

PhotonEdge

Precision Optical Components

UV Fused Silica Optical Window

Product Datasheet | UV Fused Silica Material | Standard Grade

July 2026 | V1.0

1. Product Overview

PhotonEdge UV Fused Silica Optical Windows are manufactured from high-quality UV Fused Silica material. UV Fused Silica optical windows feature excellent UV transmission and high laser damage threshold. They are ideal for UV laser systems, excimer laser applications, and high-power laser beam delivery.

All windows are precision-polished to $\lambda/10$ surface flatness with parallelism better than 3 arcmin. Available uncoated or with anti-reflection coatings optimized for specific wavelengths.

PhotonEdge Optical Windows offer excellent surface quality and tight tolerance control at competitive prices. Standard models deliver in 1-2 weeks.

2. Technical Specifications

Parameter	Specification
Material	UV Fused Silica
Transmission Range	180nm - 2.5um
Diameter Tolerance	+0.0 / -0.1mm
Thickness Tolerance	+/-0.1mm
Surface Flatness	$\lambda/10$ @ 632.8nm
Surface Quality	40-20 Scratch-Dig
Parallelism	< 3 arcmin
Clear Aperture	> 90% of diameter
Coating	AR Coating, R < 0.5% per surface
Operating Temperature	-20 degC to +60 degC

3. Standard Models

Custom Options: Rectangular windows, custom thickness, and wedge windows are available.

Standard models are in stock with typical delivery of 1-2 weeks. Custom sizes and coatings can be manufactured in 3 weeks.

4. Material Properties

UV Fused Silica Key Properties:

- Transmission Range: 180nm - 2.5um
- Refractive Index: 1.4584
- Density: 2.20 g/cm³
- Thermal Expansion Coefficient: $0.55 \times 10^{-6}/K$

5.

Various AR coatings are available. Uncoated windows are also available.

Coating Type	Wavelength	Reflectance	Applications
Standard	400-700nm	R < 0.5% per surface	Visible light systems
Optional	650-1000nm	R < 0.5% per surface	Near-infrared
Optional	400-1000nm	R < 1.0% per surface	Multi-wavelength
Optional	250-400nm	R < 1.5% per surface	UV systems

6. Ordering Information

Sample Policy: First-time customers can order single-piece samples at regular price.

When ordering or requesting a quote, please provide:

1. Model number or diameter and thickness requirements
2. Coating specification
3. Quantity and delivery requirements
4. Special requirements (wedge angle, custom shape, etc.)

Minimum Order Quantity: 1 piece for standard models.

Lead Time: 1-2 weeks for stock. 3 weeks for custom.

7. Contact Information

Beijing Hengdingguang Technology Co., Ltd.

Brand: PhotonEdge - Precision Optical Components

Website: <https://photonedgeoptics.com>

Email: sales@photonedgeoptics.com

Address: Beijing, China

Manufacturing: 15+ years experience | 67+ product types | 500+ global clients

Quality Assurance: 100% inspection | $\lambda/10$ surface flatness | Zero-defect shipping