

[See all 69 Products in Family](#)

## TECHSPEC® 20mm Diameter x 3.3mm Thickness, MgF<sub>2</sub> Coated, BOROFLOAT® Window

See More by [SCHOTT Optical Components](#)



TECHSPEC BOROFLOAT Borosilicate Windows

Stock #83-374 **14 In Stock**

⊖ 1 ⊕ €34.<sup>50</sup>

**ADD TO CART**

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | €34,50 each                   |
| Qty 6-25       | €28,00 each                   |
| Qty 26-99      | €25,00 each                   |
| Need More?     | <a href="#">Request Quote</a> |

ⓘ Prices shown are exclusive of VAT/local taxes

### Product Downloads

### General

Protective Window **Type:**

Glass **Type of Window:**

### Physical & Mechanical Properties

|                      |                                       |
|----------------------|---------------------------------------|
| 18.00                | Clear Aperture CA (mm):               |
| 20.00 ±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

|                                |  |
|--------------------------------|--|
| MgF <sub>2</sub> (400-700nm)   | Coating:                               |
| <b>BOROFLOAT®</b>              | Substrate: □                           |
| 1.472                          | Index of Refraction (n <sub>d</sub> ): |
| 80-50                          | Surface Quality:                       |
| ≥95                            | Transmission (%):                      |
| 65.41                          | Abbe Number (v <sub>d</sub> ):         |
| R <sub>abs</sub> ≤2.5% @ 550nm | Coating Specification:                 |
| 400 - 700                      | 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<br>1 - 100 hrs: 90K<br>Long Term, >100 hrs: 80K | Resistance to Temperature Difference (K): |
| Up to 4mm Thick: 175K<br>4 - 6mm Thick: 160K<br>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:                  |

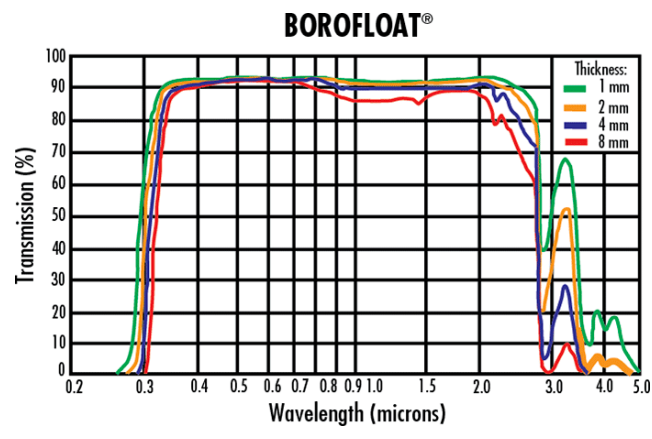
## Product Details

- 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.

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

## Technical Information



**Coating Curves**

**Quote Your Size**

**Compatible Mounts**