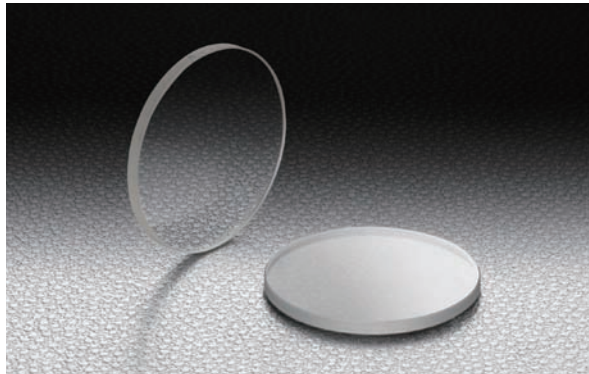
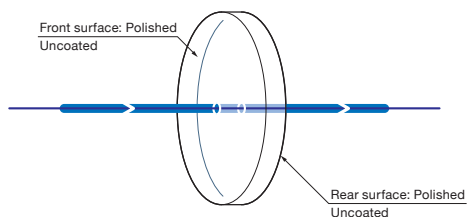


These Sapphire windows contain no impurities and provide high transmittance without any absorption covering the visible and infrared regions of the spectrum. Recommended to use these sapphire windows where the most durable surface is required such as cover windows.

- Sapphire windows have excellent heat and weather resistance and can be used in outdoor applications or as a protective glass for optical systems.
- High transmittance from visible regions to Infrared regions of the spectrum and are widely used as windows for detector systems.

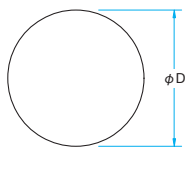


Schematic



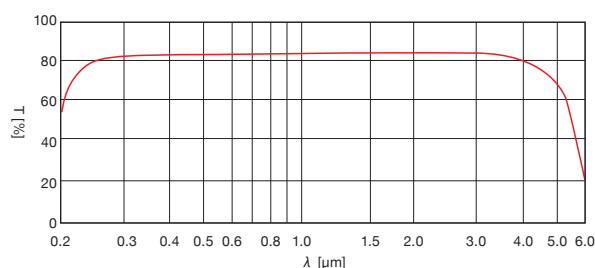
Outline Drawing

(in mm)



- Tolerance
Diameter $\phi D_{\pm 0.1}$
Thickness $t \pm 0.1$

Typical Transmittance Data T: Transmission



Specifications

Part Number	Diameter ϕD [mm]	Thickness t [mm]
OPSH-20C02-P	$\phi 20$	2
OPSH-25C02-P	$\phi 25$	2
OPSH-30C02-P	$\phi 30$	2
OPSH-40C02-P	$\phi 40$	2
OPSH-50C02-P	$\phi 50$	2

Compatible Optic Mounts

LHF-20S, -25S, -30S, -40S, -50S

Specifications

Material	Optical Sapphire Crystal (Uniaxial crystal)
Crystal axis direction	Not define the direction of the crystal axis
Parallelism	$<3'$
Wavelength Range	400 – 5000nm
Surface Quality (Scratch-Dig)	40-20
Clear aperture	90% of real diameter

Guide

- ▶ For Wavelength from 130nm to 8μm, we recommend to use the UV substrates CaF_2 window substrates (OPCFU). [Reference](#) B320
- ▶ For product sizes and wedges which are not listed on our website or in our catalog, please contact our Sales Division with your requests.

Attention

- ▶ Fluorescence illuminant may occur with strong UV light exposure. For high UV exposure applications we recommend CaF_2 Windows (OPCF). [Reference](#) B320
- ▶ Windows are offered standard with no AR coating and provide transmittance of 94% after loss of 3% for each surface.

Physics

Wavelength [nm]	Refractive Index
248.4	1.834
325.0	1.804
365.0	1.794
404.7	1.786
587.6	1.769
694.3	1.764
1014	1.756
1800	1.742
2200	1.733
3400	1.699
4500	1.650
Density	3.98g/cm ³
Thermal Conductivity	42W·m ⁻¹ K ⁻¹ (25°C)
Thermal Expansion Coefficient	6.9×10 ⁻⁶ /°C (Perpendicular to the C axis 200°C) 7.6×10 ⁻⁶ /°C (Parallel to the C axis 200°C)

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