

TECHSPEC<sup>®</sup>

1λ-Quarzglasfenster, 25,4 mm Durchmesser, 4 mm Dicke, YAGG-BBAR-beschichtet



TECHSPEC<sup>®</sup> 1λ UV Fused Silica Windows

Produkt **#25-339** **5 In Stock**

-

1

+

€120<sup>,00</sup>

+ WARENKORB

| Mengenrabatte |                                 |
|---------------|---------------------------------|
| Stk. 1-5      | €120,00 stückpreis              |
| Stk. 6-25     | €95,50 stückpreis               |
| Stk. 26-49    | €89,50 stückpreis               |
| Need More?    | <a href="#">Angebotsanfrage</a> |

ⓘ Preise exklusiv der geltenden Mehrwertsteuer und Abgaben

| Downloadbereich |
|-----------------|
|-----------------|

|        |           |
|--------|-----------|
| 198.00 | #Sorting: |
|--------|-----------|

| Produktdetails |
|----------------|
|----------------|

|                   |      |
|-------------------|------|
| Protective Window | Typ: |
|-------------------|------|

| Physikalische und mechanische Eigenschaften |
|---------------------------------------------|
|---------------------------------------------|

|                      |                              |
|----------------------|------------------------------|
| 22.86                | Freie Apertur CA (mm):       |
| 25.40 +0.00/-0.20    | Durchmesser (mm):            |
| 4.00 ±0.38           | Dicke (mm):                  |
| <5                   | Parallelität (Bogenminuten): |
| Protective as needed | Fase:                        |
| 90                   | Freie Apertur (%):           |
| Fine Ground          | Kanten:                      |
| 0.16                 | Poisson-Zahl:                |
| 73                   | Elastizitätsmodul (GPa):     |
| 522.00               | Knoop-Härte (kg/mm²):        |

|                                                                                                                                             |                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Optische Eigenschaften                                                                                                                      |                                   |
| YAG-BBAR (500-1100nm)                                                                                                                       | Beschichtung:                     |
| Fused Silica (Corning 7980)                                                                                                                 | Substrat: □                       |
| 1.458                                                                                                                                       | Brechungsindex (n <sub>d</sub> ): |
| 60-40                                                                                                                                       | Oberflächenqualität:              |
| 1λ                                                                                                                                          | Transmittierte Wellenfront, P-V:  |
| 67.8                                                                                                                                        | Abbe-Zahl (v <sub>d</sub> ):      |
| Beschichtungsspezifikation:<br>R <sub>abs</sub> <0.25% @ 532nm<br>R <sub>abs</sub> <0.25% @ 1064nm<br>R <sub>avg</sub> <1.0% @ 500 - 1100nm |                                   |
| 500 - 1100                                                                                                                                  | Wellenlängenbereich (nm):         |

|                                                                                                                                     |                 |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Materialeigenschaften                                                                                                               |                 |
| 2.20                                                                                                                                | Dichte (g/cm³): |
| Thermischer Ausdehnungskoeffizient CTE (10 <sup>-6</sup> /°C):<br>0.52 (+5 to +35°C)<br>0.57 (0 to +200°C)<br>0.48 (-100 to +200°C) |                 |

|                           |                         |
|---------------------------|-------------------------|
| Konformität mit Standards |                         |
| Konform                   | RoHS 2015:              |
| Anzeigen                  | Konformitätszertifikat: |
| Konform                   | Reach 235:              |

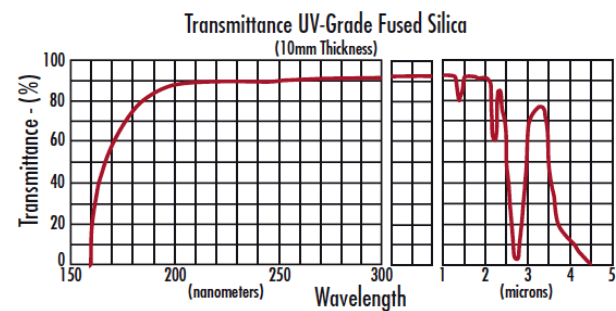
## Produktdetails

- 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

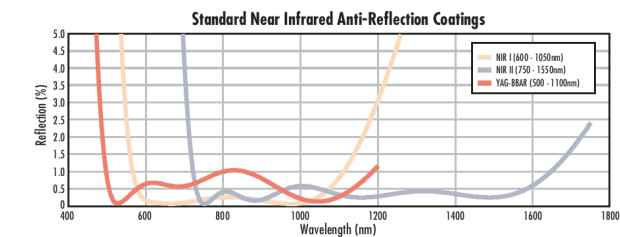
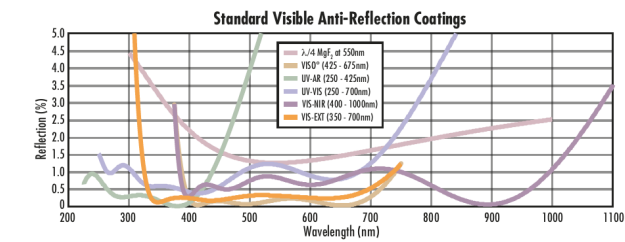
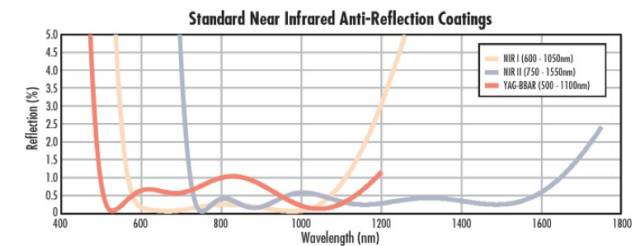
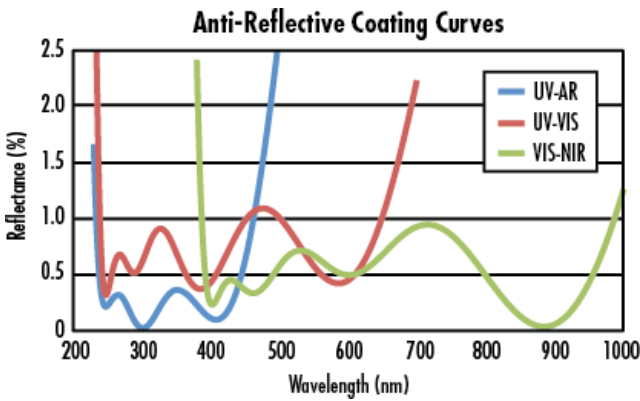
TECHSPEC® 1λ-Fenster aus UV-Quarzglas werden präzise aus synthetischem UV-Quarzglas gefertigt. Das synthetische Quarzglas hat nicht nur bessere Transmissionseigenschaften, sondern auch bessere thermische Eigenschaften und zeichnet sich durch außergewöhnliche Reinheit und Beständigkeit gegenüber Umwelteinflüssen 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

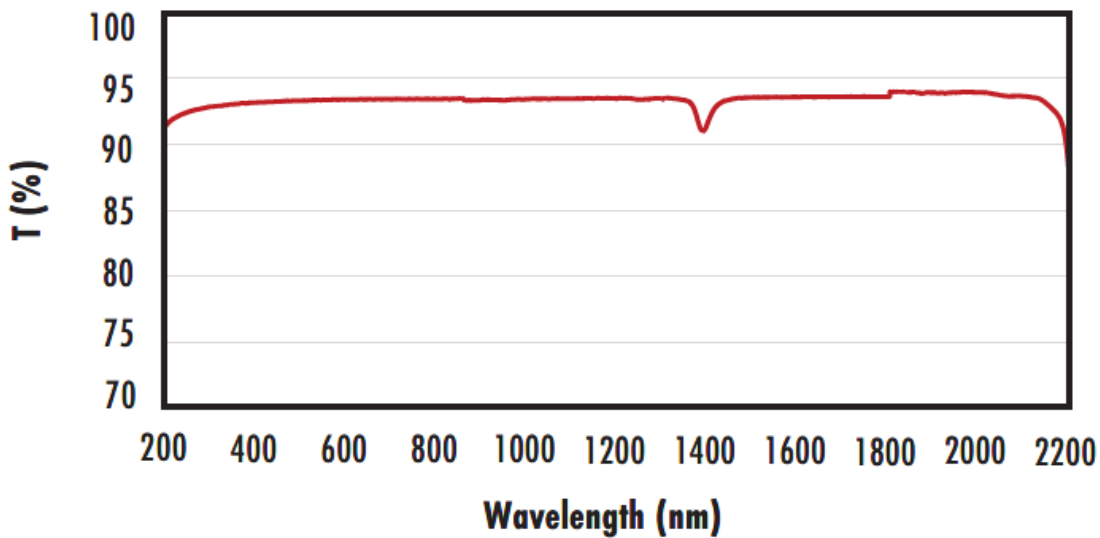


UV FS Transmission Curve



## FUSED SILICA

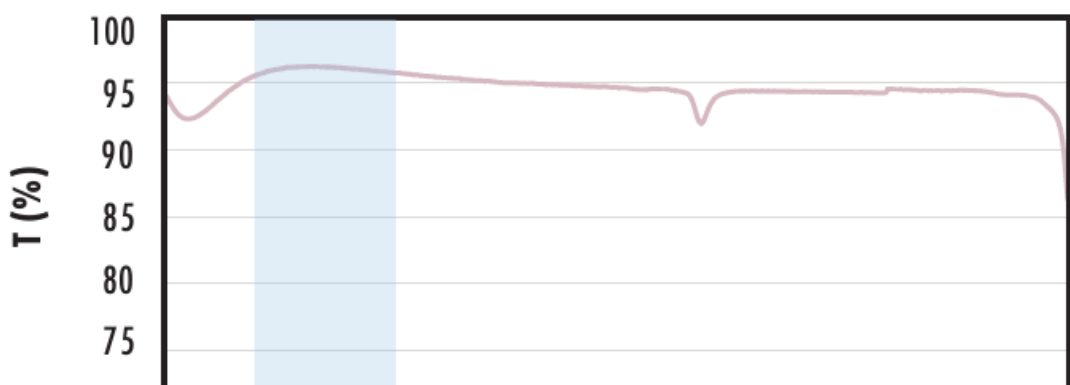
### Uncoated Fused Silica Typical Transmission



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



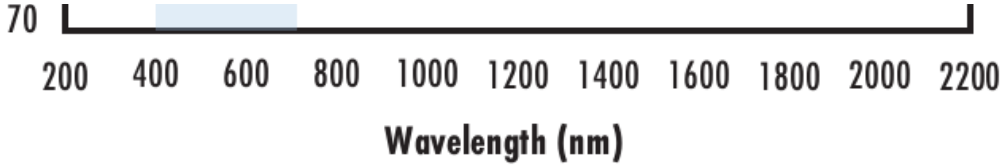
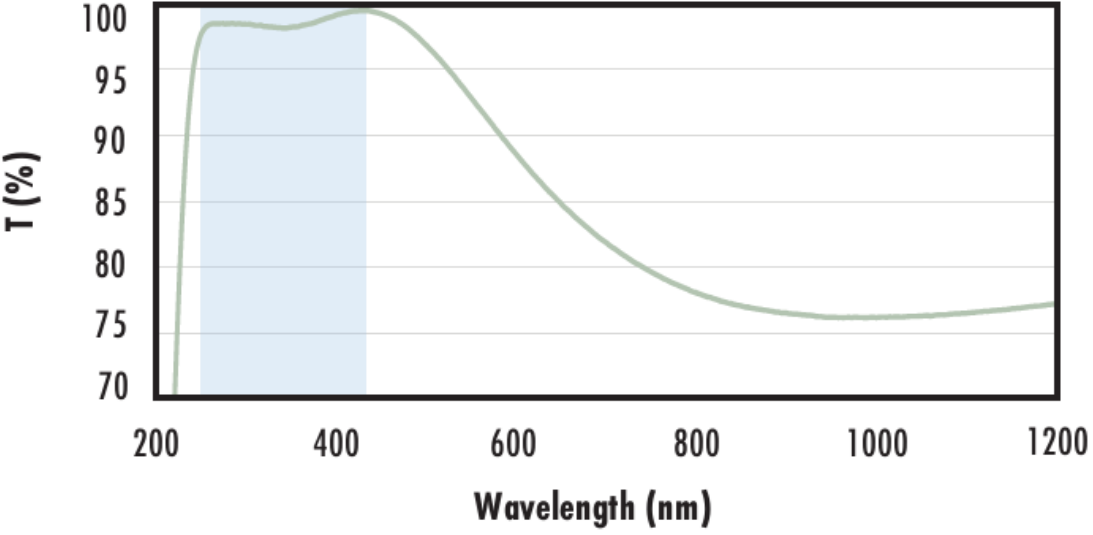
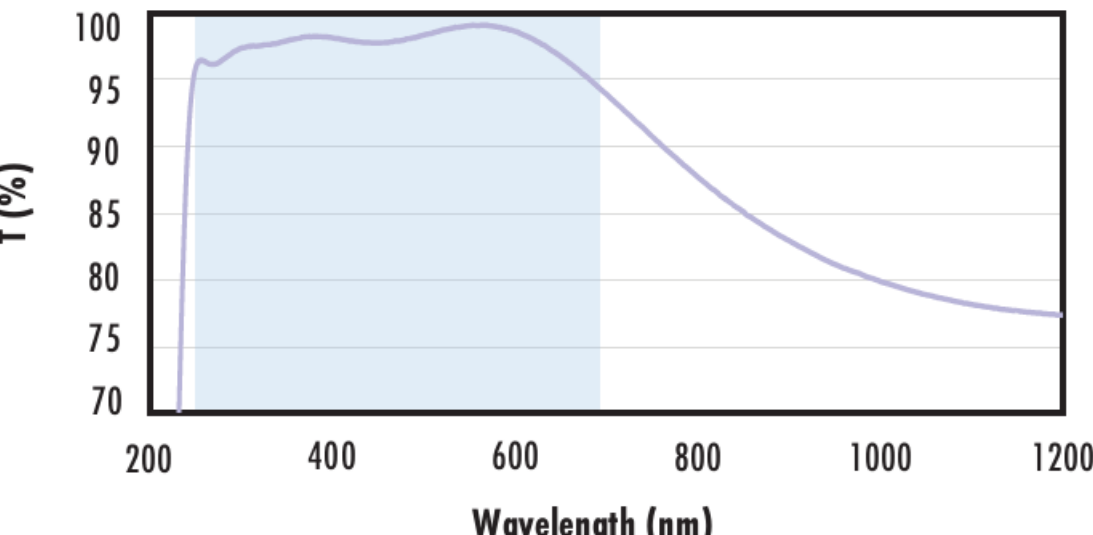
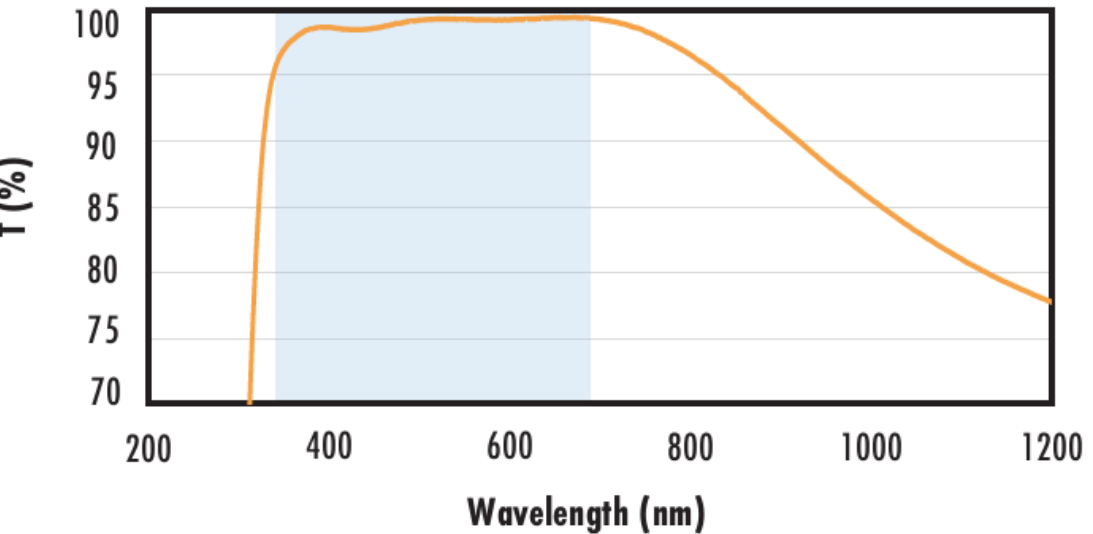
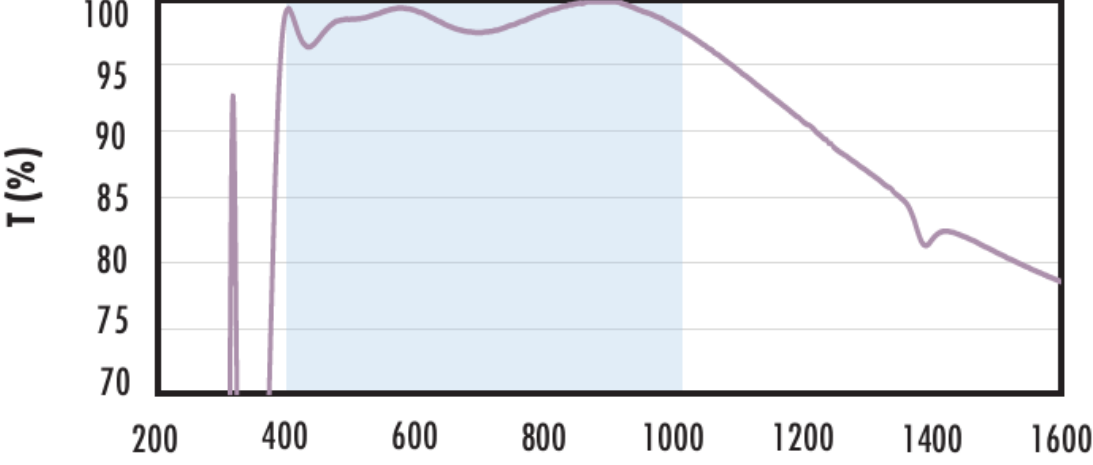
Typical transmission of a 3mm thick fused silica window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.

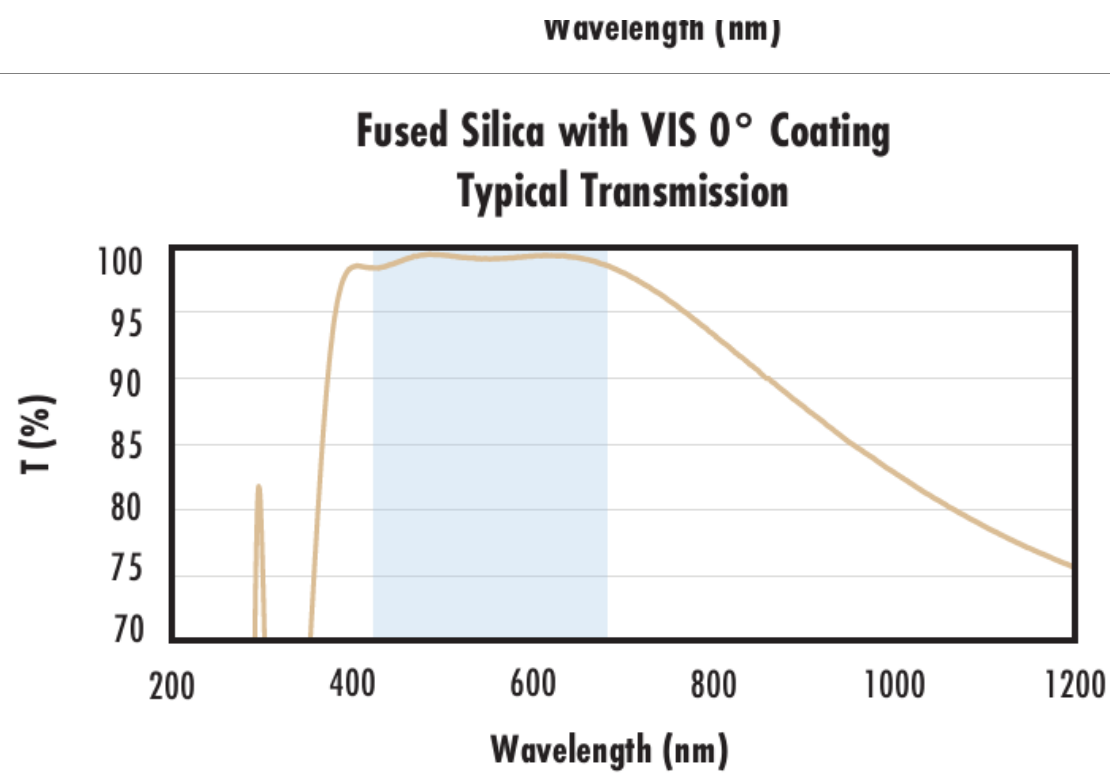
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

|                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <p data-bbox="583 261 1075 371"><b>Fused Silica with UV-AR Coating</b><br/><b>Typical Transmission</b></p>        | <p data-bbox="1329 424 1854 474">Typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) coating at 0° AOI.</p> <p data-bbox="1329 486 1854 537">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 549 1707 623"><math>R_{abs} \leq 1.0\% \text{ @ } 250 - 425\text{nm}</math><math>R_{avg} \leq 0.75\% \text{ @ } 250 - 425\text{nm}</math><math>R_{avg} \leq 0.5\% \text{ @ } 370 - 420\text{nm}</math></div> <p data-bbox="1329 635 1854 685">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 697 1707 718"><a href="#">Click Here to Download Data</a></p>           |
| <p data-bbox="575 943 1083 1053"><b>Fused Silica with UV-VIS Coating</b><br/><b>Typical Transmission</b></p>    | <p data-bbox="1329 1101 1854 1151">Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.</p> <p data-bbox="1329 1163 1854 1213">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 1225 1707 1276"><math>R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}</math><math>R_{avg} \leq 1.5\% \text{ @ } 250 - 700\text{nm}</math></div> <p data-bbox="1329 1311 1854 1362">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 1374 1707 1394"><a href="#">Click Here to Download Data</a></p>                                                              |
| <p data-bbox="569 1626 1087 1736"><b>Fused Silica with VIS-EXT Coating</b><br/><b>Typical Transmission</b></p>  | <p data-bbox="1329 1801 1854 1852">Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.</p> <p data-bbox="1329 1863 1854 1914">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 1926 1707 1952"><math>R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}</math></div> <p data-bbox="1329 1964 1854 2015">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 2027 1707 2047"><a href="#">Click Here to Download Data</a></p>                                                                                                                          |
| <p data-bbox="575 2309 1083 2418"><b>Fused Silica with VIS-NIR Coating</b><br/><b>Typical Transmission</b></p>  | <p data-bbox="1329 2442 1854 2493">Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.</p> <p data-bbox="1329 2504 1854 2555">The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <div data-bbox="1476 2567 1707 2641"><math>R_{abs} \leq 0.25\% \text{ @ } 880\text{nm}</math><math>R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}</math><math>R_{avg} \leq 1.25\% \text{ @ } 890 - 1000\text{nm}</math></div> <p data-bbox="1329 2677 1854 2727">Data outside this range is not guaranteed and is for reference only.</p> <p data-bbox="1476 2739 1707 2760"><a href="#">Click Here to Download Data</a></p> |



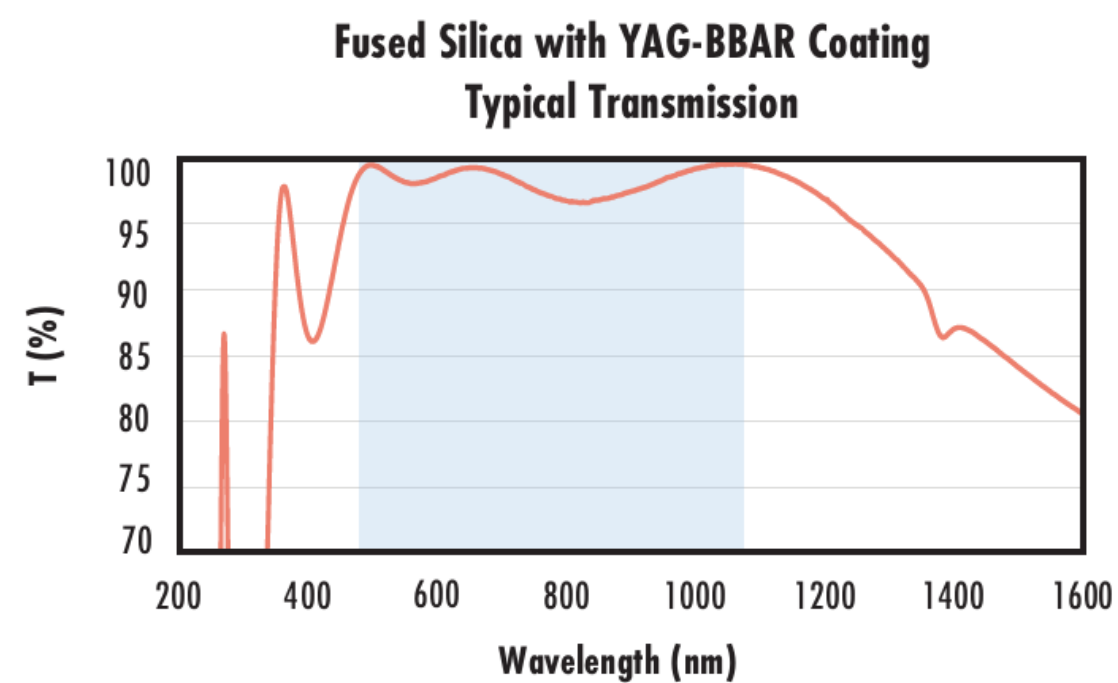
Typical transmission of a 3mm thick fused silica window with MS  
0° (425-675nm) coating at 0° AOI.

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.

[Click Here to Download Data](#)



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:

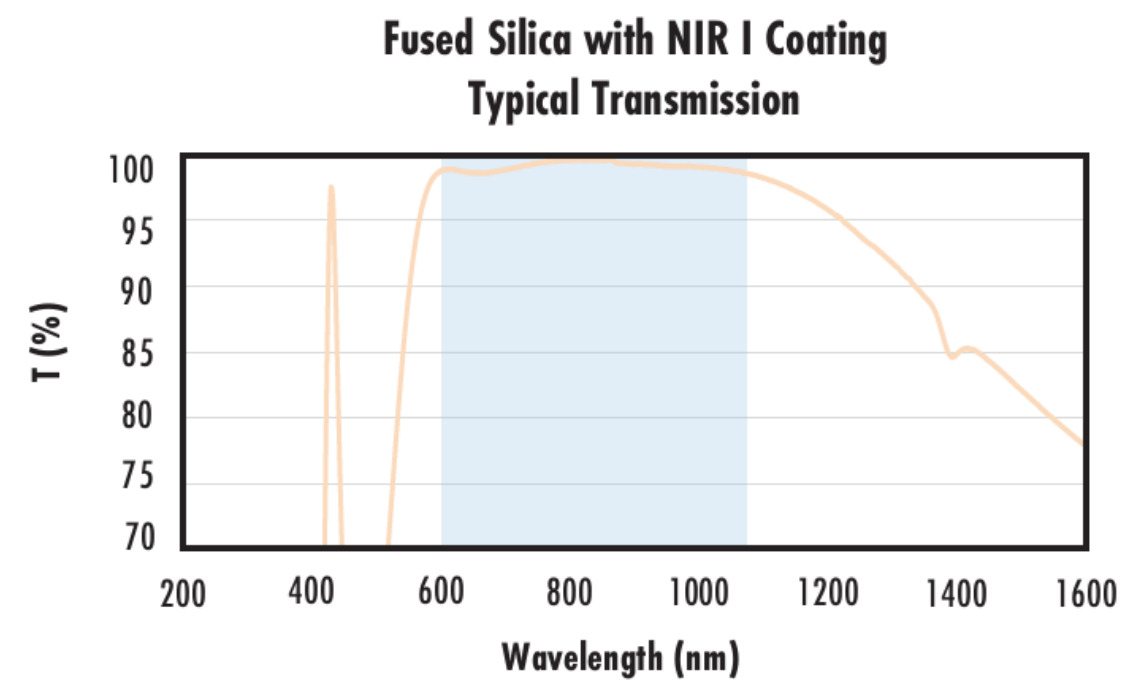
$$R_{\text{abs}} \leq 0.25\% @ 532\text{nm}$$

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

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

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

[Click Here to Download Data](#)



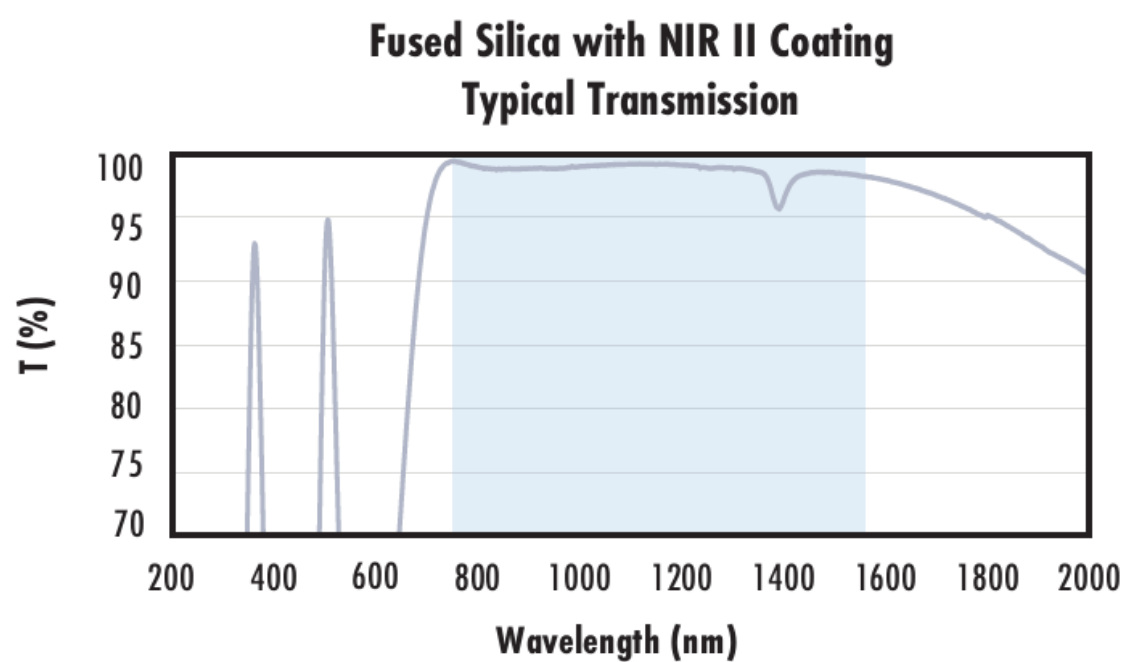
Typical transmission of a 3mm thick fused silica window with NIR  
I (600 - 1050nm) coating at 0° AOI.

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

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

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:

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

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

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

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

[Click Here to Download Data](#)

# Kundenspezifische Produkte

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.