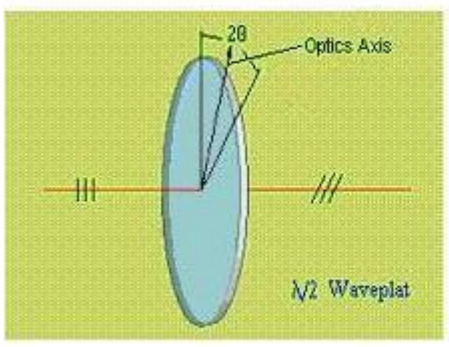
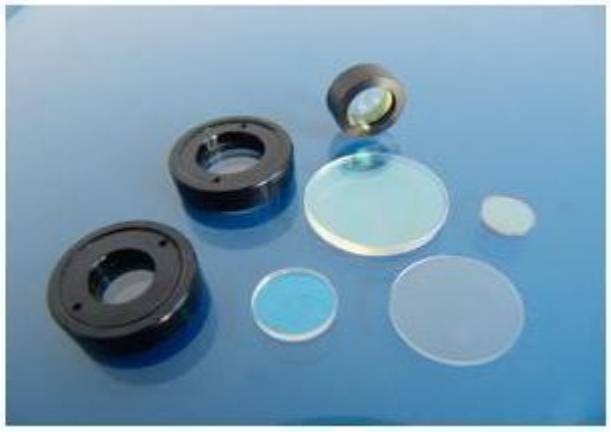
WAVEPLATE

Waveplate are made from birefringent material. The velocities of the extraordinary and ordinary rays through the birefringent materials vary inversely with their refractive indices. The difference in velocities gives rise to a phase difference when the two beams recombine. In the case of an incident linearly polarized beam this is given by:

$$\Delta \mathrm{D} = \frac{2\pi}{\lambda}|n_e - n_o|d$$

Sinocera Photonics provides many kinds of waveplats, such as multi(low)-order, dual wavelength waveplate, cemented zero-order, airspaced zero-order, true zero-order and optical contacted true zero-order.Also we provide waveplates with different retardation half-wave, quarter-wave, octadic-wave and full-wave. If you want to order the specific retardation of waveplate for your system, **Sinocera Photonics** is able to design any type of them for customers.

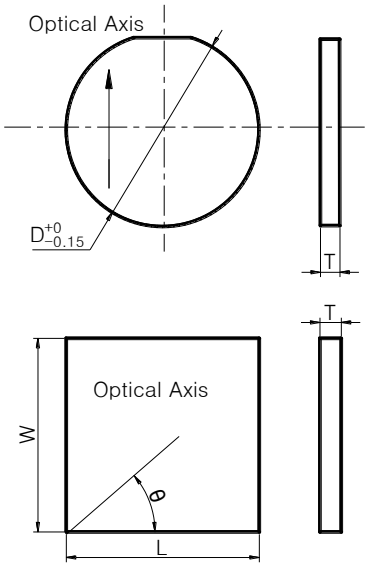




Multi(Low)-order Waveplate

Specifications:

1. Material: Quartz
2. Surface Quality: 10/5
3. Wavefront Distortion: <λ/10@633nm
4. Retardation Accuracy: <λ/300
5. Wedge: 1 arc sec
6. Coating: AR/AR, R<0.2% on both sides
7. Thickness: Multi-order T= 0.5~2.0mm;
   Low-order T<0.5mm
8. Clear Aperture: ≥central 90% of diameter



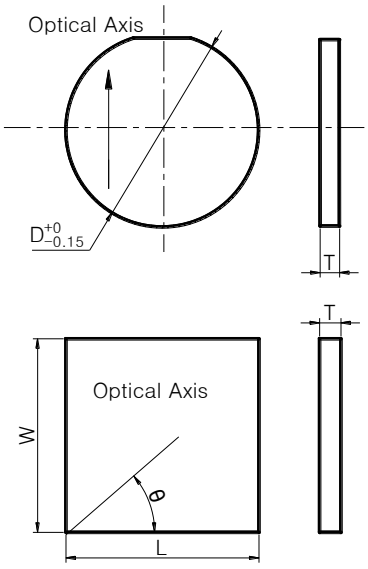
- Product Code:

WPM(WPL)+Material-Size-Retardation-Center Wavelength-θ

Dual Wavelength Waveplate

Specifications:

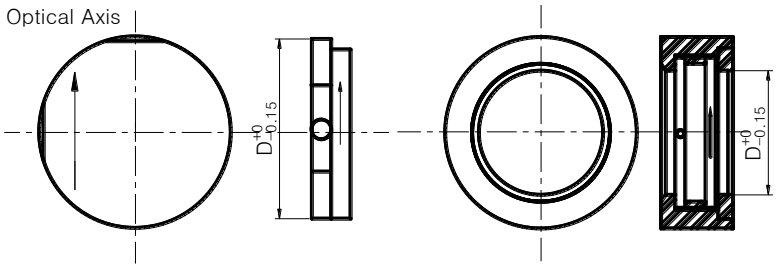
1. Material: Quartz
2. Surface Quality: 10/5~20/10
3. Wavefront Distortion: <λ/10@633nm
4. Retardation Accuracy: <λ/100
5. Wedge: 1″ arc sec
6. Coating: AR/AR, R<0.2% on both sides
7. Clear Aperture: ≥central 90% of diameter

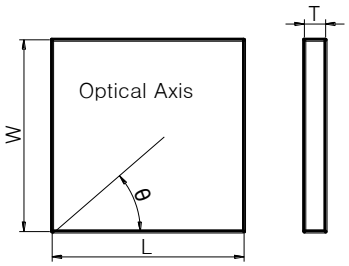


- Product Code:

WPD+Material-Size-Retardation 1-Center Wavelength 1-Retardation 2-Center Wavelength 2-θ

Zero-Order Waveplate





Specifications:

1. Material: Quartz
2. Surface Quality: 10/5~20/10
3. Wavefront Distortion: <λ/10@633nm
4. Retardation Accuracy: <λ/300
5. Wedge: <40 arc sec
6. Coating: AR/AR, R<0.2% on outer sides
7. Clear Aperture: ≥central 90% of diameter

- Produce Code：

WPZ+Material+Type No.-Size-Retardation-Center Wavelength-θ

Type No:

“01”- Cemented Zero-Order

“02”- Airspaced Zero-Order

“03”- True Zero-Order

“04”-Optical Contacted True Zero-Order