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**TECHSPEC® 50.8mm Dia. x 3mm Thickness 1.65-3µm Coated Silicon Window**



TECHSPEC Silicon (Si) Windows

Stock **#20-033** **1 In Stock**

⊖ 1 ⊕ £307<sup>20</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-10	£307.20 each
Qty 11-25	£272.00 each
Qty 26-49	£256.80 each
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**!** Prices shown are exclusive of VAT/local taxes

Product Downloads

**General**

Protective Window **Type:**

**Physical & Mechanical Properties**

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

**Diameter (mm):**

50.80 +0.0/-0.1

3.00 ±0.1 **Thickness (mm):**

<3 **Parallelism (arcmin):**

Protective as needed **Bevel:**

90.00 **Clear Aperture (%):**

Fine Ground **Edges:**

0.27 **Poisson's Ratio:**

140 **Young's Modulus (GPa):**

1,150.00 **Knoop Hardness (kg/mm<sup>2</sup>):**

## Optical Properties

BBAR (1650-3000nm) **Coating:**

Silicon (Si) **Substrate:**

3.422 @5µm **Index of Refraction (n<sub>d</sub>):**

60-40 **Surface Quality:**

**Coating Specification:**  
R<sub>avg</sub> <1% @ 1650 - 3000nm  
R<sub>abs</sub> <2% @ 1650 - 3000nm

1650 - 3000 **Wavelength Range (nm):**

1λ **Surface Flatness (P-V):**

## Material Properties

2.33 **Density (g/cm<sup>3</sup>):**

2.55 **Coefficient of Thermal Expansion CTE (10<sup>-6</sup>/°C):**

## Regulatory Compliance

**RoHS 2015:**  
[Compliant](#)

**Certificate of Conformance:**  
[View](#)

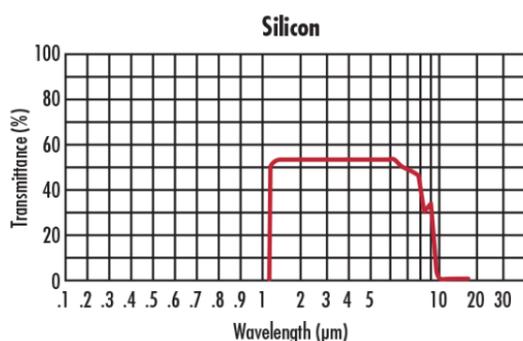
**Reach 235:**  
[Compliant](#)

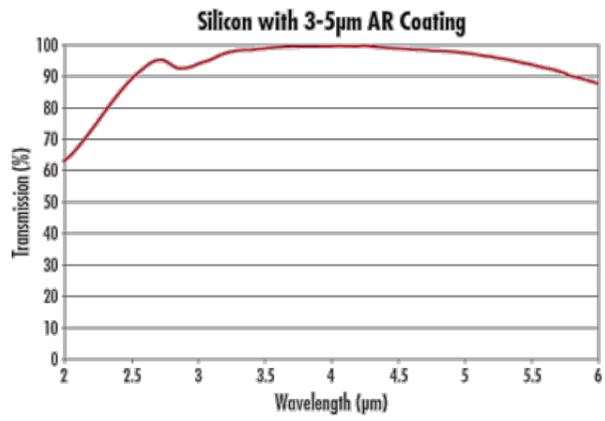
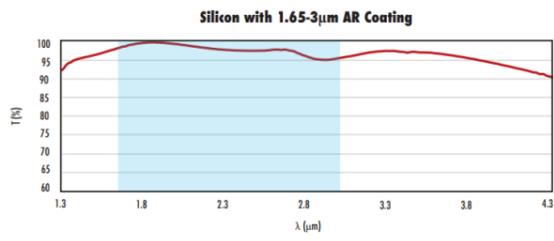
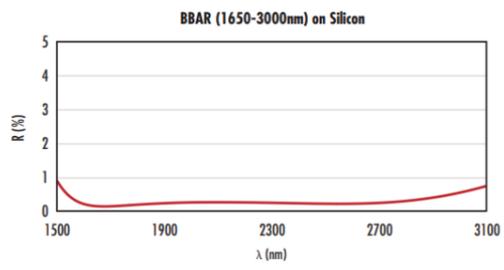
## Product Details

- 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/cm<sup>3</sup> 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