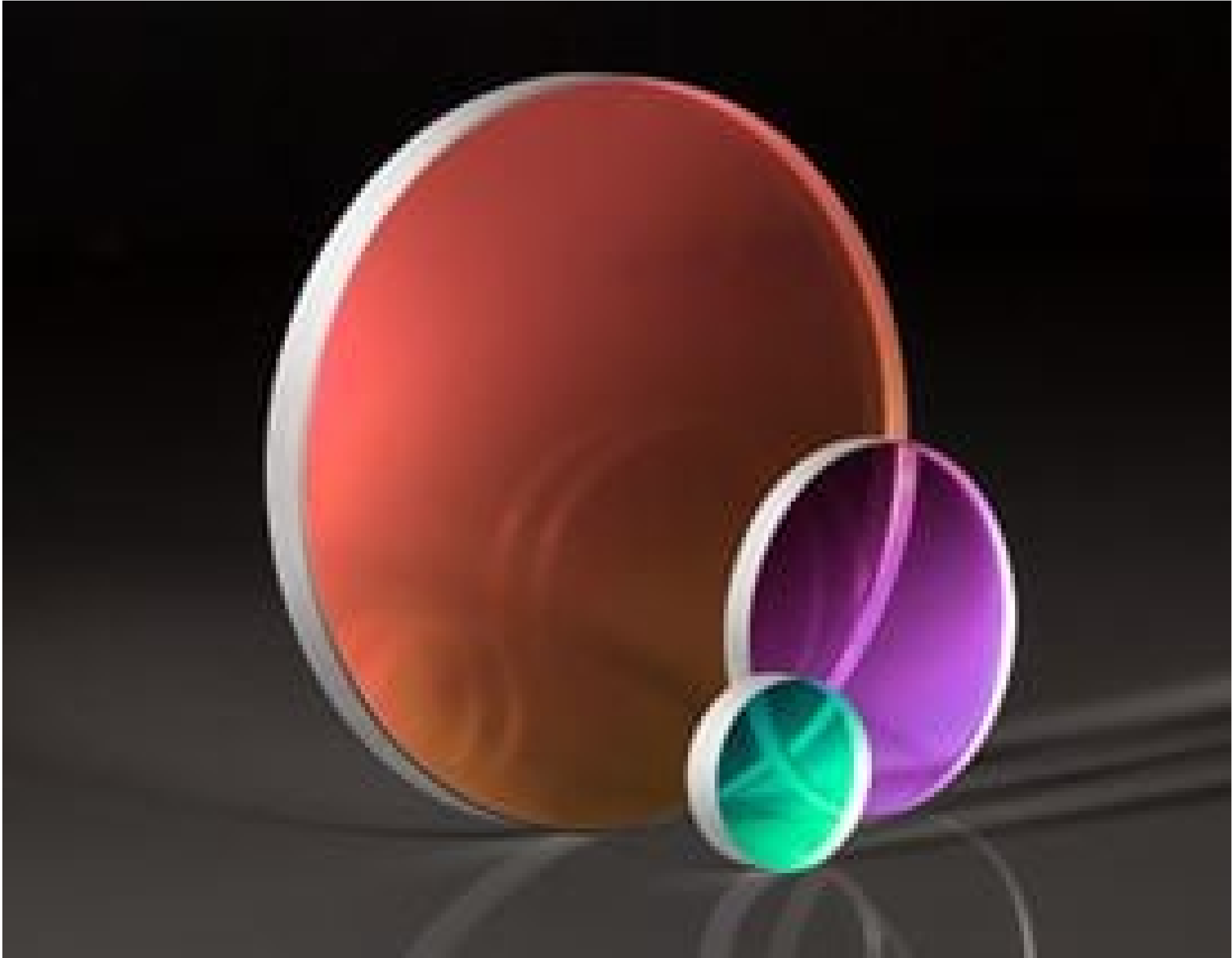


12.7mm Dia., 1mm Thick, Uncoated, ISP Optics Quartz Window | Q-W-12-1

See More by [ISP Optics](#)



Stock **#24-594** CLEARANCE CONTACT US

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€51<sup>48</sup>

€102,95

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Product Downloads

SPECIFICATIONS

General

Protective Window

Type:

Q-W-12-1

Model Number:

| Physical & Mechanical Properties                                                                                            |                                        |
|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| Protective as needed                                                                                                        | Bevel:                                 |
| 85                                                                                                                          | Clear Aperture (%):                    |
| 10.79                                                                                                                       | Clear Aperture CA (mm):                |
| 12.70 +0.00/-0.13                                                                                                           | Diameter (mm):                         |
| 1.00 ±0.13                                                                                                                  | Thickness (mm):                        |
| Fine Ground                                                                                                                 | Edges:                                 |
| 522.00                                                                                                                      | Knoop Hardness (kg/mm²):               |
| <3                                                                                                                          | Parallelism (arcmin):                  |
| 0.16                                                                                                                        | Poisson's Ratio:                       |
| 73                                                                                                                          | Young's Modulus (GPa):                 |
| Optical Properties                                                                                                          |                                        |
| 67.8                                                                                                                        | Abbe Number (v <sub>d</sub> ):         |
| Uncoated                                                                                                                    | Coating:                               |
| 1.458                                                                                                                       | Index of Refraction (n <sub>d</sub> ): |
| Quartz                                                                                                                      | Substrate:                             |
| 1λ per inch @ 633nm                                                                                                         | Surface Flatness (P-V):                |
| 40-20                                                                                                                       | Surface Quality:                       |
| 190 - 3500                                                                                                                  | Wavelength Range (nm):                 |
| Material Properties                                                                                                         |                                        |
| Coefficient of Thermal Expansion CTE (10 <sup>-6</sup> /°C):<br>0.52 (+5 to +35°C) 0.57 (0 to +200°C) 0.48 (-100 to +200°C) |                                        |
| 2.20                                                                                                                        | Density (g/cm³):                       |
| Regulatory Compliance                                                                                                       |                                        |
| Compliant                                                                                                                   | RoHS 2015:                             |
| View                                                                                                                        | Certificate of Conformance:            |
| Compliant                                                                                                                   | Reach 240:                             |

## PRODUCT DETAILS

- High Transmission from 190 - 3500nm
- High Chemical Resistance
- Low Coefficient of Thermal Expansion

ISP Optics Quartz Windows feature crystalline quartz (SiO<sub>2</sub>) substrates, providing high transmission from the UV to the MMR. Unlike fused silica, crystalline quartz does not have hydroxide ion impurities, allowing for its use between 1.4 - 2.7μm with no dips in transmission. The material also has high chemical resistance, a low coefficient of thermal expansion, and relatively high hardness, making these windows advantageous for use in harsh environments or those with fluctuating temperatures. ISP Optics Quartz Windows are ideal for use in UV, visible, or infrared applications as protective windows to protect sensors, lasers, or other electro-optical components.