

Bi-Crystalline Achromatic Retarders

SPECIFICATIONS		
Materials	Quartz and Magnesium Fluoride	
Retardance	$\lambda/4$ or $\lambda/2$	
Retardance Accuracy	$\leq \lambda/100$ over wavelength range	
Temperature Coefficient of Retardance	$< \lambda/500$ per °C	
Wavelength Range	Quarter Wave	Half Wave
	Ultraviolet	395-465 nm
Visible	475-590 nm	500-650 nm
Near Infrared	600-900 nm	600-840 nm
Infrared	690-2050nm	1190-1660 nm
Transmitted Wavefront Distortion (at 632.8 nm)	$\leq \lambda/4$	
Reflectance (per surface)	$\leq 0.5\%$ at normal incidence	
Surface Quality	40-20 scratch and dig	
Beam Deviation	≤ 1 arc min	
Temperature Storage Range	-40° C to +75° C	
Recommended Safe Operating Limit	2 J/cm ² , 10 ns, 1064 nm	

ORDERING INFORMATION			
Mounted			
Diameter (in.)	Clear Aperture (in.)	$\lambda/4$ Wave Part No.	$\lambda/2$ Wave Part No.
1.00	0.40	CQM-050	CHM-050
Unmounted			
0.50	0.40	CQ-050	CH-050

We offer standard Bi-Crystalline Achromatic Retarders to cover 4 regions of the spectrum (see graph): UV, VIS, NIR, IR. Please specify wavelength region when placing your order.