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## TECHSPEC® 50mm Diameter x 3.3mm Thickness, NIR Coated, BOROFLOAT® Window

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TECHSPEC BOROFLOAT Borosilicate Windows

Stock #12-193 **20+ In Stock**

⊖ 1 ⊕ €59<sup>50</sup>

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Volume Pricing	
Qty 1-5	€59,50 each
Qty 6-25	€47,00 each
Qty 26-99	€44,00 each
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ⓘ Prices shown are exclusive of VAT/local taxes

### Product Downloads

### General

Protective Window **Type:**

Glass **Type of Window:**

### Physical & Mechanical Properties

45.00	Clear Aperture CA (mm):
50.00 ±0.5	Diameter (mm):
3.30 ±0.2	Thickness (mm):
Protective as needed	Bevel:
≥90	Clear Aperture (%):
Ground	Edges:
0.20	Poisson's Ratio:
64	Young's Modulus (GPa):
480.00	Knoop Hardness (kg/mm <sup>2</sup> ):

## Optical Properties

NIR (700-1150nm)	Coating:
<b>BOROFLOAT®</b>	Substrate: □
1.472	Index of Refraction (n <sub>d</sub> ):
80-50	Surface Quality:
≥97	Transmission (%):
65.41	Abbe Number (v <sub>d</sub> ):
R <sub>avg</sub> <1.0% @ 700 - 1150nm	Coating Specification:
700 - 1150	Wavelength Range (nm):
4 - 6λ	Surface Flatness (P-V):

## Material Properties

2.23	Density (g/cm <sup>3</sup> ):
525	Transformation Temperature (°C):
3.25 (+20 to +300°C)	Coefficient of Thermal Expansion CTE (10 <sup>-6</sup> /°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

<b>Compliant</b>	RoHS 2015:
<b>View</b>	Certificate of Conformance:
<b>Compliant</b>	Reach 247:

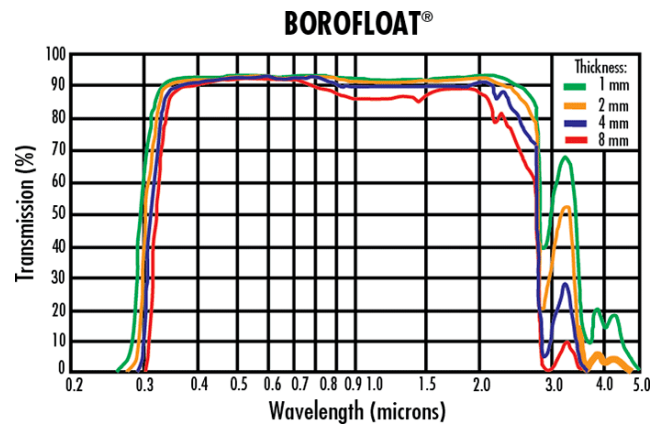
## Product Details

- 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.

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## Technical Information



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