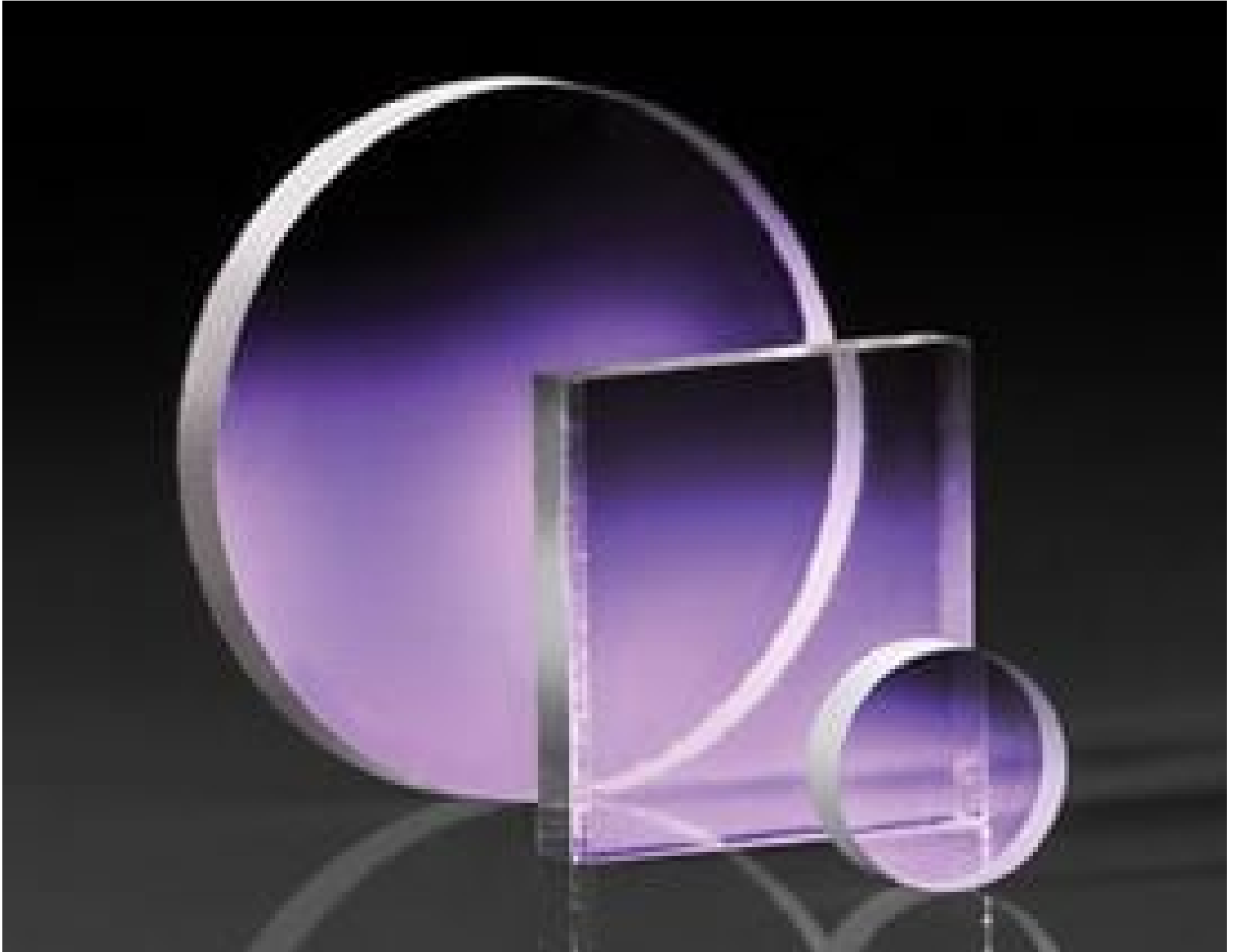


TECHSPEC® 20mm Diameter x 3.3mm Thickness, Uncoated, BOROFLOAT® Window

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TECHSPEC BOROFLOAT Borosilicate Windows

Stock **#45-461** **20+ In Stock**

⊖ 1 ⊕ ₹1,870

ADD TO CART

Volume Pricing	
Qty 1-5	₹1,870 each
Qty 6-25	₹1,485 each
Qty 26-99	₹1,375 each
Need More?	Request Quote

Product Downloads

SPECIFICATIONS

General

Type:

Protective Window

Physical & Mechanical Properties

Protective as needed **Bevel:**

≥90 **Clear Aperture (%):**

18.00 **Clear Aperture CA (mm):**

20.00 ±0.5 **Diameter (mm):**

3.30 ±0.2 **Thickness (mm):**

Ground **Edges:**

480.00 **Knoop Hardness (kg/mm²):**

0.20 **Poisson's Ratio:**

64 **Young's Modulus (GPa):**

Optical Properties

65.41 **Abbe Number (v_d):**

Uncoated **Coating:**

1.472 **Index of Refraction (n_d):**

BOROFLOAT® **Substrate:**

4 - 6λ **Surface Flatness (P-V):**

80-50 **Surface Quality:**

90 **Transmission (%):**

350 - 2000 **Wavelength Range (nm):**

Material Properties

3.25 (+20 to +300°C) **Coefficient of Thermal Expansion CTE (10⁻⁶/°C):**

2.23 **Density (g/cm³):**

525 **Transformation Temperature (°C):**

Environmental & Durability Factors

1 hour @ 500; >100 hours @ 450 **Operating Temperature (°C):**

Short Term, 1 hr: 110K
1 - 100 hrs: 90K
Long Term, >100 hrs: 80K **Resistance to Temperature Difference (K):**

Up to 4mm Thick: 175K
4 - 6mm Thick: 160K
6 - 15mm Thick: 150K **Thermal Shock (K):**

Regulatory Compliance

Compliant **RoHS 2015:**

Compliant **Reach 219:**

View **Certificate of Conformance:**

PRODUCT DETAILS

- Low Coefficient of Thermal Expansion
- Visible to Near Infrared Transmission
- High Resistance to Thermal Shock

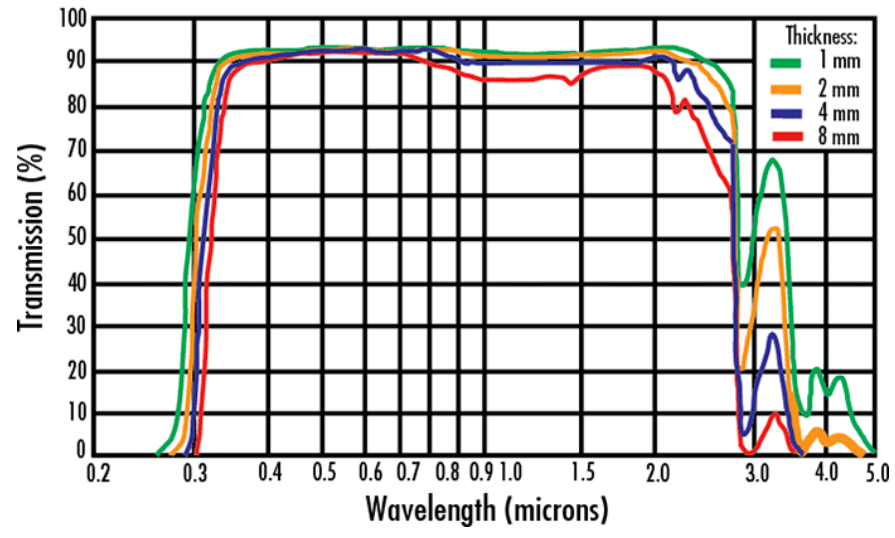
TECHSPEC® BOROFLOAT® Borosilicate Windows are ideal for high temperature and harsh environment applications. The windows have a low coefficient of thermal expansion of 3.25 (+20 to +300°C).

TECHSPEC® BOROFLOAT® Borosilicate Windows feature visible to near infrared transmission. Unlike common borosilicate that is drawn flat, BOROFLOAT® is produced by a float technique that yields superior surface flatness — typically 4 - 6λ per inch. BOROFLOAT® is about three times more resistant to thermal shock than standard soda lime glass.

Can't find what you need? Get a quick [custom quote](#).

TECHNICAL INFORMATION

BOROFLOAT®



QUOTE YOUR SIZE

COMPATIBLE MOUNTS