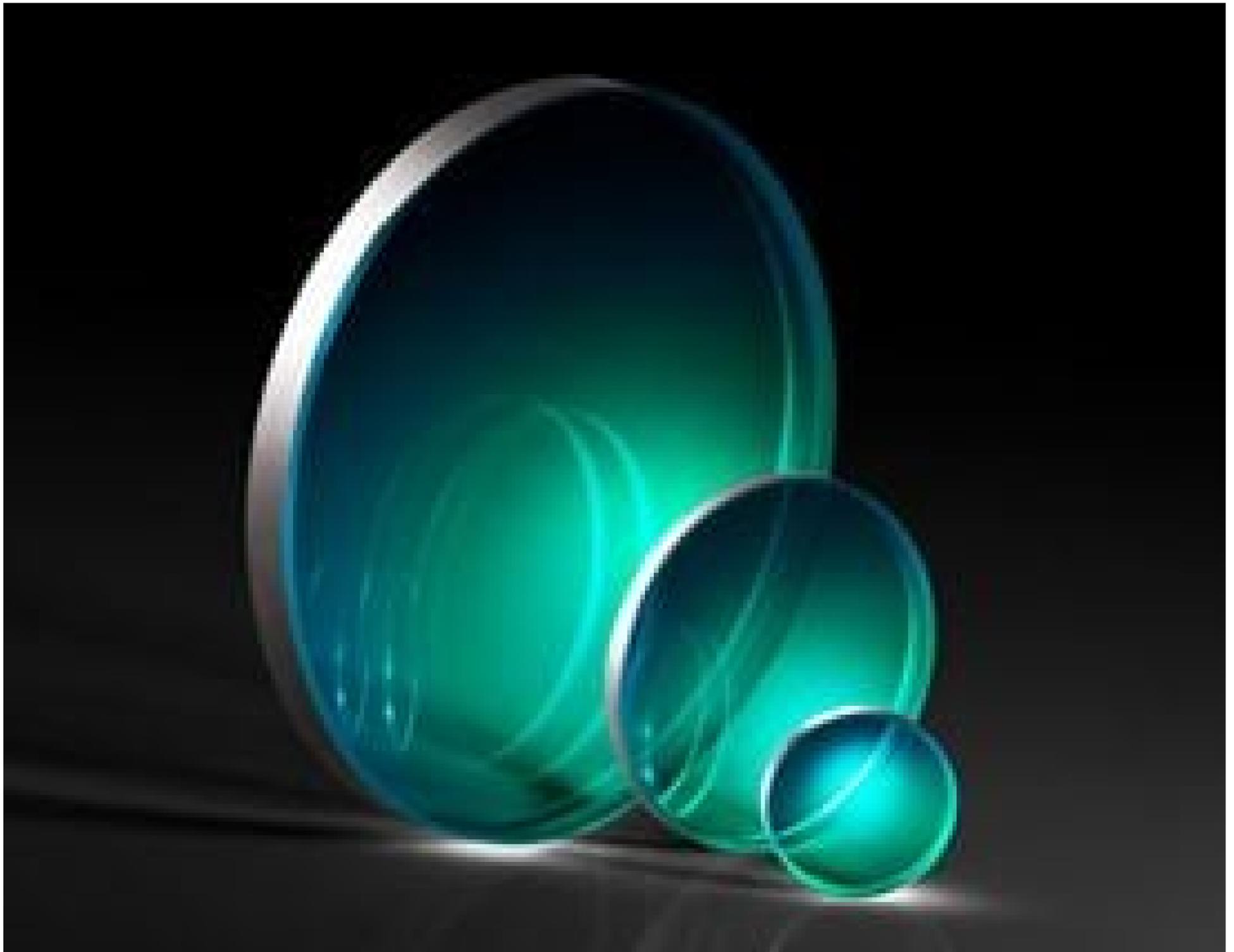


**TECHSPEC®  $\lambda/4$ -Quarzglasfenster, 125 mm Durchm., 3 mm Dicke, NIR-I-beschichtet**



TECHSPEC®  $\lambda/4$  UV Fused Silica Windows

Produkt **#29-623** **2 In Stock**

⊖ 1 ⊕ €1.010<sup>00</sup>

**+ WARENKORB**

Mengenrabatte	
Stk. 1-5	€1.010,00 stückpreis
Stk. 6-25	€805,00 stückpreis
Stk. 26-49	€755,00 stückpreis
Need More?	<a href="#">Angebotsanfrage</a>

ⓘ Preise exklusiv der geltenden Mehrwertsteuer und Abgaben

Downloadbereich

**Produktdetails**

Protective Window **Typ:**

**Physikalische und mechanische Eigenschaften**

90.00 **Freie Apertur CA (mm):**

**Durchmesser (mm):**

125.00 +0.00/-0.20

3.00 ±0.10 **Dicke (mm):**

<1 **Parallelität (Bogenminuten):**

Protective as needed **Fase:**

90 **Freie Apertur (%):**

Fine Ground **Kanten:**

0.16 **Poisson-Zahl:**

73 **Elastizitätsmodul (GPa):**

522.00 **Knoop-Härte (kg/mm<sup>2</sup>):**

## Optische Eigenschaften

NIR I (600-1050nm) **Beschichtung:**

[Fused Silica](#) **Substrat:**

1.458 **Brechungsindex (n<sub>d</sub>):**

40-20 **Oberflächenqualität:**

λ/4 (per inch within clear aperture) **Transmittierte Wellenfront, P-V:**

67.8 **Abbe-Zahl (v<sub>d</sub>):**

R<sub>avg</sub> ≤0.5% @ 600 - 1050nm **Beschichtungsspezifikation:**

600 - 1050 **Wellenlängenbereich (nm):**

7 J/cm<sup>2</sup> @ 1064nm, 10ns **Zerstörschwelle, Referenz:**

## Materialeigenschaften

2.20 **Dichte (g/cm<sup>3</sup>):**

**Thermischer Ausdehnungskoeffizient CTE (10<sup>-6</sup>/°C):**  
0.52 (+5 to +35°C)  
0.57 (0 to +200°C)  
0.48 (-100 to +200°C)

## Konformität mit Standards

[Anzeigen](#) **Konformitätszertifikat:**

## Gewünschte Spezifikationen nicht dabei?

Edmund Optics bietet einen umfangreichen kundenspezifischen Fertigungsservice für Optik- und Bildverarbeitungskomponenten an, speziell hergestellt für Ihre Anwendungsanforderungen. Wir ermöglichen flexible Lösungen für Ihre Bedürfnisse – von der Prototypenphase bis zur Serienfertigung. Unsere erfahrenen IngenieurInnen freuen sich auf die Zusammenarbeit und unterstützen Sie bei jedem Projektschritt.

Unser Service beinhaltet:

- Kundenspezifische Abmessungen, Materialien und mehr
- Hochpräzise Oberflächenqualität und -ebenheit
- Enge Toleranzen und komplexe Formen
- Skalierbare Produktion – vom Prototypen zur Serie

Erfahren Sie mehr über unsere [kundenspezifischen Fertigungsmöglichkeiten](#) oder senden Sie [hier](#) eine Anfrage.

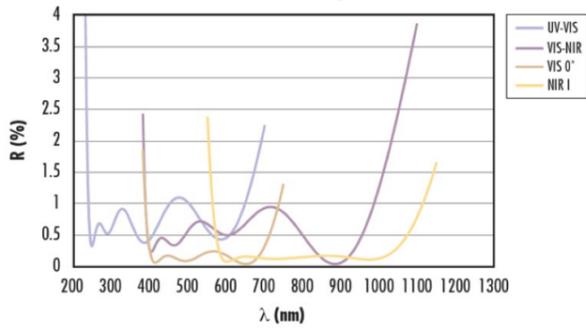
## Produktdetails

- Verfügbar unbeschichtet sowie BBAR-beschichtet für UV, VIS und NIR
- Ideal für Bildverarbeitungsanwendungen
- Rund oder rechteckig mit Größen von 5 bis 200 mm
- 1λ- oder λ/10-Fenster aus UV-Quarzglas sind ebenfalls verfügbar

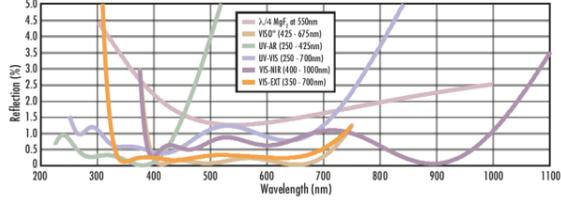
TECHSPEC® λ/4-Fenster aus UV-Quarzglas haben eine Oberflächenqualität von 40-20 und einen transmittierten Wellenfrontfehler von λ/4. Dies macht sie ideal für Bildverarbeitungsanwendungen. Die Fenster bestehen aus UV-Quarzglas substraten und bieten eine hohe Transmission vom ultravioletten über den sichtbaren bis zum nahinfraroten Bereich. Es sind breitbandige Antireflexionsbeschichtungen (BBAR) verfügbar, um Reflexionsverluste zu minimieren und die Transmission zu erhöhen. TECHSPEC® λ/4-Fenster aus UV-Quarzglas werden in optischen Bildgebungsanwendungen, in Laseranwendungen mit geringer oder mittlerer Leistung und als Schutzfenster für Anwendungen, die eine hohe UV-Transmission erfordern, eingesetzt.

## Technische Informationen

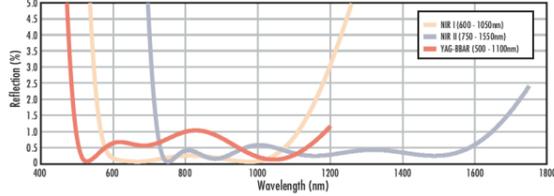
### Anti-Reflection Coating Curves



### Standard Visible Anti-Reflection Coatings

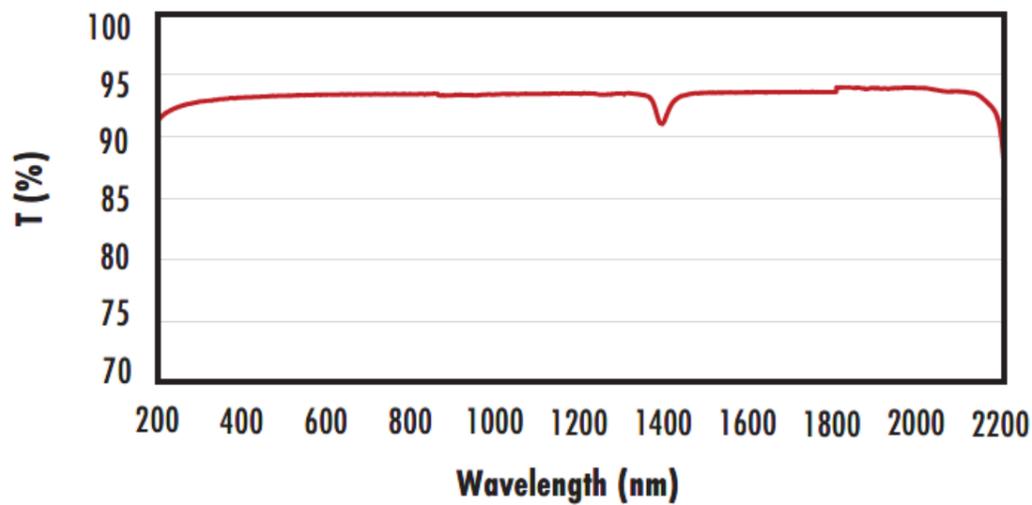


### Standard Near Infrared Anti-Reflection Coatings



## FUSED SILICA

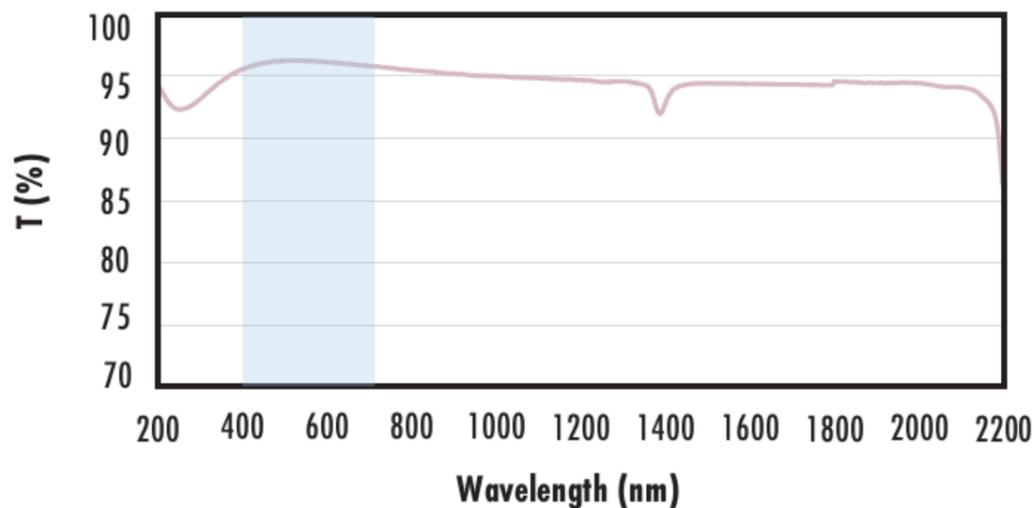
### Uncoated Fused Silica Typical Transmission



Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra.

[Click Here to Download Data](#)

### Fused Silica with MgF<sub>2</sub> Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.

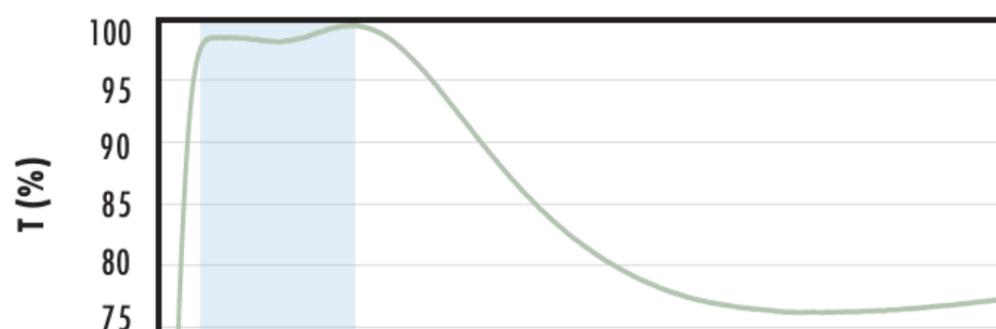
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 1.75\% @ 400 - 700\text{nm (N-BK7)}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### Fused Silica with UV-AR Coating Typical Transmission



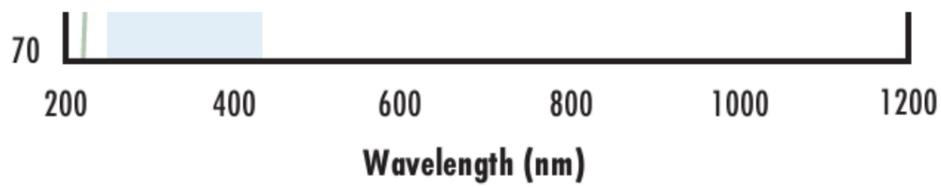
Typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

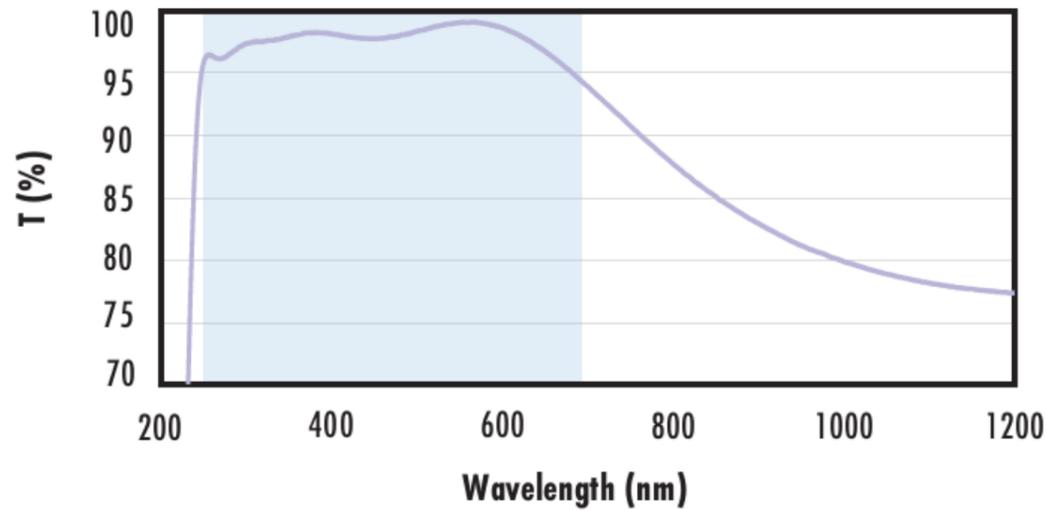
$$\begin{aligned} R_{abs} &\leq 1.0\% @ 250 - 425\text{nm} \\ R_{avg} &\leq 0.75\% @ 250 - 425\text{nm} \\ R_{avg} &\leq 0.5\% @ 370 - 420\text{nm} \end{aligned}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)



### Fused Silica with UV-VIS Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

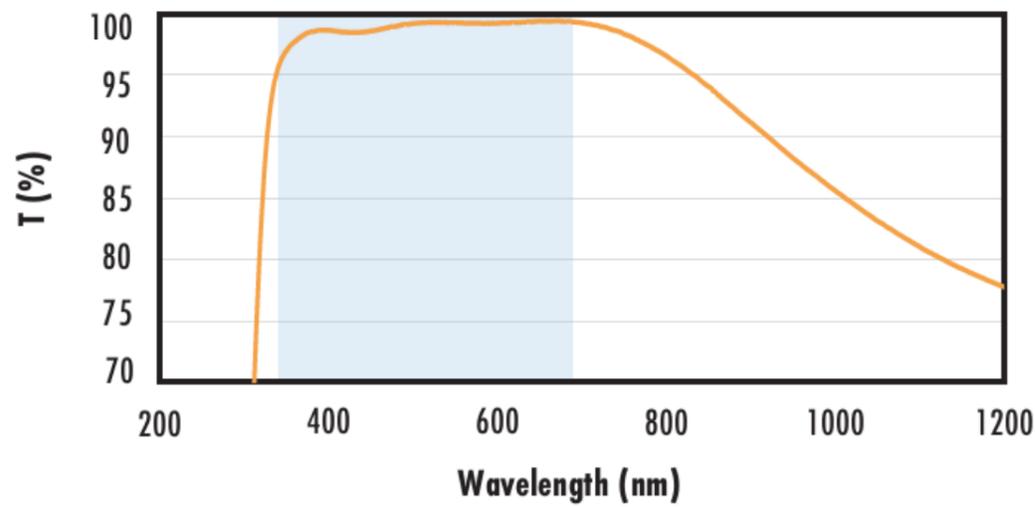
$$R_{abs} \leq 1.0\% @ 350 - 450\text{nm}$$

$$R_{avg} \leq 1.5\% @ 250 - 700\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### Fused Silica with VIS-EXT Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.

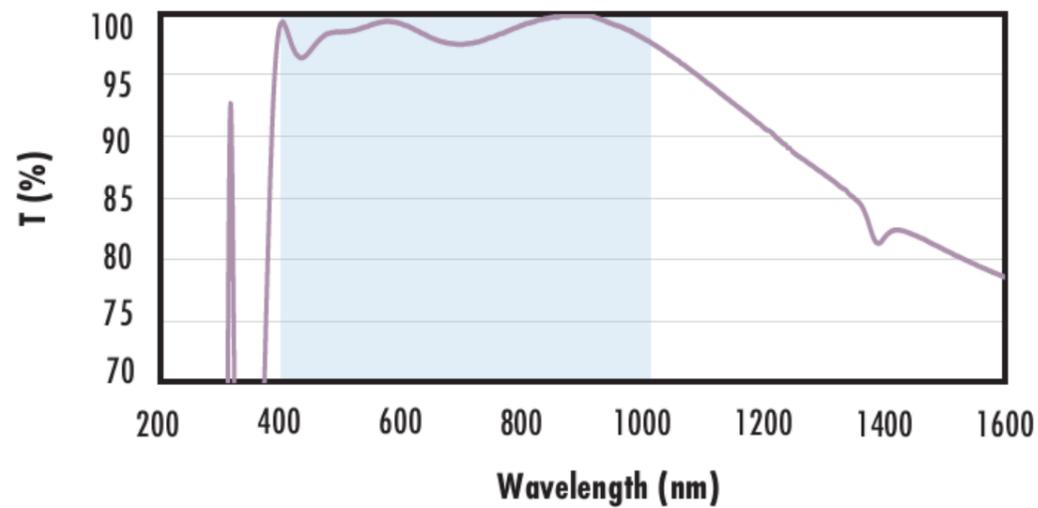
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.5\% @ 350 - 700\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### Fused Silica with VIS-NIR Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{abs} \leq 0.25\% @ 880\text{nm}$$

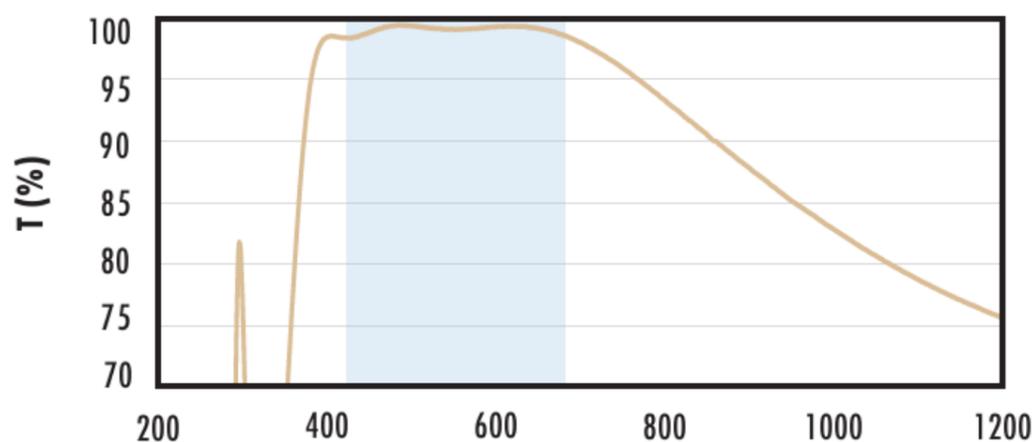
$$R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$$

$$R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### Fused Silica with VIS 0° Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

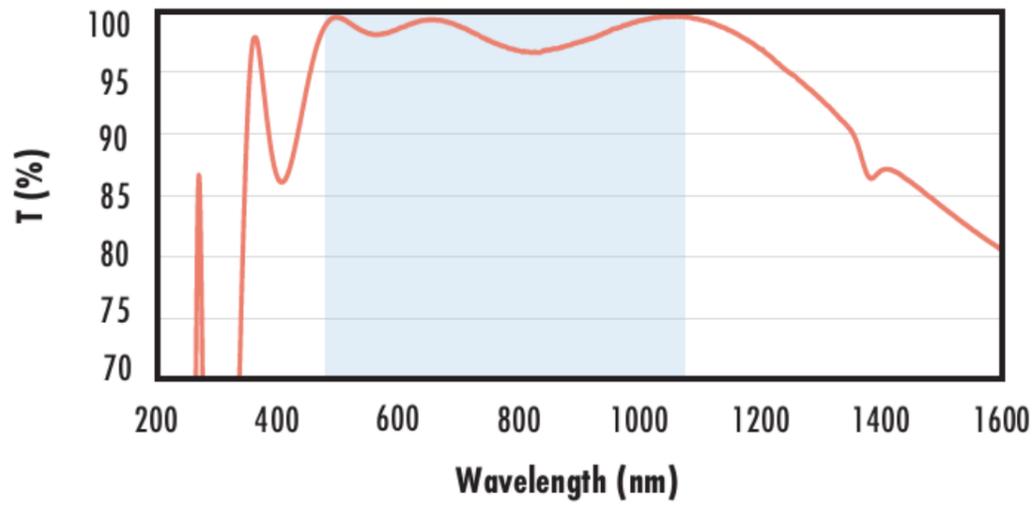
$$R_{avg} \leq 0.4\% @ 425 - 675\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

Wavelength (nm)

### Fused Silica with YAG-BBAR Coating Typical Transmission



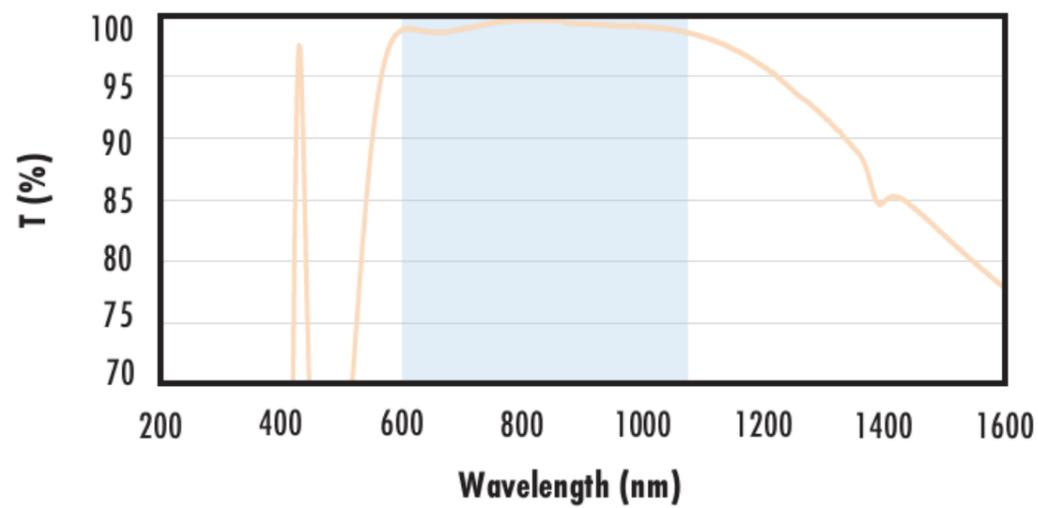
Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.  
The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{abs} \leq 0.25\%$  @ 532nm  
 $R_{abs} \leq 0.25\%$  @ 1064nm  
 $R_{avg} \leq 1.0\%$  @ 500 - 1100nm

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### Fused Silica with NIR I Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.

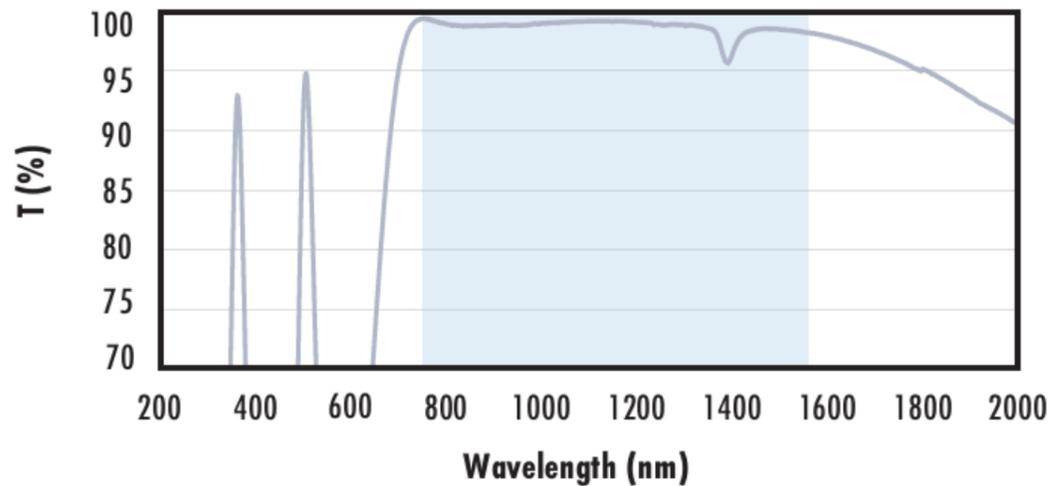
The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{avg} \leq 0.5\%$  @ 600 - 1050nm

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

### Fused Silica with NIR II Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with NIR II (750 - 1550nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{abs} \leq 1.5\%$  @ 750 - 800nm  
 $R_{abs} \leq 1.0\%$  @ 800 - 1550nm  
 $R_{avg} \leq 0.7\%$  @ 750 - 1550nm

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)