

ULTRAFAST POLARIZERS

ARO offers [thin film polarizers](#) that have been designed to provide the top performance in Ti:Sapphire amplifiers. Multiple round trips in the amplifier have a multiplying effect on the characteristics of any optic in the cavity. The ARO sales team can offer a free estimate for custom thin film polarizers.



PARTS CATALOG

Close cooperation between the ARO design staff and leading researchers has led to the development of an advanced ultrafast polarizer, [UV polarizer](#) and a [high energy polarizer](#). ARO's polarizers are designed with an optimum combination of a high extinction ratio, spectral bandwidth, laser damage resistance, and minimal group delay dispersion. In addition to a broadband ultrafast polarizer, ARO can custom produce a wide selection of polarizers. Reach out to ARO's sales team for a free quote and consultation.

| Part Number | Wavelength (nm) | Diameter (mm) | Thickness (mm) | Angle of Incidence | Reflectivity (%) |
|------------------------|-----------------|---------------|----------------|--------------------|------------------|
| PL6020 | 740 – 860 | 28.6 x 14.3 | 3.2 | 70°±3° | 98/75 |
| PL6040 | 700 – 900 | 28.6 x 14.3 | 3.2 | 70°±3° | 75/95 |

SPECIFICATIONS

- Clear Aperture: 85% best fit ellipse
- Wedge: <5 arc minutes
- Flatness: $\lambda/10$ at 633 nm
- Wavefront Distortion: < $\lambda/10$ at 633 nm
- Surface Quality: 10-5
- Material: Fused Silica
- Length/Width Tolerance: +0.00, -0.13 mm
- Thickness Tolerance: ± 0.25 mm



TI:SAPPHIRE POLARIZATION

These high performance, thin film polarizers are coated to separate orthogonal polarizations with a high extinction ratio. They are designed for use over a broad spectral bandwidth centered on 800 nm. They are intended to be used at Brewster's angle, and should be tilt tuned ($\pm 3^\circ$) to optimize performance.

