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TECHSPEC® 50mm Diameter x 1.1mm Thickness, Uncoated, BOROFLOAT® Window

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TECHSPEC BOROFLOAT Borosilicate Windows

Stock **#39-274** **20+ In Stock**

⊖ 1 ⊕ £27⁴⁰

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Volume Pricing	
Qty 1-5	£27.40 each
Qty 6-25	£21.60 each
Qty 26-99	£20.00 each
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Protective Window **Type:**

Glass **Type of Window:**

Physical & Mechanical Properties

45.00	Clear Aperture CA (mm):
50.00 ±0.5	Diameter (mm):
1.10 ±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/mm²):

Optical Properties

Uncoated	Coating:
BOROFLOAT®	Substrate: □
1.472	Index of Refraction (n_d):
80-50	Surface Quality:
90	Transmission (%):
65.41	Abbe Number (v_d):
350 - 2000	Wavelength Range (nm):
4 - 6λ	Surface Flatness (P-V):

Material Properties

2.23	Density (g/cm³):
525	Transformation Temperature (°C):
3.25 (+20 to +300°C)	Coefficient of Thermal Expansion CTE (10⁻⁶/°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



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Compatible Mounts