

TECHSPEC® 50mm Dia. x 3.0mm Thickness 1.65-3µm Coated Silicon Window



TECHSPEC Silicon (Si) Windows

Stock #17-203 **20+ In Stock**

⊖ 1 ⊕ £307²⁰

ADD TO CART

Volume Pricing	
Qty 1-10	£307.20 each
Qty 11-25	£272.00 each
Qty 26-49	£256.80 each
Need More?	Request Quote

! Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Protective Window **Type:**

Physical & Mechanical Properties

45.00 **Clear Aperture CA (mm):**

Diameter (mm):

50.00 +0.0/-0.1

3.00 ±0.1
Thickness (mm):

<3
Parallelism (arcmin):

Protective as needed
Bevel:

Fine Ground
Edges:

0.27
Poisson's Ratio:

140
Young's Modulus (GPa):

1,150.00
Knoop Hardness (kg/mm²):

Optical Properties

BBAR (1650-3000nm)
Coating:

Silicon (Si)
Substrate:

3.422 @5µm
Index of Refraction (n_d):

60-40
Surface Quality:

R_{avg} <1% @ 1650 - 3000nm
R_{abs} <2% @ 1650 - 3000nm
Coating Specification:

1650 - 3000
Wavelength Range (nm):

1λ
Surface Flatness (P-V):

Material Properties

2.33
Density (g/cm³):

2.55
Coefficient of Thermal Expansion CTE (10⁻⁶/°C):

Regulatory Compliance

[Compliant](#)
RoHS 2015:

[View](#)
Certificate of Conformance:

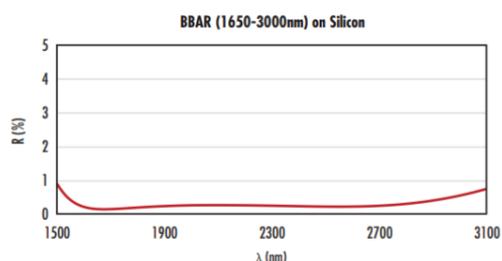
[Compliant](#)
Reach 235:

Product Details

- Transmission from 1.2 - 7µm
- Available Uncoated or AR Coated for 1.65 - 5µm
- Ideal for Weight Sensitive Applications

TECHSPEC® Silicon (Si) Windows manufactured from optical grade silicon are popular for the 1.2 - 7µm spectral region due to their low cost and low density. Due to its low density (half that of [germanium](#) or [zinc selenide](#)), silicon is ideal for weight sensitive applications, especially those in the 1.65 - 5µm region. Density is 2.329 g/cm³ and Knoop Hardness is 1150, making it harder and less brittle than germanium. TECHSPEC® Silicon (Si) Windows available uncoated or AR coated for 1.65 - 5µm. These crystal windows are offered in diameters ranging from 10 – 76.20mm.

Technical Information



Custom

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Compatible Mounts
