

Prism

Mirror

Window

Beamsplitter

Waveplate

IR Optics

Lens

Filter

Micro Optics

Plastic Optics

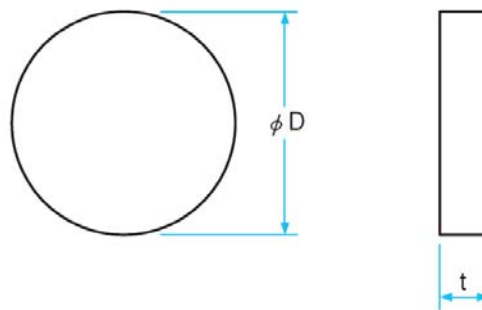
Window Sapphire

Introductions



Used as transparent barriers for sending and receiving light between two phases under varying conditions in temperature, pressure, chemical composition, cleanliness, and phase. Windows of synthetic optical sapphire crystal are highly abrasion-resistant, with hardness approaching that of diamonds. The material allows transmission of light in the range from ultraviolet to near-infrared.

Beam Path



Standard Specifications

Items	Standard Precision	High Precision
Material	Anisotropic crystalline synthetic sapphire	
Density	3.98 g/cm ³	
Refractive Index	1.833 (265nm) 1.793 (365nm) 1.785 (405nm) 1.76 (630nm) 1.755 (1014nm)	
Diameter	Φ 5 mm – Φ 50.8 mm	
Dimension Tolerance	+0.0/-0.2 mm	+0.0/-0.05mm
Thickness Tolerance	± 0.2 mm	± 0.05mm
Clear Aperture	> 90%	
Parallelism	< 3 arc minutes	< 10 arc seconds
Flatness	λ at 632.8 nm	λ / 4 at 632.8 nm
Surface Quality	scratch and dig 60-40	scratch and dig 40-20
Bevel	0.5 (0/-0.3) mm	

Notes:

Please show us the size and the coating specification.

Banner Union Standard Products with standard precision

Part NO.	D(mm)	t(mm)
ISW0101	20.0	2.0
ISW0102	25.0	2.0
ISW0103	30.0	2.0
ISW0104	40.0	2.0
ISW0105	50.0	2.0

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Optical Components

| ISW 01