

## ACHROMATIC AIR-SPACED WAVEPLATES



Achromatic waveplates are made from two different materials: crystal quartz and magnesium fluoride with highly efficient broadband antireflection coatings in an air spaced design.

Retardation tolerance of our achromatic waveplates is better than  $\lambda/100$  over the entire wavelength range. The flat response of these waveplates is ideal for use with tunable lasers, multiple laser-line systems and other broad spectrum sources.

Our achromatic waveplates are available for four wavelength ranges: VIS (450 – 680 nm), NIR (700 – 1000 nm), 950 – 1300 nm, 1200 – 1650 nm. The waveplates are provided in a black anodized aluminum housing.

### Housing accessories

High Precision Rotation  
Polarizer, Waveplate  
Mount 840-0186

Find more at [EksmaOptics.com](http://EksmaOptics.com)

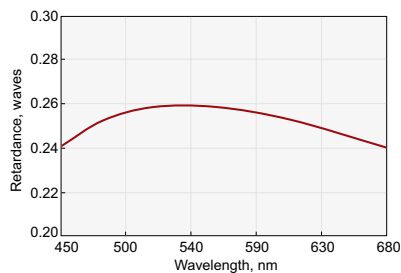


### Specifications

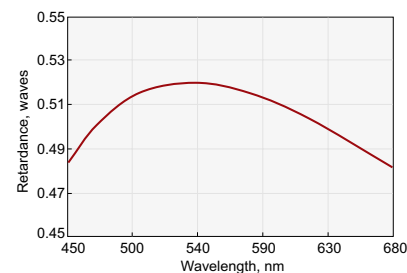
Material	Single crystal quartz and MgF <sub>2</sub>
Clear aperture	Ø12.7 mm
Ring mount outer diameter	25.4 +0.0 / -0.12 mm
Ring mount thickness	8.0 ± 0.2 mm
Retardation tolerance	< $\lambda/100$ over wavelength range
Surface quality	40 – 20 scratch & dig (MIL-PRF-13830B)
Wavefront distortion	< $\lambda/8$ @ 632 nm
Parallelism	< 1 arcmin
AR coating	R < 0.8%
Laser damage threshold	> 3 J/cm <sup>2</sup> , 10 nsec, 1064 nm typical

Operating wavelength, nm	Retardation $\lambda/2$		Retardation $\lambda/4$	
	Catalogue nr.	Price, EUR	Catalogue nr.	Price, EUR
450 – 680	467-4205	480	467-4405	480
700 – 1000	467-4210	480	467-4410	480
950 – 1300	467-4215	480	467-4415	480
1200 – 1650	467-4220	480	467-4420	480

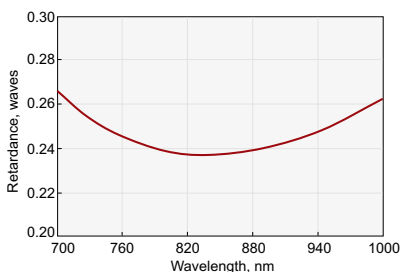
### RETARDATION CURVE SAMPLES



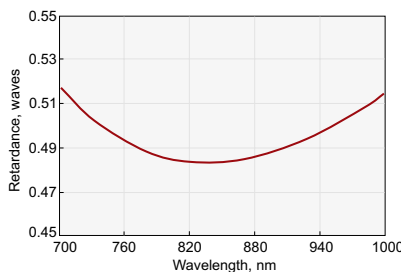
$\lambda/4$  @ 450-680 nm



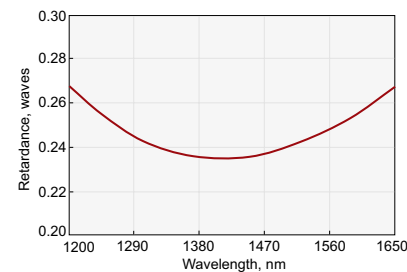
$\lambda/2$  @ 450-680 nm



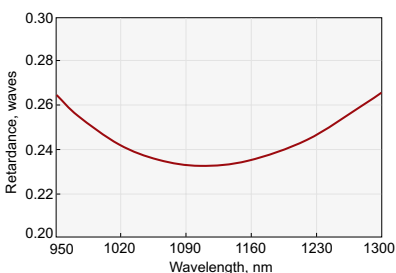
$\lambda/4$  @ 700-1000 nm



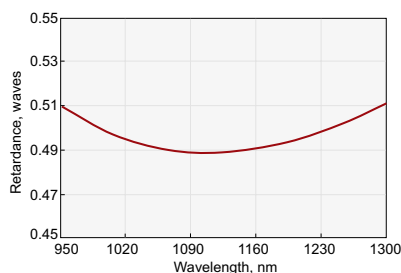
$\lambda/2$  @ 700-1000 nm



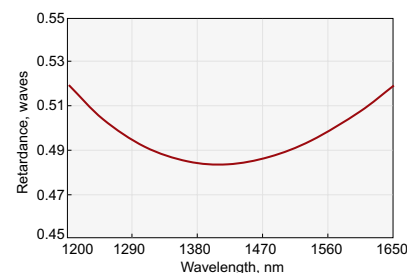
$\lambda/4$  @ 1200-1650 nm



$\lambda/4$  @ 950-1300 nm



$\lambda/2$  @ 950-1300 nm



$\lambda/2$  @ 1200-1650 nm