

TECHSPEC<sup>®</sup> 1λ-Quarzglasfenster, 50 mm Durchmesser, 3 mm Dicke, VIS-EXT-beschichtet



TECHSPEC® 1λ UV Fused Silica Windows

Produkt **#25-207** **6 In Stock**

-

1

+

€178<sup>.00</sup>

+ WARENKORB

| Mengenrabatte |                                 |
|---------------|---------------------------------|
| Stk. 1-5      | €178,00 stückpreis              |
| Stk. 6-25     | €142,00 stückpreis              |
| Stk. 26-49    | €133,00 stückpreis              |
| Need More?    | <a href="#">Angebotsanfrage</a> |

Preise exklusiv der geltenden Mehrwertsteuer und Abgaben

Downloadbereich

274.00

#Sorting:

Produktdetails

Protective Window

Typ:

Physikalische und mechanische Eigenschaften

Freie Apertur CA (mm):

|                      |                              |
|----------------------|------------------------------|
| 45.00                |                              |
|                      | Durchmesser (mm):            |
| 50.00 +0.00/-0.20    |                              |
|                      | Dicke (mm):                  |
| 3.00 ±0.38           |                              |
|                      | Parallelität (Bogenminuten): |
| <5                   |                              |
|                      | Fase:                        |
| Protective as needed |                              |
|                      | Freie Apertur (%):           |
| 90                   |                              |
|                      | Kanten:                      |
| Fine Ground          |                              |
|                      | Poisson-Zahl:                |
| 0.16                 |                              |
|                      | Elastizitätsmodul (GPa):     |
| 73                   |                              |
|                      | Knoop-Härte (kg/mm²):        |
| 522.00               |                              |

Optische Eigenschaften

|                                             |                                    |
|---------------------------------------------|------------------------------------|
|                                             | Beschichtung:                      |
| VIS-EXT (350-700nm)                         |                                    |
|                                             | Substrat: <input type="checkbox"/> |
| <a href="#">Fused Silica</a> (Corning 7980) |                                    |
|                                             | Brechungsindex (n <sub>d</sub> ):  |
| 1.458                                       |                                    |
|                                             | Oberflächenqualität:               |
| 60-40                                       |                                    |
|                                             | Transmittierte Wellenfront, P-V:   |
| 1λ                                          |                                    |
|                                             | Abbe-Zahl (v <sub>d</sub> ):       |
| 67.8                                        |                                    |
|                                             | Beschichtungsspezifikation:        |
| R <sub>avg</sub> ≤0.5% @ 350 - 700nm        |                                    |
|                                             | Wellenlängenbereich (nm):          |
| 350 - 700                                   |                                    |
|                                             | Zerstörschwelle, Referenz:         |
| 5 J/cm² @ 532nm, 10ns                       |                                    |

Materialeigenschaften

|                       |                                                                |
|-----------------------|----------------------------------------------------------------|
|                       | Dichte (g/cm³):                                                |
| 2.20                  |                                                                |
|                       | 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) |                                                                |
|                       | Güte Quarzglas:                                                |
| 7980 0G               |                                                                |

Konformität mit Standards

|                          |                         |
|--------------------------|-------------------------|
|                          | RoHS 2015:              |
| <a href="#">Konform</a>  |                         |
|                          | Konformitätszertifikat: |
| <a href="#">Anzeigen</a> |                         |
|                          | Reach 235:              |
| <a href="#">Konform</a>  |                         |

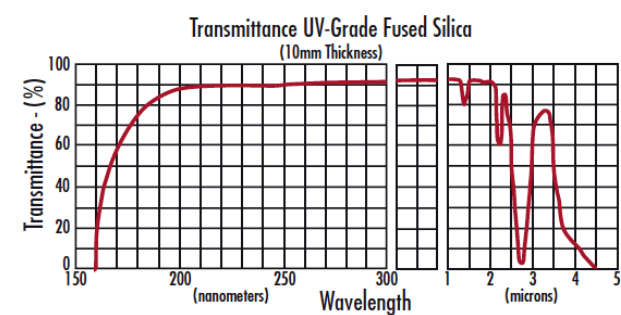
Produktdetails

- Lieferbar ohne Beschichtung oder mit breitbandiger Antireflexionsbeschichtung
- Ideal für kostenkritische breitbandige Anwendungen
- Rund oder quadratisch mit Größen von 5 mm bis 100 mm
- [λ/4](#)- oder [λ/10](#)-Fenster aus UV-Quarzglas ebenfalls erhältlich

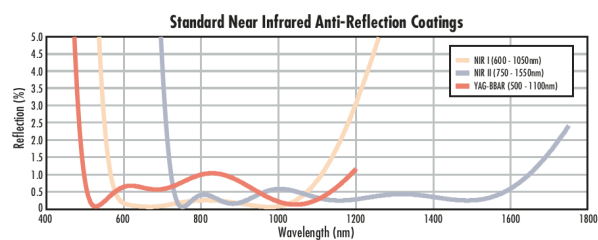
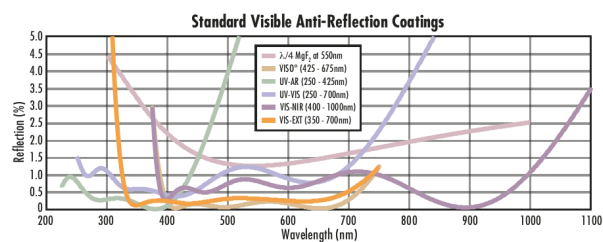
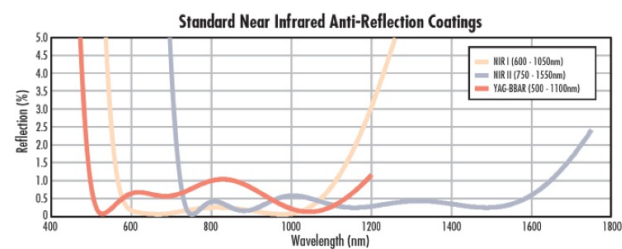
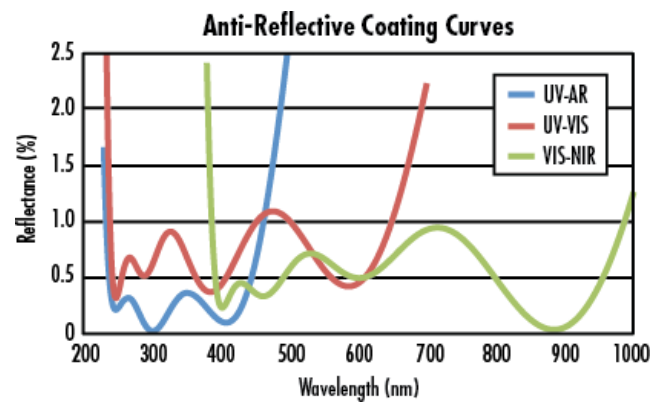
TECHSPEC® 1λ-Fenster aus UV-Quarzglas werden präzise aus synthetischem UV-Quarzglas gefertigt. Das synthetische Quarzglas hat nicht nur bessere Transmissionseigenschaften, sondern auch bessere thermische Eigenschaften und zeichnet sich durch außergewöhnliche Reinheit und Beständigkeit gegenüber Umwelteinflüssen bei anspruchsvollen Anwendungen aus. Die Fenster eignen sich ideal für kostensensible Breitband-Anwendungen und sind sowohl unbeschichtet als auch mit breitbandiger Antireflexionsbeschichtung lieferbar. TECHSPEC® 1λ-Fenster aus UV-Quarzglas werden rund oder quadratisch mit Größen von 5 mm bis 100 mm angeboten.

**Bitte beachten Sie:** Neue Produkte, die zu dieser Produktfamilie hinzugefügt werden, können mit der transmittierten Wellenfrontverzerrung (TWD) und nicht mehr mit der Oberflächenebenheit spezifiziert sein. Weitere Informationen über den Unterschied zwischen den beiden Spezifikationen finden Sie unter [Grundlagen optischer Fenster](#).

Technische Informationen

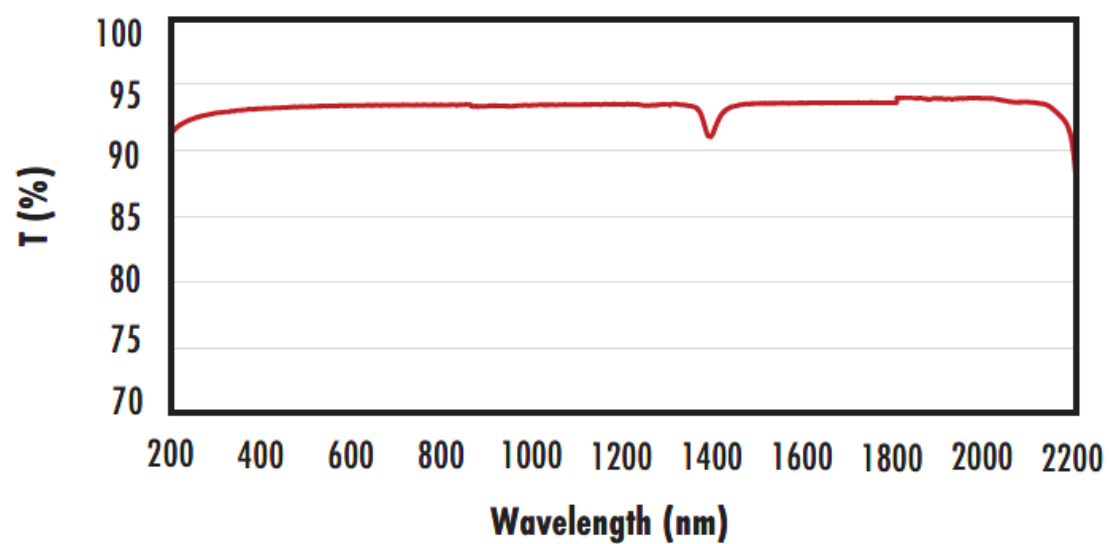


UV FS Transmission Curve



## FUSED SILICA

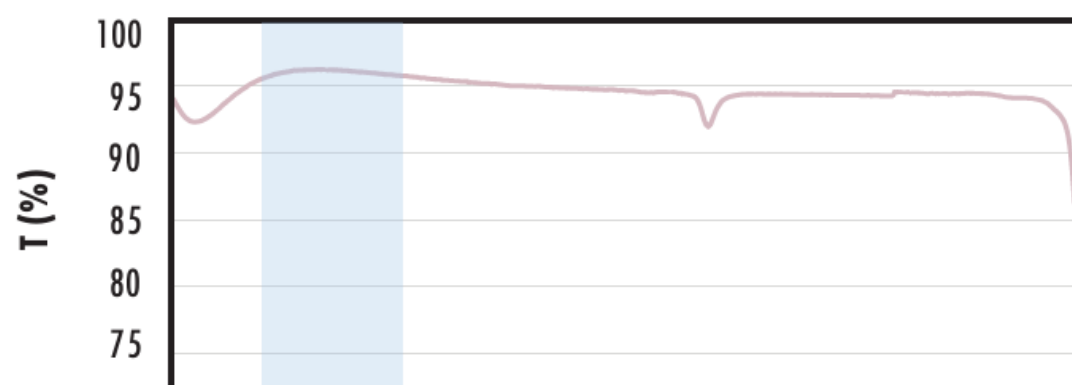
### Uncoated Fused Silica Typical Transmission



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



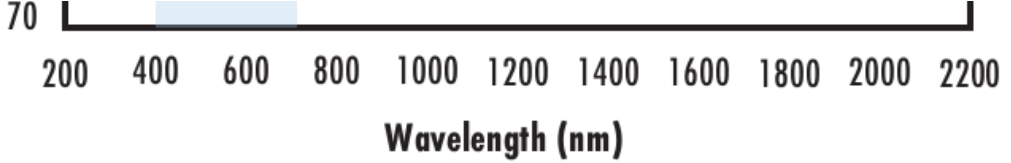
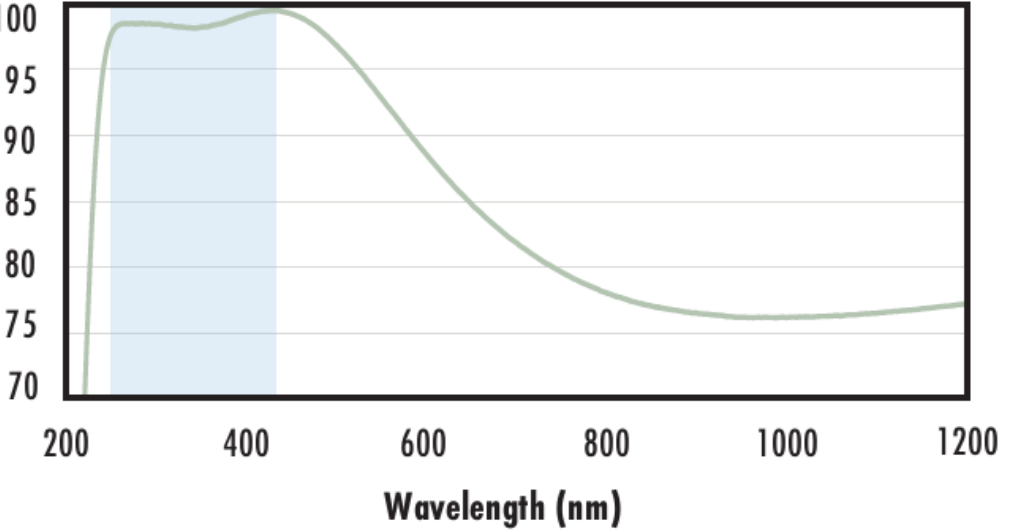
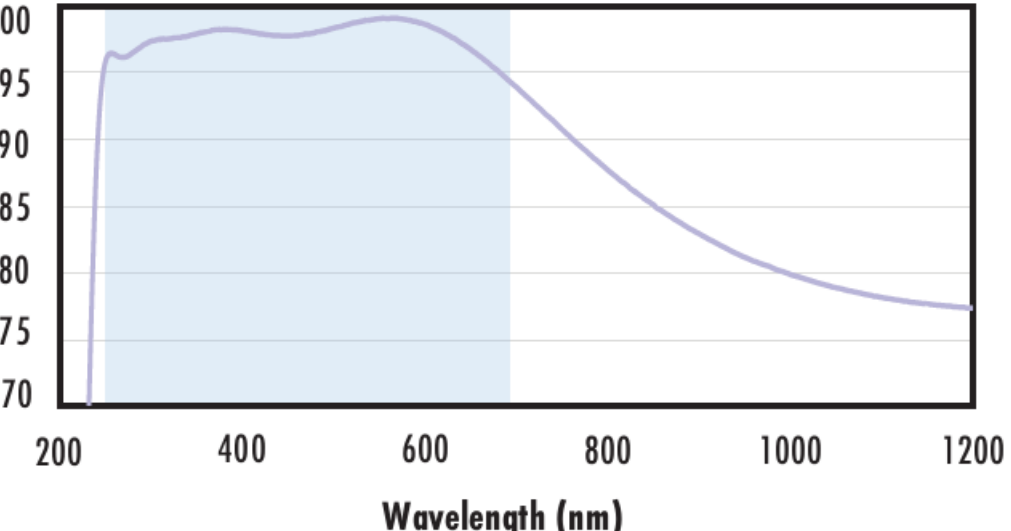
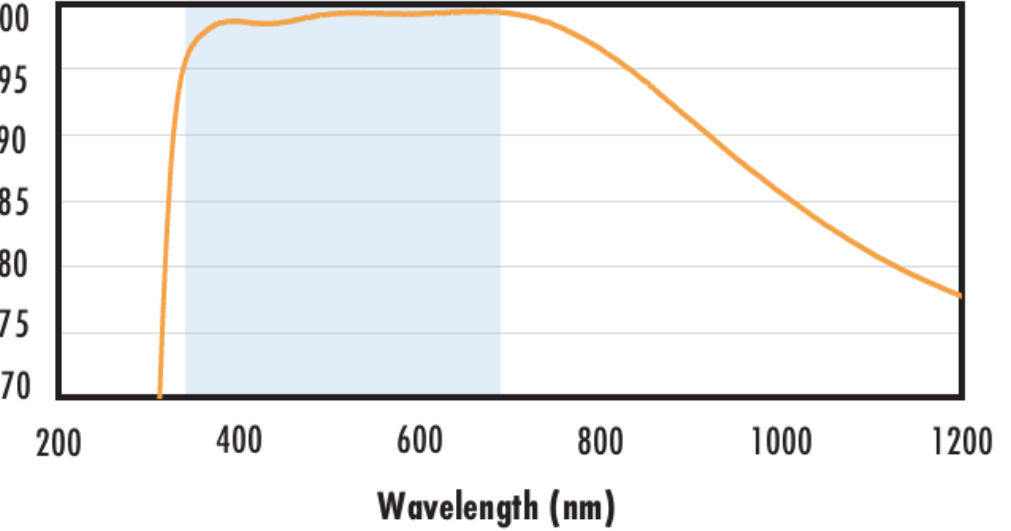
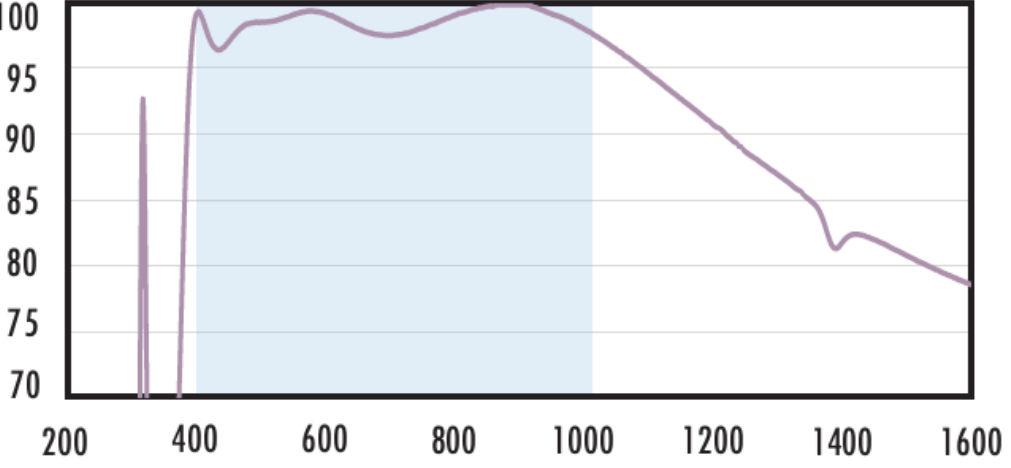
Typical transmission of a 3mm thick fused silica window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.

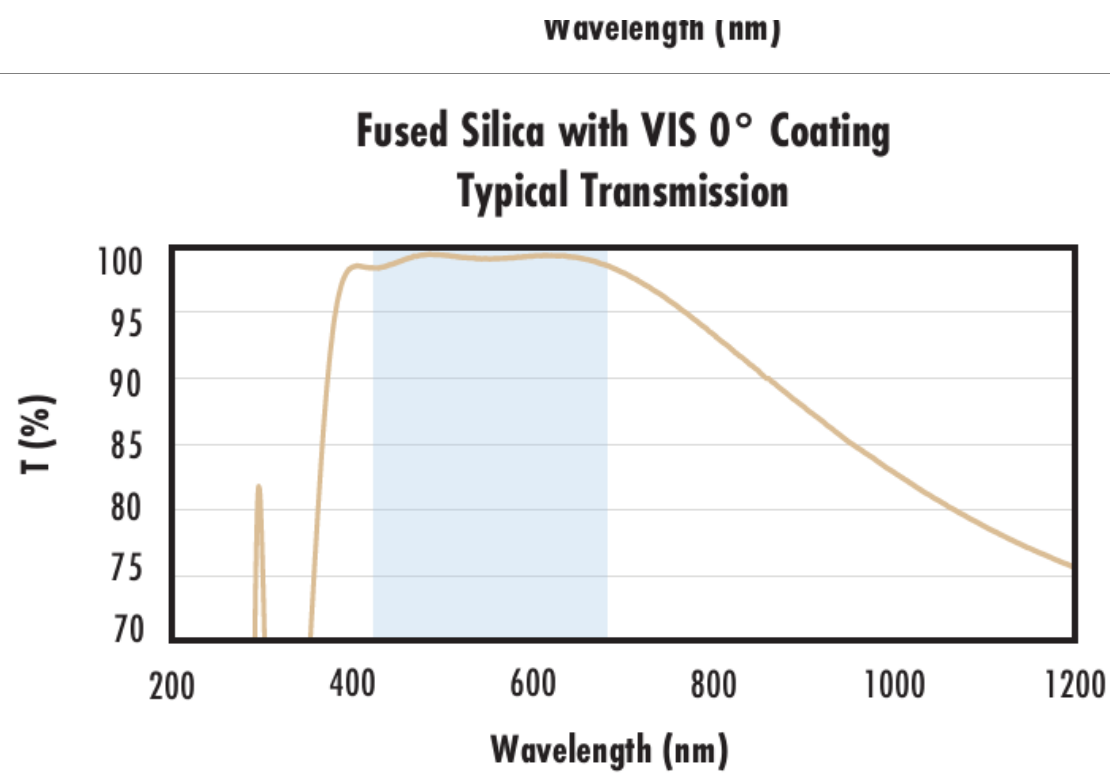
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

|                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <p data-bbox="583 270 1075 371"><b>Fused Silica with UV-AR Coating</b><br/><b>Typical Transmission</b></p>        | <p data-bbox="1329 427 1856 474">Typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) coating at 0° AOI.</p> <p data-bbox="1329 489 1856 537">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 552 1709 626"><p><math>R_{abs} \leq 1.0\% \text{ @ } 250 - 425\text{nm}</math></p><p><math>R_{avg} \leq 0.75\% \text{ @ } 250 - 425\text{nm}</math></p><p><math>R_{avg} \leq 0.5\% \text{ @ } 370 - 420\text{nm}</math></p></div> <p data-bbox="1329 641 1856 688">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 703 1709 721"><a href="#">Click Here to Download Data</a></p>           |
| <p data-bbox="575 946 1083 1047"><b>Fused Silica with UV-VIS Coating</b><br/><b>Typical Transmission</b></p>    | <p data-bbox="1329 1104 1856 1151">Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.</p> <p data-bbox="1329 1166 1856 1213">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 1228 1709 1276"><p><math>R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}</math></p><p><math>R_{avg} \leq 1.5\% \text{ @ } 250 - 700\text{nm}</math></p></div> <p data-bbox="1329 1317 1856 1365">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 1380 1709 1397"><a href="#">Click Here to Download Data</a></p>                                                                     |
| <p data-bbox="569 1626 1077 1727"><b>Fused Silica with VIS-EXT Coating</b><br/><b>Typical Transmission</b></p>  | <p data-bbox="1329 1804 1856 1852">Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.</p> <p data-bbox="1329 1866 1856 1914">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 1929 1709 1952"><p><math>R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}</math></p></div> <p data-bbox="1329 1967 1856 2015">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 2030 1709 2047"><a href="#">Click Here to Download Data</a></p>                                                                                                                                        |
| <p data-bbox="575 2303 1083 2404"><b>Fused Silica with VIS-NIR Coating</b><br/><b>Typical Transmission</b></p>  | <p data-bbox="1329 2442 1856 2490">Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.</p> <p data-bbox="1329 2504 1856 2552">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 2567 1709 2641"><p><math>R_{abs} \leq 0.25\% \text{ @ } 880\text{nm}</math></p><p><math>R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}</math></p><p><math>R_{avg} \leq 1.25\% \text{ @ } 890 - 1000\text{nm}</math></p></div> <p data-bbox="1329 2680 1856 2727">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 2742 1709 2760"><a href="#">Click Here to Download Data</a></p> |



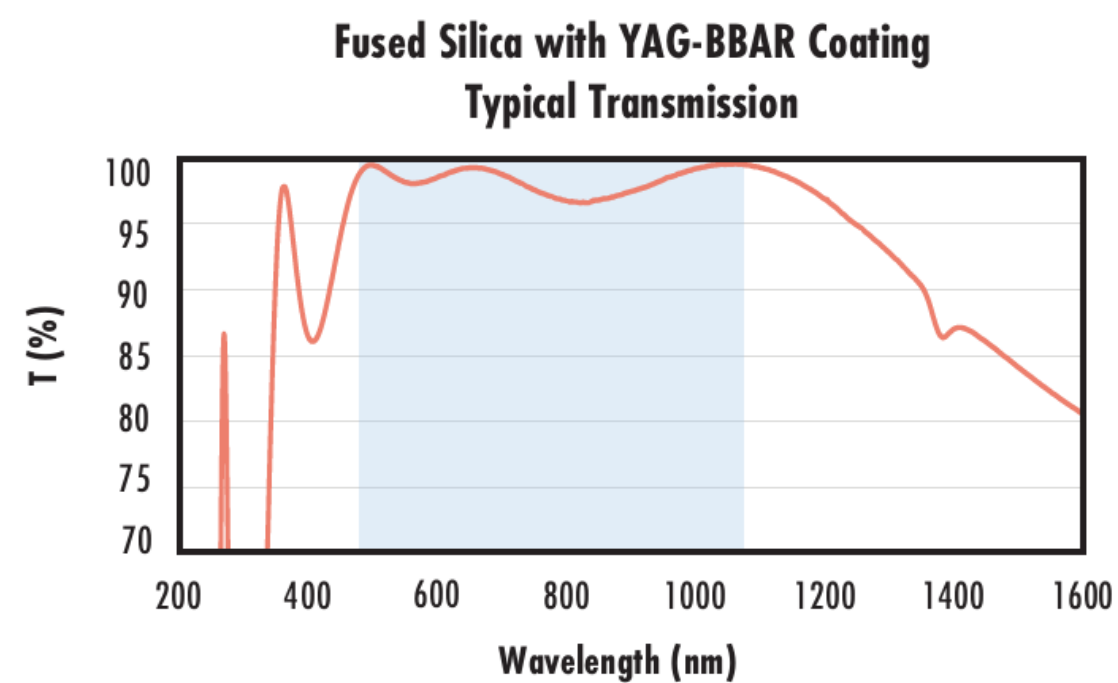
Typical transmission of a 3mm thick fused silica window with MS  
0° (425-675nm) coating at 0° AOI.

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

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

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

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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:

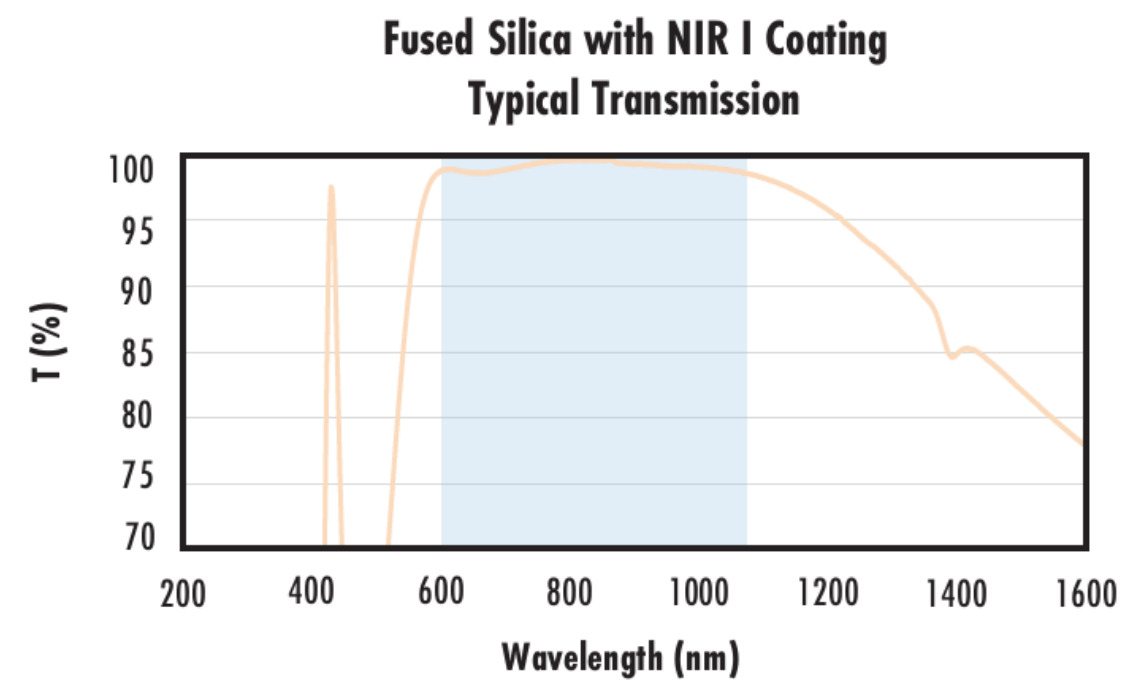
$$R_{\text{abs}} \leq 0.25\% @ 532\text{nm}$$

$R_{\text{abs}} \leq 0.25\% @ 1064\text{nm}$

$$R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}$$

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

[Click Here to Download Data](#)



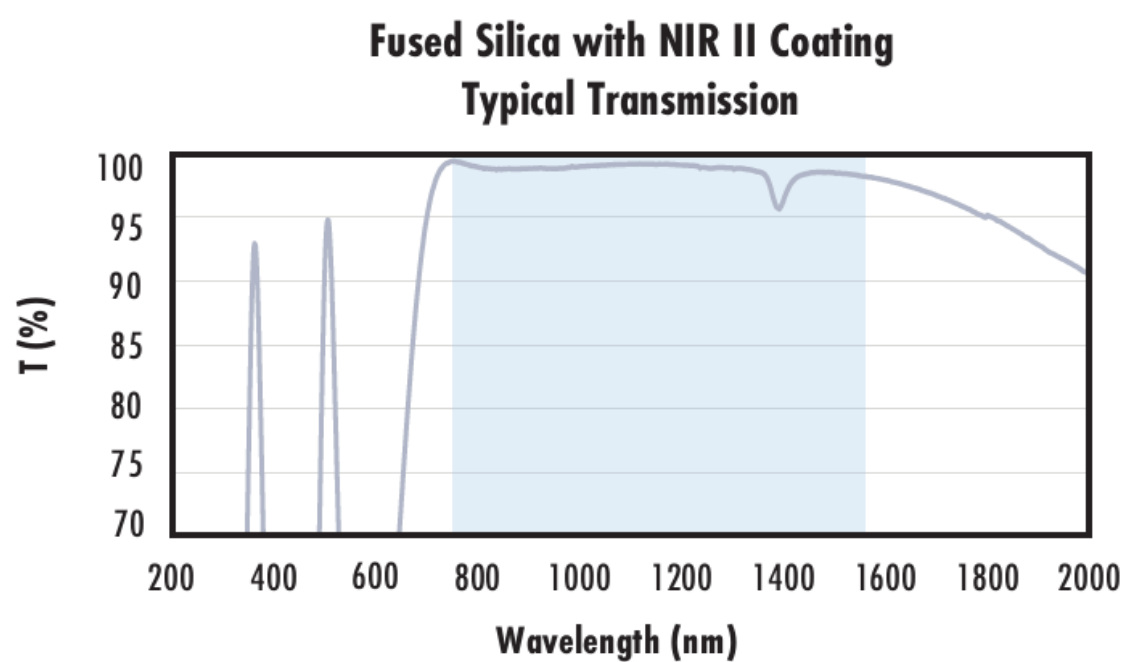
Typical transmission of a 3mm thick fused silica window with NIR  
I (600 - 1050nm) coating at 0° AOI.

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

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

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

[Click Here to Download Data](#)



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:

$R_{\text{abs}} \leq 1.5\% @ 750 - 800\text{nm}$

$$R_{\text{abs}} \leq 1.5\% @ 750 - 800\text{nm}$$

$$R_{\text{abs}} \leq 1.0\% @ 800 - 1550\text{nm}$$

$$R_{avg} \leq 0.7\% @ 750 - 1550nm$$

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

[Click Here to Download Data](#)

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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.

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