OPTICAL COMPONENTS

Spherical Lenses

Cylindrical Lenses

Lens Kits

Achromatic Doublets

Multi-Element

Micro Optics

Mirrors

Prisms

Substrates & Windows

Beamsplitters

Polarizers

Filter & Apertures

Quartz Waveplates

- First order Quartz Waveplates
- Made from high quality optical grade crystalline quartz
- 17mm by 17mm square clear aperture
- Mounted in a metal ring with engraved wavelength identification
- Optically contacted for precision retardation
- Both quarter wave and half wave retardation versions available

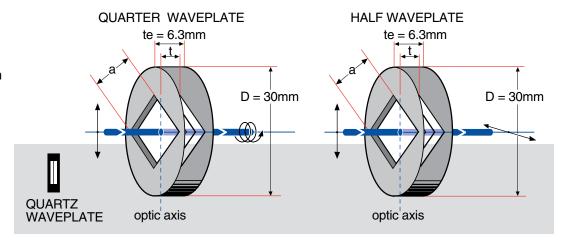


These are formed from two thin sections of crystalline quartz which have been cut to include the optic axis. The two sections are polished to different thicknesses in order to be have exactly the required retardation difference. They are then optically contacted with the axes opposed. In this way it is possible to provide precise first order retardation in a plate of usable thickness. The plates are 17mm square with a combined thickness of 5mm. They are mounted in a 30mm diameter by 6mm thick cell with the combined optic axis along the diagonal. The cell is engraved with the wavelength and the retardation. We offer both $\lambda/4$ retardation and $\lambda/2$ retardation waveplates for a variety of wavelengths.

Specifications & Tolerances

Dimensions: +0, -0.2mm
Parallelism: ≤5arcsec
Surface quality: 20-10
Coating: Narrowband
Anti-Reflection
Wavefront: λ/10
Retardation: λ/500
Material: Crystal
quartz

Mounting: Black finished aluminum



Quartz Waveplates

Wavelength	Side, a	Thickness, t	Price	PART NUMBER	
(nm)	(mm)	(mm)	Price	λ /4 retardation	λ /2 retardation
266.0	17.0	5.0		068-1110	068-1330
325.0	17.0	5.0		068-1130	068-1350
355.0	17.0	5.0		068-1140	068-1360
405.0	17.0	5.0		068-1145	068-1365
410.0	17.0	5.0		068-1147	068-1367
441.6	17.0	5.0		068-1150	068-1370
457.9	17.0	5.0		068-1160	068-1380
488.0	17.0	5.0		068-1170	068-1390
514.5	17.0	5.0		068-1180	068-1440
532.0	17.0	5.0		068-1185	068-1445
590.0	17.0	5.0		068-1190	068-1450
632.8	17.0	5.0		068-1220	068-1460
670.0	17.0	5.0		068-1230	068-1470
694.3	17.0	5.0		068-1240	068-1480
780.0	17.0	5.0		068-1250	068-1490
830.0	17.0	5.0		068-1260	068-1550
1064.0	17.0	5.0		068-1270	068-1560
1150.0	17.0	5.0		068-1275	068-1565
1300.0	17.0	5.0		068-1280	068-1570
1550.0	17.0	5.0		068-1290	068-1580



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