

TECHSPEC® 50 x 50 x 3.3mm Thickness, MgF<sub>2</sub> Coated, BOROFLOAT® Window

See More by [SCHOTT Optical Components](#)



TECHSPEC BOROFLOAT Borosilicate Windows

Stock **#83-912** 20+ In Stock

-

1

+

A\$76<sup>.00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | A\$76.00 each                 |
| Qty 6-25       | A\$60.80 each                 |
| Qty 26-99      | A\$56.00 each                 |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

General

|                   |       |
|-------------------|-------|
| Protective Window | Type: |
|-------------------|-------|

Physical & Mechanical Properties

|               |                         |
|---------------|-------------------------|
| 45.00 x 45.00 | Clear Aperture CA (mm): |
|               | Dimensions (mm):        |

|                      |                             |
|----------------------|-----------------------------|
| 50.00 x 50.00        |                             |
| 3.30 ±0.2            | Thickness (mm):             |
| 50.00                | Length (mm):                |
| 50.00                | Width (mm):                 |
| ±0.5                 | Dimensional Tolerance (mm): |
| Protective as needed | Bevel:                      |
| ≥90                  | Clear Aperture (%):         |
| Seamed               | Edges:                      |
| 0.20                 | Poisson's Ratio:            |
| 64                   | Young's Modulus (GPa):      |
| 480.00               | Knoop Hardness (kg/mm²):    |

|                                |                                                                                                |
|--------------------------------|------------------------------------------------------------------------------------------------|
| Optical Properties             |                                                                                                |
| MgF <sub>2</sub> (400-700nm)   | Coating:                                                                                       |
| <a href="#">BOROFLOAT®</a>     | 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/cm³):                 |
| 525                                                                                  | Transformation Temperature (°C): |
| Coefficient of Thermal Expansion CTE (10 <sup>-6</sup> /°C):<br>3.25 (+20 to +300°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     |                             |
| <a href="#">Compliant</a> | RoHS 2015:                  |
| <a href="#">View</a>      | Certificate of Conformance: |
| <a href="#">Compliant</a> | Reach 247:                  |

## Product Details

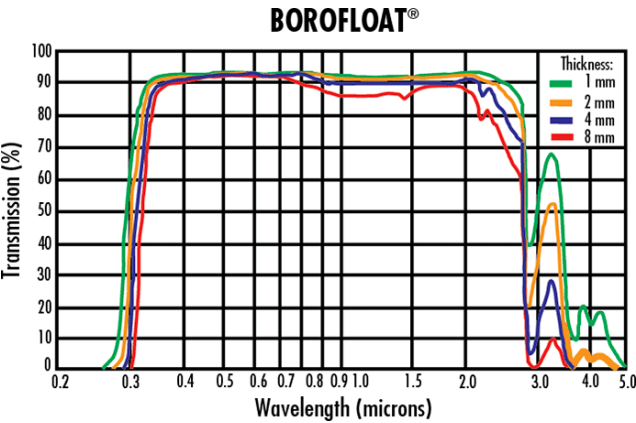
- Low Coefficient of Thermal Expansion
- Visible to Near Infrared Transmission

- 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