

Sheet Polarizers

Optics

Lenses

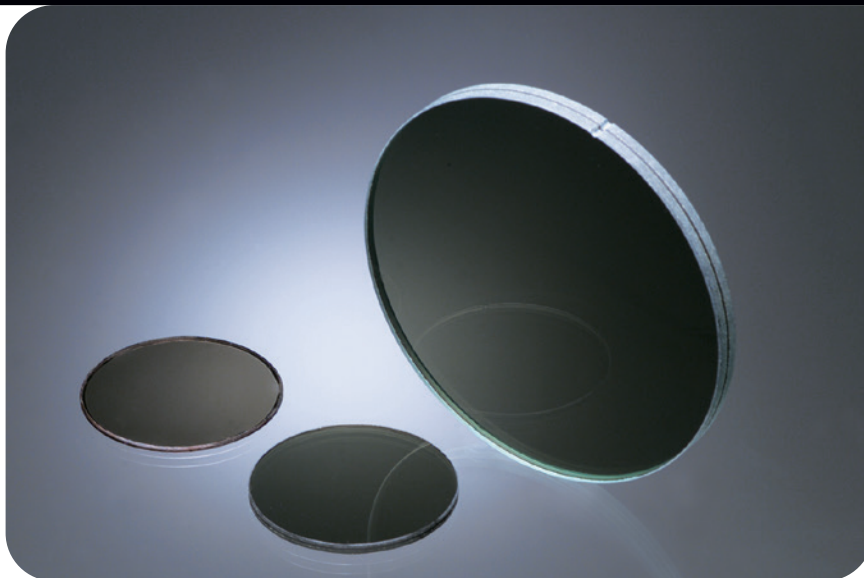
Mirrors & Beamsplitters

Prisms & Polarizers

Filters

Pinholes

- **Ideal for broadband applications**
- **Cost effective**



For low power applications Sheet Polarizers can often provide a simple cost effective solution.

Unpolarized light passing through a Sheet Polarizer emerges as linearly polarized light. Sheet Polarizers are often used in pairs. When the two polarizers have their axes aligned transmission is at a maximum. When the axes are orthogonal to each other

transmission is nearly zero. For intermediate positions the transmission is given by the equation:

$$I = I_{\max} \cos^2\theta$$

where θ = angle between the axes of the polarizers.

Ealing offers Sheet Polarizers for the visible and ultraviolet spectrums.

Sheet Polarizers are not suitable for high power use. Their main applications are for production and analysis of polarized radiation, and the elimination of unwanted beams.

The degree of polarization is virtually independent of the incident angle. This allows them to be used with highly convergent or divergent beams and still produce uniform polarization.

Opto-mechanics

Breadboards & Rails

Mounting Hardware

Mirror & Component Mounts

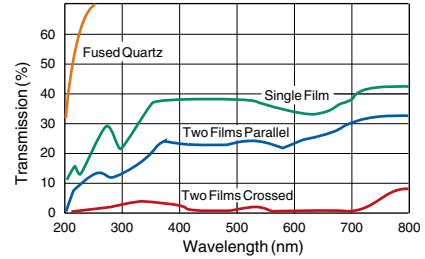
Manual Micro Positioners

Motorized Positioners

UV-Visible Linear Polarizers

- **Useful for 200-800 nm**
- **UV fused silica substrate**

Providing excellent linear polarization from 200-800 nm in a single special coating, these polarizers are mounted on UV quality, fused silica. The coated surface is delicate and care should be taken while handling or cleaning. Normal cleaning solvents should not be used. For best results only clean with blown air. The coating is neutral green in color. Maximum survival temperature is 95°C. Polarization and transmission characteristics do not deteriorate with time or long exposure to UV, visible, or IR irradiation. Thickness is nominally 1.6 mm.



UV-Visible Linear Polarizers

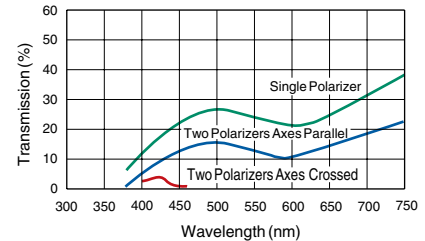
Catalog Number	Diameter (mm)	Price US
23-2520	25.4	\$407.00
23-2363	50.8	\$620.00
22-9039	101.6	\$1,554.00

Visible Linear Polarizers

- **Usable over 350-750 nm**
- **Ideal for broadband applications**

These sheet polarizers are designed for 350-750 nm. Total luminous transmittance is 22% for white light; total integrated transmission for two crossed polarizers is 0.05%. The polarizing sheet is sandwiched between two optically ground and polished pieces of glass. Polarization and transmission characteristics are stable with time and prolonged

visible irradiation. High intensity ultraviolet or infrared irradiation will degrade both the polarizing properties and total transmission of the unit. Recommended temperature extremes are -60°C and +80°C. Maximum survival temperature is 90°C. High relative humidity will tend to cause a separation of the glass sandwich and should be avoided.



Visible Linear Polarizers

Catalog Number	Diameter (mm)	Thickness (mm)	Price US
23-5671	50.8	3.2	\$280.00
22-9062	101.6	7.2	\$357.00

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- Lenses
- Mirrors & Beamsplitters
- Prisms & Polarizers
- Filters
- Pinholes

- Opto-mechanics
- Breadboards & Rails
- Mounting Hardware
- Mirror & Component Mounts
- Manual Micro Positioners
- Motorized Positioners