

Sapphire Optical Windows

These sapphire windows feature low distortion and scatter. They offer excellent parallelism for laser and non-laser applications.



ADDITIONAL IMAGES



Product Overview

High-Performance Sapphire Windows

These sapphire optical windows are engineered from anisotropic synthetic sapphire crystal, offering unmatched hardness and durability for demanding industrial applications. With exceptional optical clarity and transmission across a broad spectrum, they are ideally suited for use in sensors, high-pressure cells, and precision laser systems. Their superior resistance to scratching, abrasion, and high temperatures ensures reliable performance in the harshest environments.

Material Properties

Material	Anisotropic synthetic sapphire crystal (Al ₂ O ₃)
Orientation	Random

Dimensional Specifications

Diameter Tolerance	+0.0, -0.15mm
Thickness Tolerance	+/- 0.2mm
Clear Aperture	> 85% of diameter

Optical Performance

Parallelism	3 arc minutes
Flatness	lambda per 25mm @ 632.8nm

Quality Standards

Surface Quality	80-50 scratch and dig
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Manufacturing Details

Available Size Range

3 mm

Minimum Size

120 mm

Maximum Size

Bevel

0.25mm x 45deg