

TECHSPEC<sup>®</sup> 1λ-Quarzglasfenster, 20 mm Durchmesser, 1 mm Dicke, VIS-NIR-beschichtet



Produkt **#23-319** **KONTAKT**

-1+

€115<sup>,00</sup>

+ WARENKORB

| Mengenrabatte |                                 |
|---------------|---------------------------------|
| Stk. 1-5      | €115,00 stückpreis              |
| Stk. 6-25     | €91,50 stückpreis               |
| Stk. 26-49    | €86,00 stückpreis               |
| Need More?    | <a href="#">Angebotsanfrage</a> |

! Preise exklusiv der geltenden Mehrwertsteuer und Abgaben

Downloadbereich

Produktdetails

Protective Window

Typ:

Physikalische und mechanische Eigenschaften

18.00

Freie Apertur CA (mm):

20.00 +0.00/-0.20

Durchmesser (mm):

|                      |                              |
|----------------------|------------------------------|
| 1.00 ±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

|                                                                                                                    |                                                     |
|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| VIS-NIR (400-1000nm)                                                                                               | Beschichtung:                                       |
| <a href="#">Fused Silica</a> (Corning 7980)                                                                        | Substrat: <input type="checkbox"/>                  |
| 1.458                                                                                                              | Brechungsindex (n <sub>d</sub> ):                   |
| 60-40                                                                                                              | Oberflächenqualität:                                |
| 1λ                                                                                                                 | Transmittierte Wellenfront, P-V:                    |
| 67.8                                                                                                               | Abbe-Zahl (v <sub>d</sub> ):                        |
| R <sub>abs</sub> ≤0.25% @ 880nm<br>R <sub>avg</sub> ≤1.25% @ 400 - 870nm<br>R <sub>avg</sub> ≤1.25% @ 890 - 1000nm | Beschichtungsspezifikation:                         |
| 400 - 1000                                                                                                         | Wellenlängenbereich (nm):                           |
| 5 J/cm² @ 532nm, 10ns                                                                                              | Zerstörschwelle, Referenz: <input type="checkbox"/> |

Materialeigenschaften

|                                                                   |                                                                |
|-------------------------------------------------------------------|----------------------------------------------------------------|
| 2.20                                                              | Dichte (g/cm³):                                                |
| 0.52 (+5 to +35°C)<br>0.57 (0 to +200°C)<br>0.48 (-100 to +200°C) | Thermischer Ausdehnungskoeffizient CTE (10 <sup>-6</sup> /°C): |
| 7980 0G                                                           | Güte Quarzglas:                                                |

Konformität mit Standards

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

## 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.

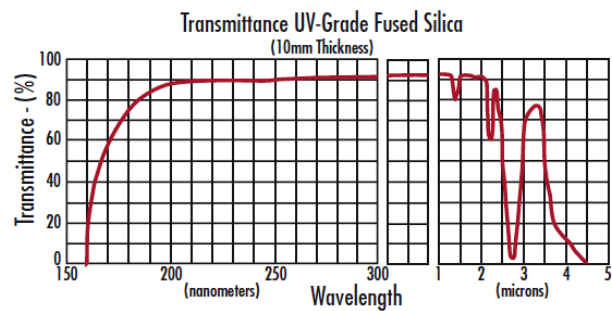
## Produktdetails

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

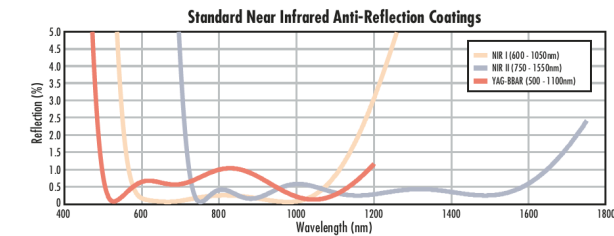
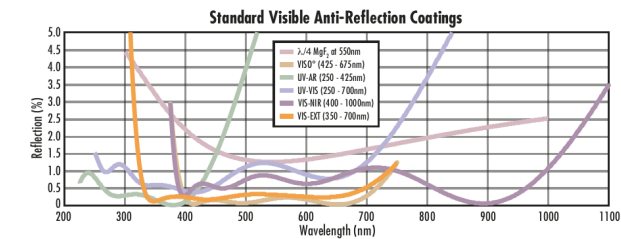
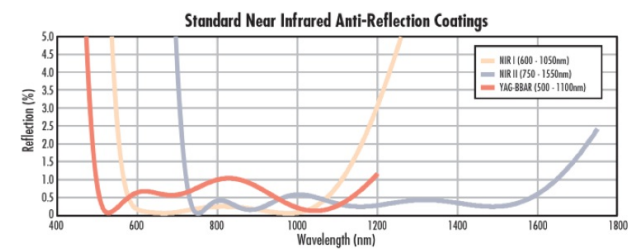
TECHSPEC® 1λ-Fenster aus UV-Quarzglas werden präzise aus synthetischem UV-Quarzglas gefertigt. Das synthetische Quarzglas hat nicht nur bessere Transmissionseigenschaften, sondern auch bessere thermische Eigenschaften und zeichnet sich durch außergewöhnliche Reinheit und Beständigkeit gegenüber Umwelteinflüssen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

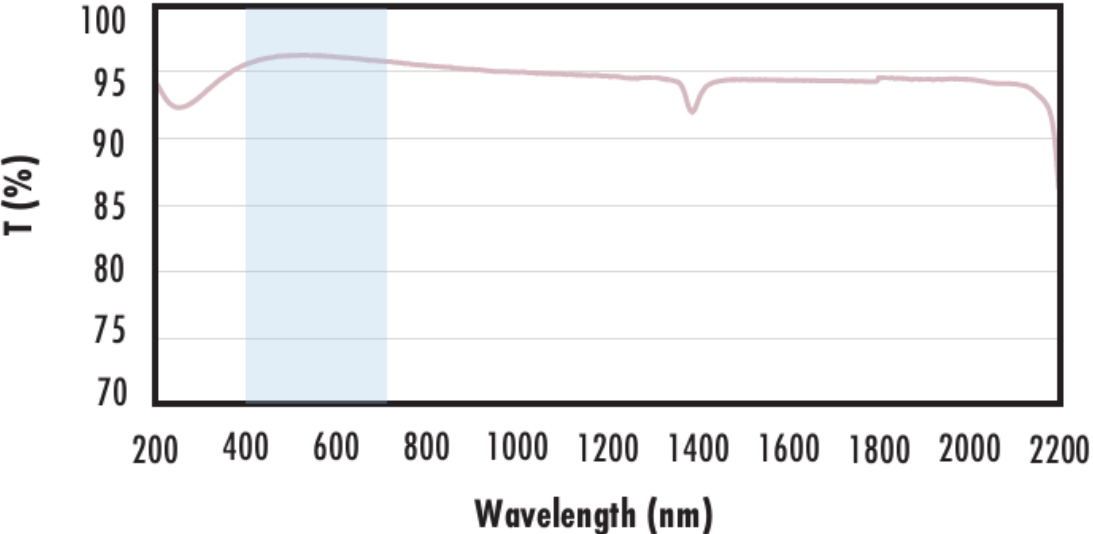
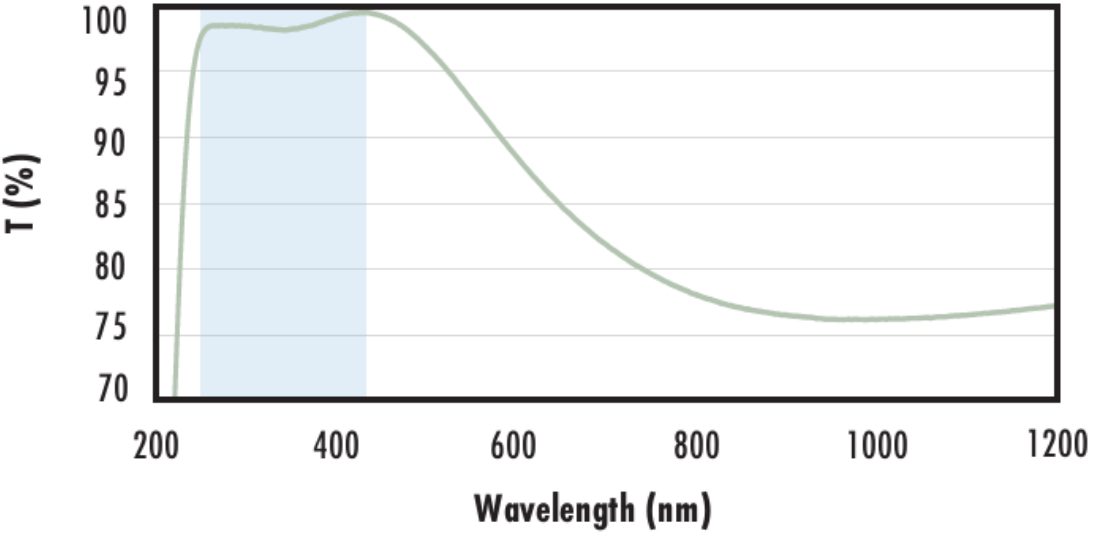
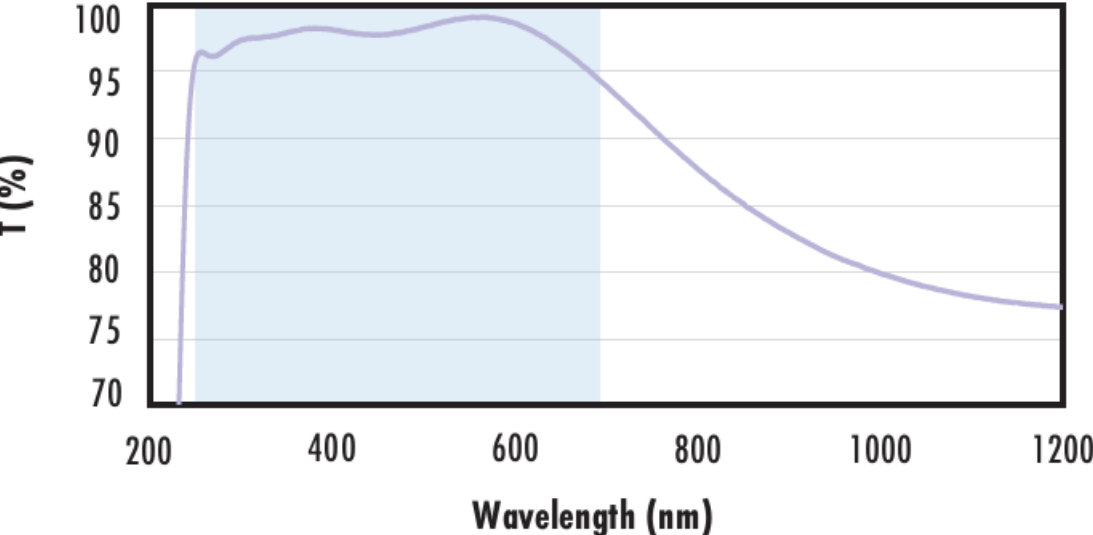
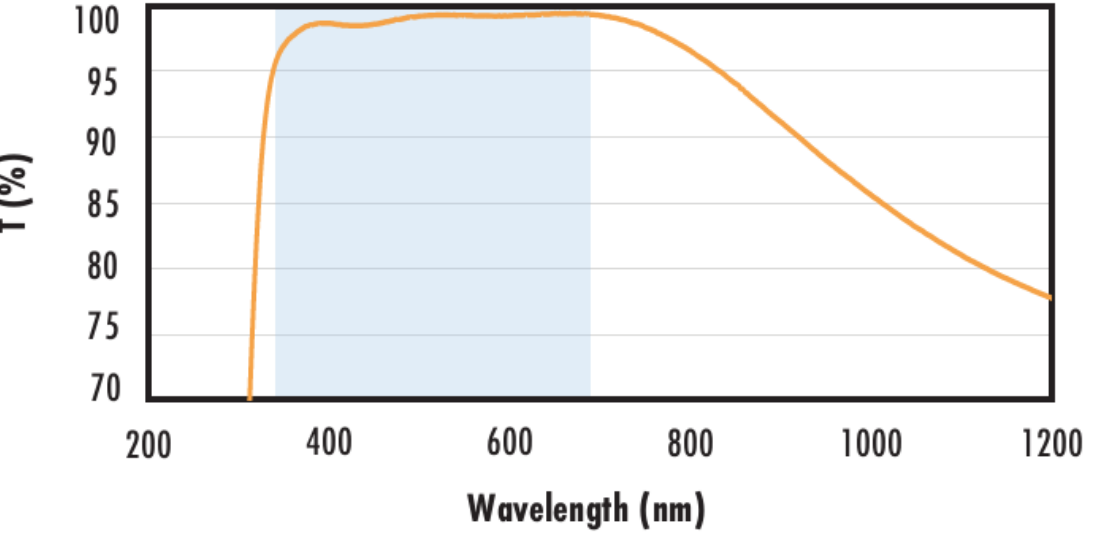
Technische Informationen

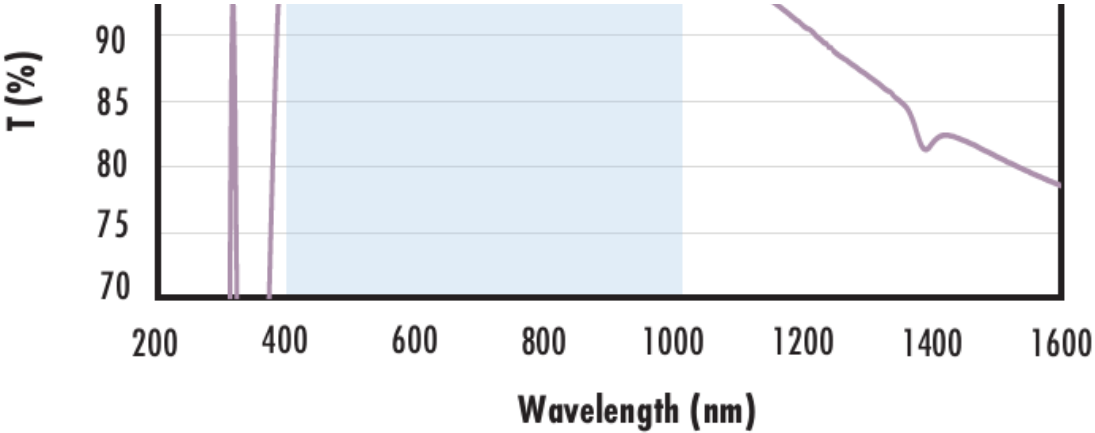
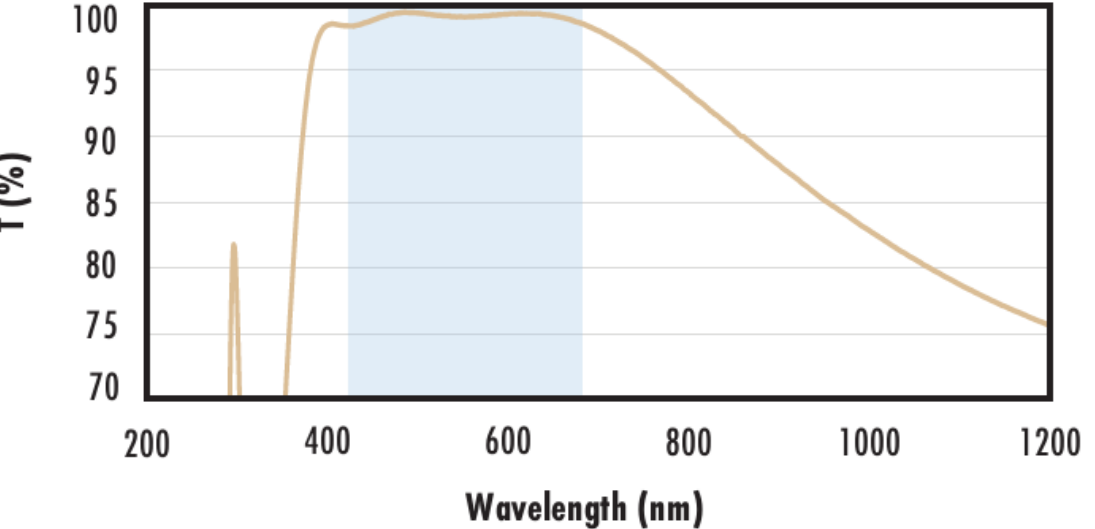
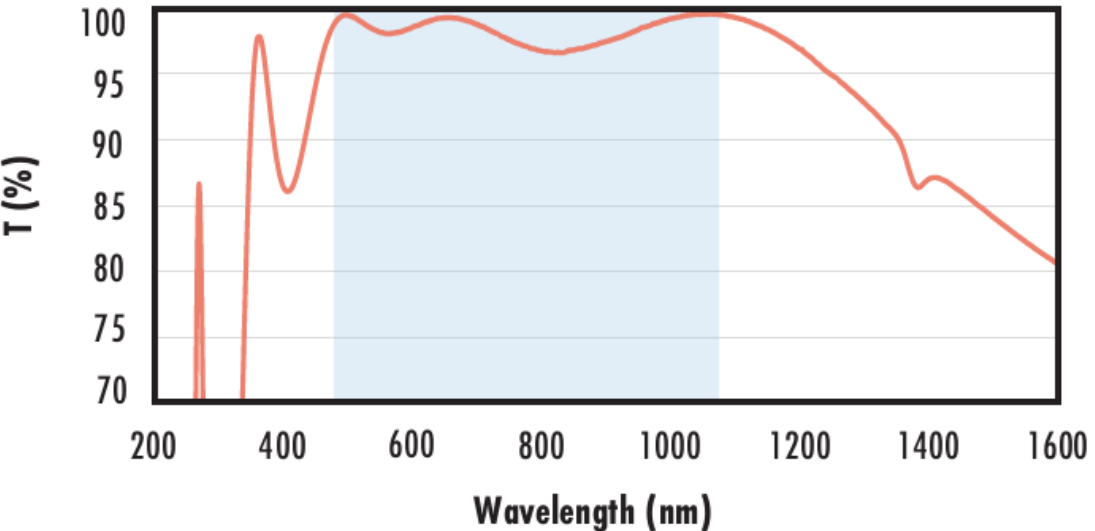
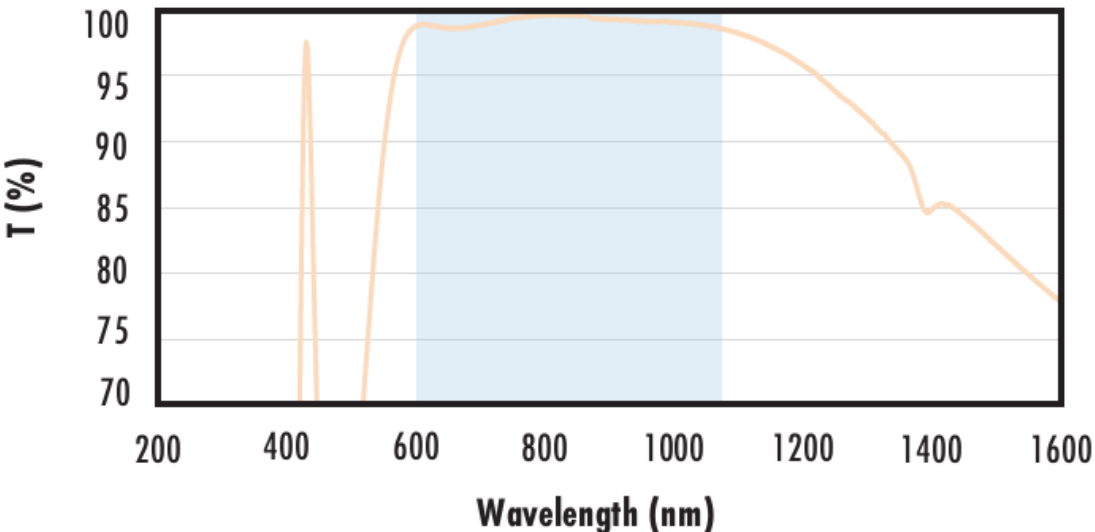


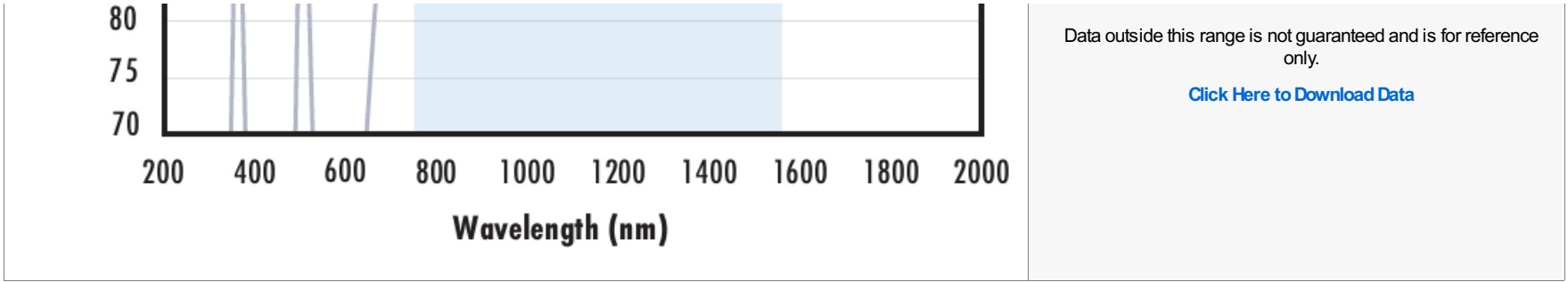
UV FS Transmission Curve



| FUSED SILICA                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>Uncoated Fused Silica<br/>Typical Transmission</div> <div><p>The graph displays the typical transmission of a 3mm thick, uncoated fused silica window. The x-axis represents wavelength in nanometers (200 to 2200). The y-axis represents transmission T in percent (70 to 100). The transmission is high (above 90%) from 200 nm to 2200 nm, with a sharp drop in the mid-IR region around 3 microns.</p></div> |  | <p>Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra.</p> <p><a href="#">Click Here to Download Data</a></p> |
| <div>Fused Silica with MgF<sub>2</sub> Coating<br/>Typical Transmission</div>                                                                                                                                                                                                                                                                                                                                          |  |                                                                                                                                                          |

|                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     | <p>Typical transmission of a 3mm thick fused silica window with MgF2 (400-700nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 1.75\% @ 400 - 700\text{nm}</math> (N-BK7)</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                            |
| <p><b>Fused Silica with UV-AR Coating</b><br/><b>Typical Transmission</b></p>     | <p>Typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 1.0\% @ 250 - 425\text{nm}</math><br/><math>R_{avg} \leq 0.75\% @ 250 - 425\text{nm}</math><br/><math>R_{avg} \leq 0.5\% @ 370 - 420\text{nm}</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p> |
| <p><b>Fused Silica with UV-VIS Coating</b><br/><b>Typical Transmission</b></p>   | <p>Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 1.0\% @ 350 - 450\text{nm}</math><br/><math>R_{avg} \leq 1.5\% @ 250 - 700\text{nm}</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                          |
| <p><b>Fused Silica with VIS-EXT Coating</b><br/><b>Typical Transmission</b></p>  | <p>Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.5\% @ 350 - 700\text{nm}</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                                  |
| <p><b>Fused Silica with VIS-NIR Coating</b><br/><b>Typical Transmission</b></p>  | <p>Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength</p>                                                                                                                                                                                                                                                                                                                                                     |

|                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                      | <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 0.25\% @ 880nm</math><br/><math>R_{avg} \leq 1.25\% @ 400 - 870nm</math><br/><math>R_{avg} \leq 1.25\% @ 890 - 1000nm</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                        |
| <p><b>Fused Silica with VIS 0° Coating</b><br/><b>Typical Transmission</b></p>     | <p>Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.4\% @ 425 - 675nm</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                |
| <p><b>Fused Silica with YAG-BBAR Coating</b><br/><b>Typical Transmission</b></p>  | <p>Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 0.25\% @ 532nm</math><br/><math>R_{abs} \leq 0.25\% @ 1064nm</math><br/><math>R_{avg} \leq 1.0\% @ 500 - 1100nm</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p> |
| <p><b>Fused Silica with NIR I Coating</b><br/><b>Typical Transmission</b></p>     | <p>Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.5\% @ 600 - 1050nm</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                             |
| <p><b>Fused Silica with NIR II Coating</b><br/><b>Typical Transmission</b></p>    | <p>Typical transmission of a 3mm thick fused silica window with NIR II (750 - 1550nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 1.5\% @ 750 - 800nm</math><br/><math>R_{abs} \leq 1.0\% @ 800 - 1550nm</math><br/><math>R_{avg} \leq 0.7\% @ 750 - 1550nm</math></p>                                                                                                                      |



Beschichtungskurven

Kompatible Halterungen

;