarizers the polymer sheet is sandwiched between two plates

of BK7 or UV Fused Silica. Polarization by this means can be quite effective



providing an extinction ratio of about 1000:1 over a wide angular field of view. The polarizers are optimised for use in either the ultra-violet, visible

or near infra-red regions and may also be anti-reflection coated if required.

The sandwich has a nominal thickness of 3mm. UV Fused Silica should be selected as protective sheet when used in the ultra-violet.

Dichroic polarizers can be supplied either un-mounted or mounted in a metal ring. Typical diameters of un-mounted polarizers are 12.7 and 25.4 mm. Clear apertures are 10 and 20 mm when mounted.

Typical Specifications

Material:	Polymer
Protective Material:	BK7 or UVFS
Transmitted wavefront:	$\lambda/2$ @ 633nm
Surface quality:	40-20
Extinction ratio:	1000:1
Beam deviation:	3 arcmin
Diameter:	+0.0 / -0.2 mm
Thickness:	+/- 0.5 mm
Clear aperture:	>85%

To request a quote or to order, please specify:

Quantity — Protective Material (BK7, UVFS) — Diameter — Mounted/Un-mounted
— Wavelength Region (UV, Vis, NIR) — AR Coating if required

Optarius

PO Box 2271
Malmesbury SN16 9FA
United Kingdom

Optical Components

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.