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## TECHSPEC® 5mm Diameter x 1.1mm Thickness, MgF<sub>2</sub> Coated, BOROFLOAT® Window

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TECHSPEC BOROFLOAT Borosilicate Windows

Stock #29-396 **20+ In Stock**

C\$44.<sup>10</sup>

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Volume Pricing	
Qty 1-5	C\$44.10 each
Qty 6-25	C\$35.00 each
Qty 26-99	C\$33.60 each
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### Product Downloads

### General

Protective Window **Type:**

Glass **Type of Window:**

### Physical & Mechanical Properties

**Clear Aperture CA (mm):**

4.50	<b>Diameter (mm):</b>
5.00 ±0.50	
	<b>Thickness (mm):</b>
1.10 ±0.2	
	<b>Bevel:</b>
Protective as needed	
	<b>Clear Aperture (%):</b>
≥90	
	<b>Edges:</b>
Ground and Seamed	
	<b>Poisson's Ratio:</b>
0.20	
	<b>Young's Modulus (GPa):</b>
64	
	<b>Knoop Hardness (kg/mm<sup>2</sup>):</b>
480.00	

## Optical Properties

	<b>Coating:</b>
MgF2 (400-700nm)	
	<b>Substrate:</b> <input type="checkbox"/>
<b>BOROFLOAT®</b>	
	<b>Index of Refraction (n<sub>d</sub>):</b>
1.472	
	<b>Surface Quality:</b>
80-50	
	<b>Transmission (%):</b>
≥95	
	<b>Abbe Number (v<sub>d</sub>):</b>
65.41	
	<b>Coating Specification:</b>
Rabs ≤2.5% @ 550nm	
	<b>Wavelength Range (nm):</b>
400 - 700	
	<b>Surface Flatness (P-V):</b>
4 - 6λ	

## Material Properties

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

## Environmental & Durability Factors

	<b>Operating Temperature (°C):</b>
1 hour @ 500; >100 hours @ 450	
	<b>Resistance to Temperature Difference (K):</b>
Short Term, 1 hr: 110K 1 - 100 hrs: 90K Long Term, >100 hrs: 80K	
	<b>Thermal Shock (K):</b>
Up to 4mm Thick: 175K 4 - 6mm Thick: 160K 6 - 15mm Thick: 150K	

## Regulatory Compliance

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

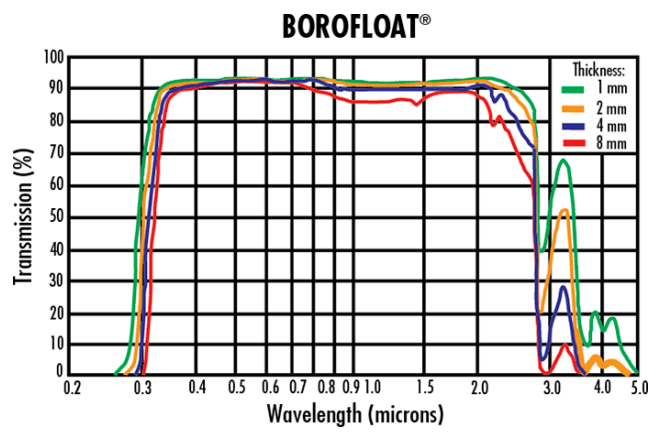
## Product Details

- 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**