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TECHSPEC® 10 x 10 x 1.75mm Thickness, MgF_2 Coated, BOROFLOAT® Window

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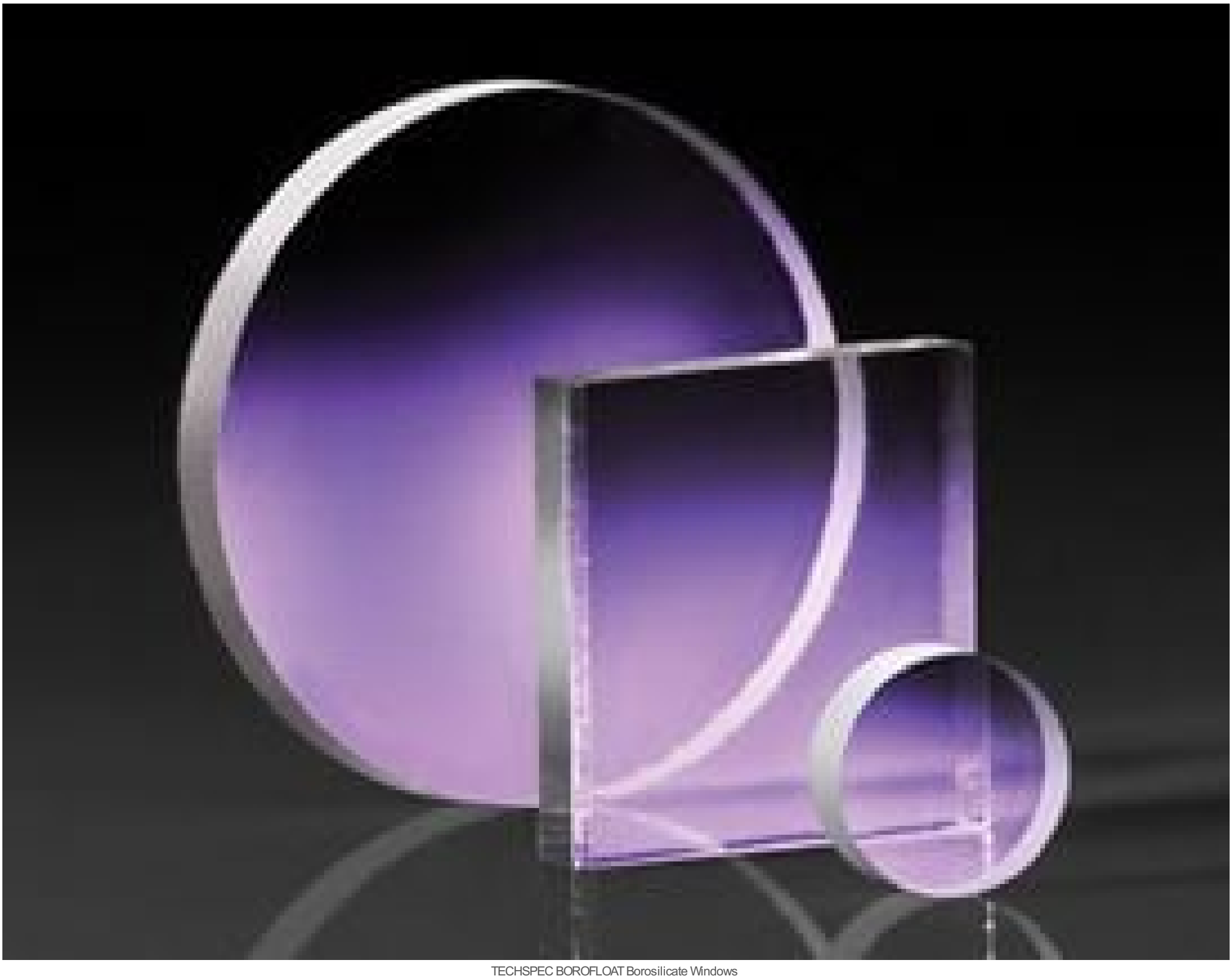

TECHSPEC BOROFLOAT Borosilicate Windows

Stock **#83-371** **2 In Stock**

- 1 + **£25**.20

ADD TO CART

Volume Pricing	
Qty 1-5	**£25.20** each
Qty 6-25	**£20.00** each
Qty 26-99	**£18.40** each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:
Protective Window

Type of Window:
Glass

Physical & Mechanical Properties

Clear Aperture CA (mm):
9.00 x 9.00

Dimensions (mm):
10.00 x 10.00

Thickness (mm):
1.75 ±0.2

Length (mm):
10.00

Width (mm):
10.00

Dimensional Tolerance (mm):
±0.5

Bevel:
Protective as needed

Clear Aperture (%):
≥90

Edges:
Seamed

Poisson's Ratio:
0.20

Young's Modulus (GPa):
64

Knoop Hardness (kg/mm^2):
480.00

Optical Properties

Coating:
MgF_2 (400-700nm)

Substrate:
BOROFLOAT®

Index of Refraction (n_d):
1.472

Surface Quality:
80-50

Transmission (%):
≥95

Abbe Number (v_d):
65.41

Coating Specification:
R_{abs} ≤2.5% @ 550nm

Wavelength Range (nm):
400 - 700

Surface Flatness (P-V):
4 - 6λ

Material Properties

Density (g/cm^3):
2.23

Transformation Temperature (°C):
525

Coefficient of Thermal Expansion CTE (10^{-6}/°C):
3.25 (+20 to +300°C)

Environmental & Durability Factors

Operating Temperature (°C):
1 hour @ 500; >100 hours @ 450

Resistance to Temperature Difference (K):
Short Term, 1 hr: 110K
1 - 100 hrs: 90K
Long Term, >100 hrs: 80K

Thermal Shock (K):
Up to 4mm Thick: 175K
4 - 6mm Thick: 160K
6 - 15mm Thick: 150K

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

Reach 247:
Compliant

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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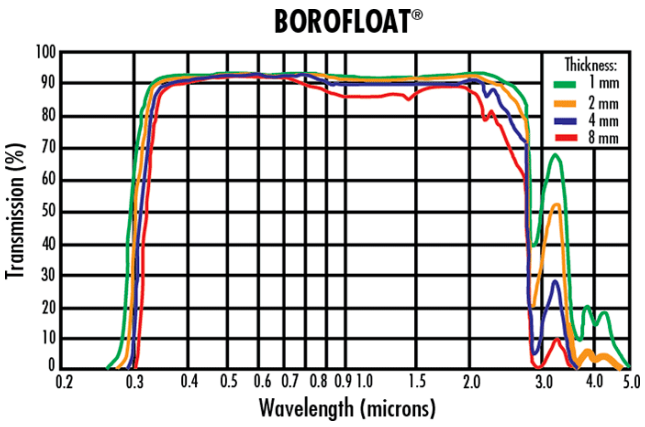
Technical Information



Coating Curves

Quote Your Size

Compatible Mounts

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