BREWSTER WINDOWS(BK7&Fused Silica)

Brewster windows are used in laser cavities to reject the s-polarized beam and to allow only linearly p-polarized light to be emitted. They are designed for use at the Brewster angle where the reflective polarization effect is most efficient.

These windows are cut at the appropriate angle so that they present a circular cross-section to the laser cavity. They are made either of BK7 with a Brewster angle of 56.5° or UV fused silica with a Brewster angle of 56.0°. Brewster windows are polished to 20/10 or better to be of intra-cavity laser quality. Flatness is not so critical, so they can be made to a flatness of between $\lambda/2$ and $\lambda/4$. This enables them to be kept relatively thin, between 1.5 and 2.0 mm.

These windows are uncoated, but we will be pleased to offer coatings to meet your special requirements.

Standard Specifications:

Optical Material:	see the table
Diameter Tolerance:	+0.0, -0.1mm
Thickness Tolerance:	±0.2mm
Clear Aperture:	>90%
Wedge:	±5 are minutes
Surface Quality:	20-10
Wavefront Distortion:	λ/4 at 632nm
Bevel:	<0.25mm X 45°
Coating:	available upon request



Standard Brewster Windows

Minor Diameter D (mm)	Thickness(mm)	Product Number
BK7		
10.0	2.0	UQT-BWNB0001
13.0	2.0	UQT-BWNB0002
16.0	2.0	UQT-BWNB0003
20.0	2.0	UQT-BWNB0004
25.4	2.0	UQT-BWNB0005
Fused Silica		
10.0	2.0	UQT-BWNF0101
13.0	2.0	UQT-BWNF0102
16.0	2.0	UQT-BWNF0103
20.0	2.0	UQT-BWNF0104
25.4	2.0	UQT-BWNF0105

Please Contact ultiQuest for other dimensions in prototype and production quantities.

NOTES!

Be sure to wear laser safety goggles when checking optical path and adjusting optical axis.