

TECHSPEC® 50mm Diameter x 3.3mm Thickness, MgF₂ Coated, BOROFLOAT® Window

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TECHSPEC BOROFLOAT Borosilicate Windows

Stock **#83-378** 20+ In Stock

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1

+

C\$66^{.50}

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Volume Pricing	
Qty 1-5	C\$66.50 each
Qty 6-25	C\$53.20 each
Qty 26-99	C\$49.00 each
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General

Protective Window	Type:
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Physical & Mechanical Properties

Protective as needed	Bevel:
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Clear Aperture (%):

≥90	
45.00	Clear Aperture CA (mm):
50.00 ±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):
MgF ₂ (400-700nm)	Coating:
R _{abs} ≤2.5% @ 550nm	Coating Specification:
1.472	Index of Refraction (n _d):
BOROFLOAT®	Substrate:
4 - 6λ	Surface Flatness (P-V):
80-50	Surface Quality:
≥95	Transmission (%):
400 - 700	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:
View	Certificate of Conformance:
Compliant	Reach 247:

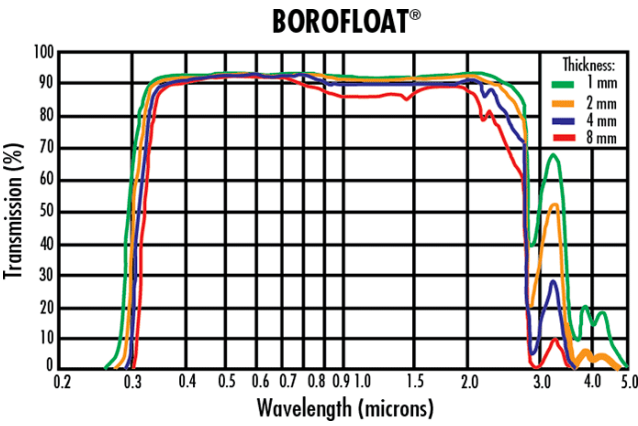
Product Details

- 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



Coating Curves

Quote Your Size

Compatible Mounts

