

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



TECHSPEC Silicon (Si) Windows

Stock **#17-203** 17 In Stock

-

1

+

€362<sup>56</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-10       | €362,56 each                  |
| Qty 11-25      | €320,33 each                  |
| Qty 26-49      | €302,82 each                  |
| Need More?     | <a href="#">Request Quote</a> |

 Prices shown are exclusive of VAT/local taxes

Product Downloads

SPECIFICATIONS

General

Protective Window

Type:

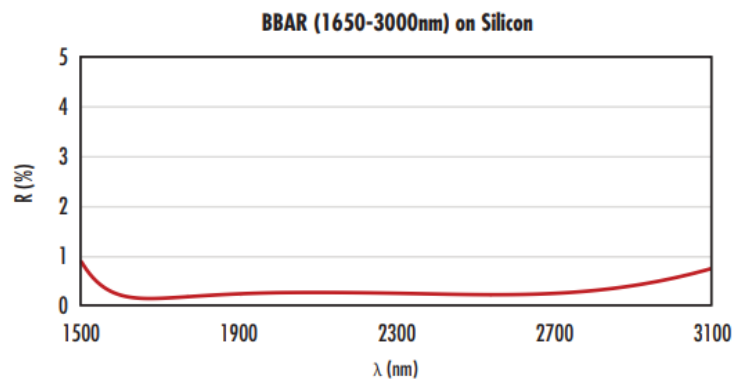
| Physical & Mechanical Properties                                             |                                                              |
|------------------------------------------------------------------------------|--------------------------------------------------------------|
| Protective as needed                                                         | Bevel:                                                       |
| 45.00                                                                        | Clear Aperture CA (mm):                                      |
| 50.00 +0.0/-0.1                                                              | Diameter (mm):                                               |
| 3.00 ±0.1                                                                    | Thickness (mm):                                              |
| Fine Ground                                                                  | Edges:                                                       |
| 1,150.00                                                                     | Knoop Hardness (kg/mm²):                                     |
| <3                                                                           | Parallelism (arcmin):                                        |
| 0.27                                                                         | Poisson's Ratio:                                             |
| 140                                                                          | Young's Modulus (GPa):                                       |
| Optical Properties                                                           |                                                              |
| BBAR (1650-3000nm)                                                           | Coating:                                                     |
| R <sub>avg</sub> <1% @ 1650 - 3000nm<br>R <sub>abs</sub> <2% @ 1650 - 3000nm | Coating Specification:                                       |
| 3.422 @ 5µm                                                                  | Index of Refraction (n <sub>d</sub> ):                       |
| Silicon (Si)                                                                 | Substrate:                                                   |
| 1λ                                                                           | Surface Flatness (P-V):                                      |
| 60-40                                                                        | Surface Quality:                                             |
| 1650 - 3000                                                                  | Wavelength Range (nm):                                       |
| Material Properties                                                          |                                                              |
| 2.55                                                                         | Coefficient of Thermal Expansion CTE (10 <sup>-6</sup> /°C): |
| 2.33                                                                         | Density (g/cm³):                                             |
| 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