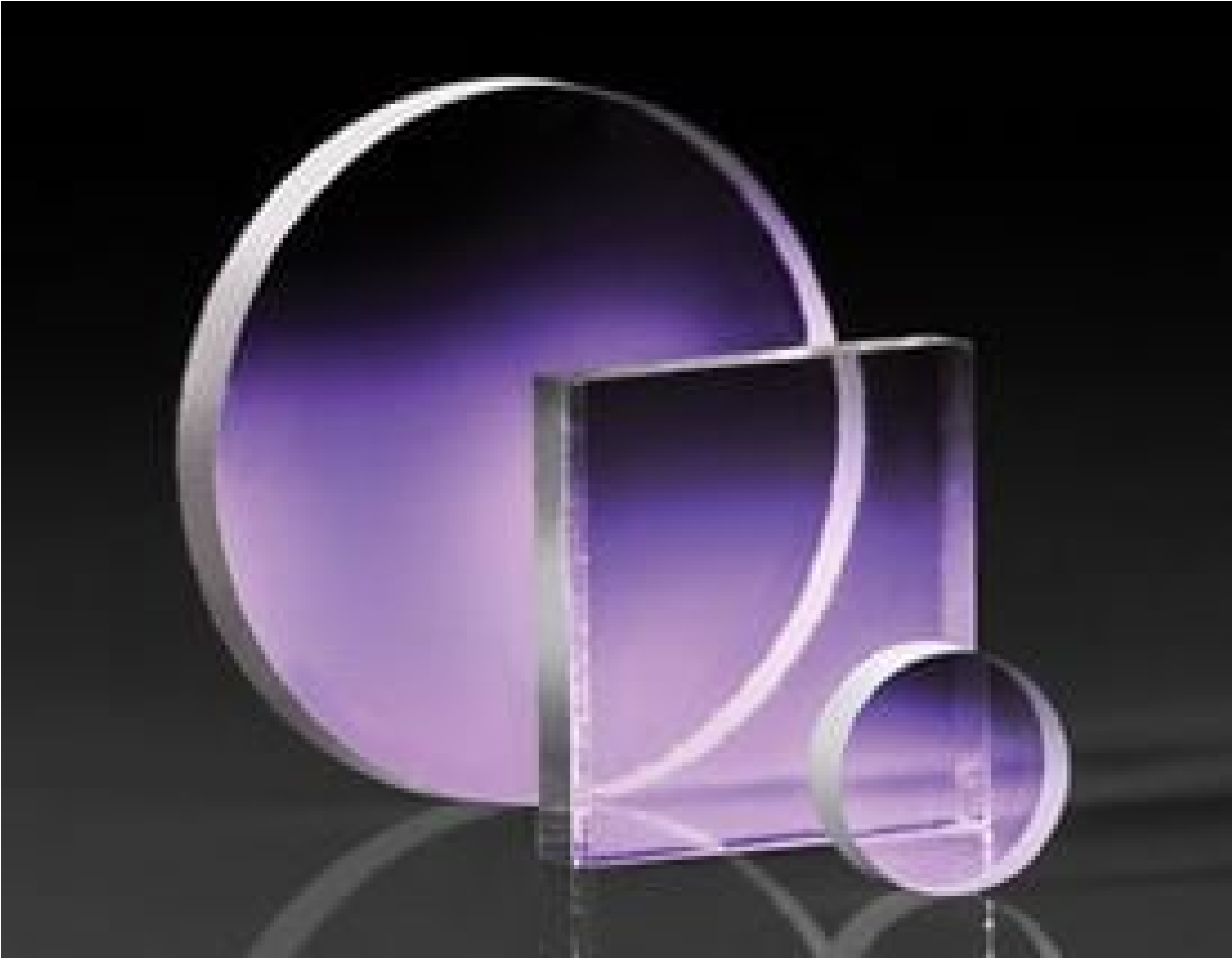


TECHSPEC® 20mm Diameter x 3.3mm Thickness, Uncoated, BOROFLOAT® Window

See More by [SCHOTT Optical Components](#)



TECHSPEC BOROFLOAT Borosilicate Windows

Stock **#45-461** ☐ In Stock

-

1

+

C\$34.30

ADD TO CART

Qty 1-5

C\$34.30

Qty 6+

C\$27.30

Volume Pricing

[Request Quote](#)

Get Product Downloads

Abbe Number (v_d):
65.41

Bevel:
Protective as needed

Clear Aperture (%):
≥90

Clear Aperture CA (mm): 18.00
Diameter (mm): 20.00 ±0.5
Thickness (mm): 3.30 ±0.2
Coating: Uncoated
Coefficient of Thermal Expansion CTE (10⁻⁶/°C): 3.25 (+20 to +300°C)
Density (g/cm³): 2.23
Edges: Ground
Index of Refraction n_d: 1.472
Knoop Hardness (kg/mm²): 480
Operating Temperature (°C): 1 hour @ 500; >100 hours @ 450
Poisson's Ratio: 0.2
Resistance to Temperature Difference (K): Short Term, 1 hr: 110K 1 - 100 hrs: 90K Long Term, >100 hrs: 80K
Substrate: BOROFLOAT®
Surface Flatness (P-V): 4 - 6λ
Surface Quality: 80-50
Thermal Shock (K): Up to 4mm Thick: 175K 4 - 6mm Thick: 160K 6 - 15mm Thick: 150K
Transformation Temperature (°C): 525
Transmission (%): 90
Type: Protective Window
Wavelength Range (nm): 350 - 2000
Young's Modulus (GPa): 64

Regulatory Compliance

RoHS 2015: Compliant
Reach 219: Compliant
Certificate of Conformance: View