

TECHSPEC<sup>®</sup> 1λ-Quarzglasfenster, 12,7 mm Durchmesser, 2 mm Dicke, YAG-BBAR-beschichtet



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

Produkt **#25-218** [KONTAKT](#)

-

1

+

€109<sup>00</sup>

+ WARENKORB

| Mengenrabatte |                                 |
|---------------|---------------------------------|
| Stk. 1-5      | €109,00 stückpreis              |
| Stk. 6-25     | €87,00 stückpreis               |
| Stk. 26-49    | €81,50 stückpreis               |
| Need More?    | <a href="#">Angebotsanfrage</a> |

 Preise exklusiv der geltenden Mehrwertsteuer und Abgaben

Downloadbereich

Produktdetails

Protective Window

Typ:

Physikalische und mechanische Eigenschaften

11.43

Freie Apertur CA (mm):

Durchmesser (mm):

|                      |                              |
|----------------------|------------------------------|
| 12.70 +0.00/-0.20    |                              |
|                      | Dicke (mm):                  |
| 2.00 ±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:                                       |
| YAG-BBAR (500-1100nm)                                                                                        |                                                     |
|                                                                                                              | Substrat: <input type="checkbox"/>                  |
| Fused Silica (Corning 7980)                                                                                  |                                                     |
|                                                                                                              | Brechungsindex (n <sub>d</sub> ):                   |
| 1.458                                                                                                        |                                                     |
|                                                                                                              | Oberflächenqualität:                                |
| 60-40                                                                                                        |                                                     |
|                                                                                                              | Abbe-Zahl (v <sub>d</sub> ):                        |
| 67.8                                                                                                         |                                                     |
|                                                                                                              | Beschichtungsspezifikation:                         |
| R <sub>abs</sub> ≤0.25% @ 532nm<br>R <sub>abs</sub> ≤0.25% @ 1064nm<br>R <sub>avg</sub> ≤1.0% @ 500 - 1100nm |                                                     |
|                                                                                                              | Wellenlängenbereich (nm):                           |
| 500 - 1100                                                                                                   |                                                     |
|                                                                                                              | Oberflächenebenheit (P-V):                          |
| 1λ                                                                                                           |                                                     |
|                                                                                                              | Zerstörschwelle, Referenz: <input type="checkbox"/> |
| 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)<br>0.57 (0 to +200°C)<br>0.48 (-100 to +200°C) |                                                                |
|                                                                   | Güte Quarzglas:                                                |
| 7980 0G                                                           |                                                                |

Konformität mit Standards

|          |                         |
|----------|-------------------------|
|          | RoHS 2015:              |
| Konform  |                         |
|          | Konformitätszertifikat: |
| Anzeigen |                         |
|          | Reach 235:              |
| Konform  |                         |

## 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
- [N4](#)- oder [N10](#)-Fenster aus UV-Quarzglas ebenfalls erhältlich

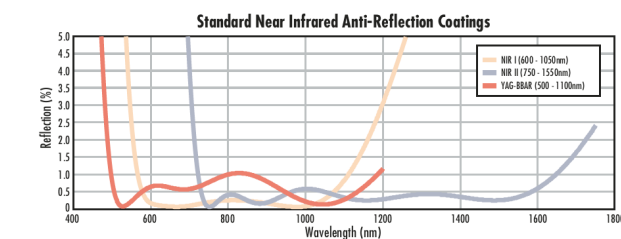
**Bitte beachten Sie:** Neue Produkte, die zu dieser Produktfamilie hinzugefügt werden, können mit der transmittierten Wellenfrontverzerrung (TWD) und nicht mehr mit der Oberflächenebenheit spezifiziert sein. Weitere Informationen über den Unterschied zwischen den beiden Spezifikationen finden Sie unter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

**Transmittance UV-Grade Fused Silica**  
(10mm Thickness)

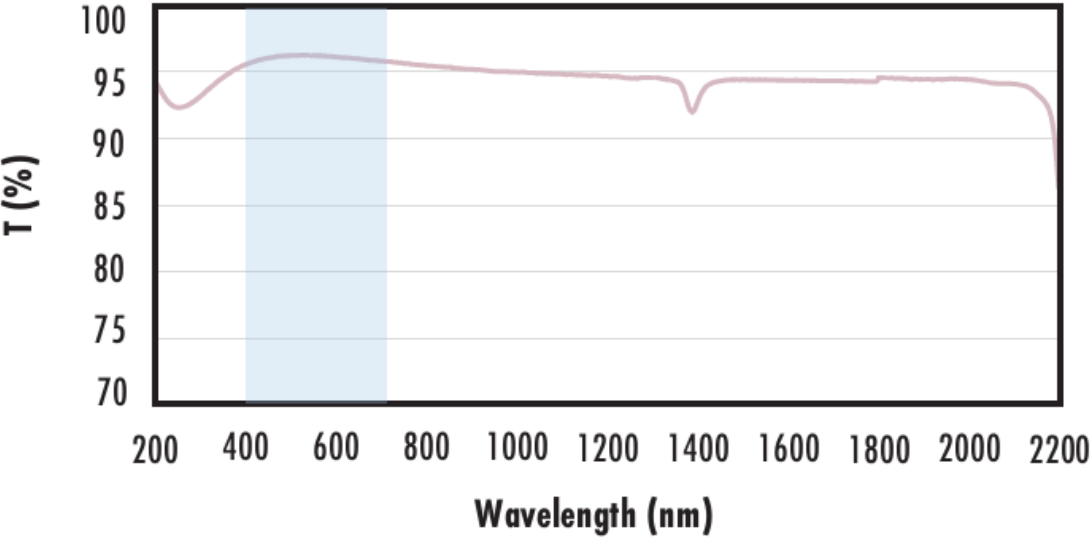
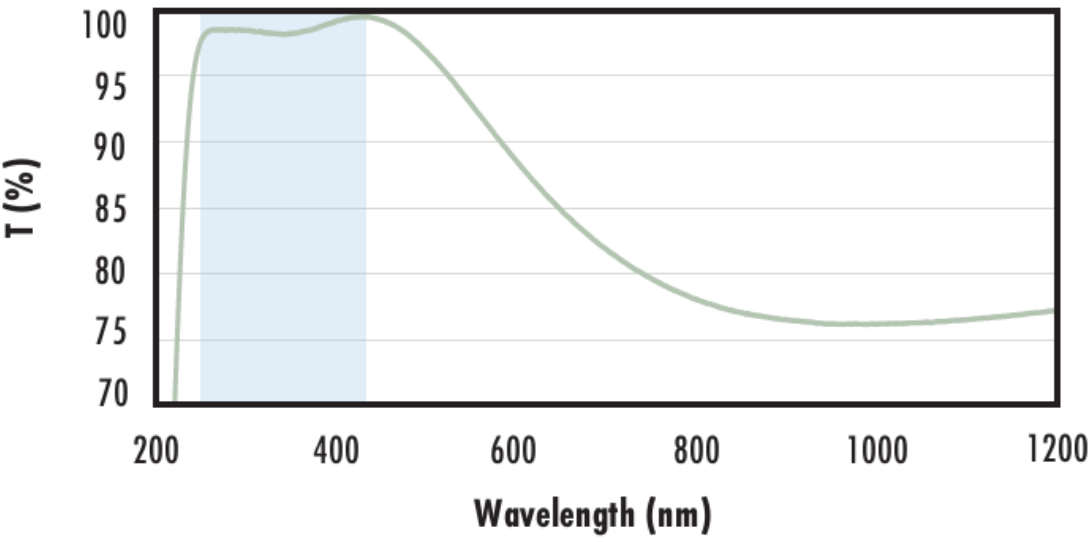
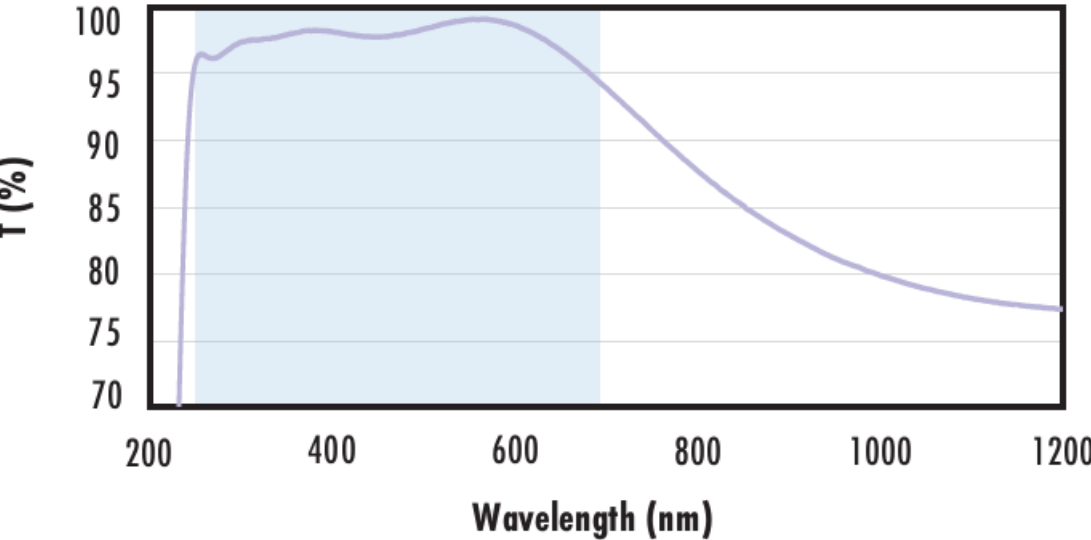
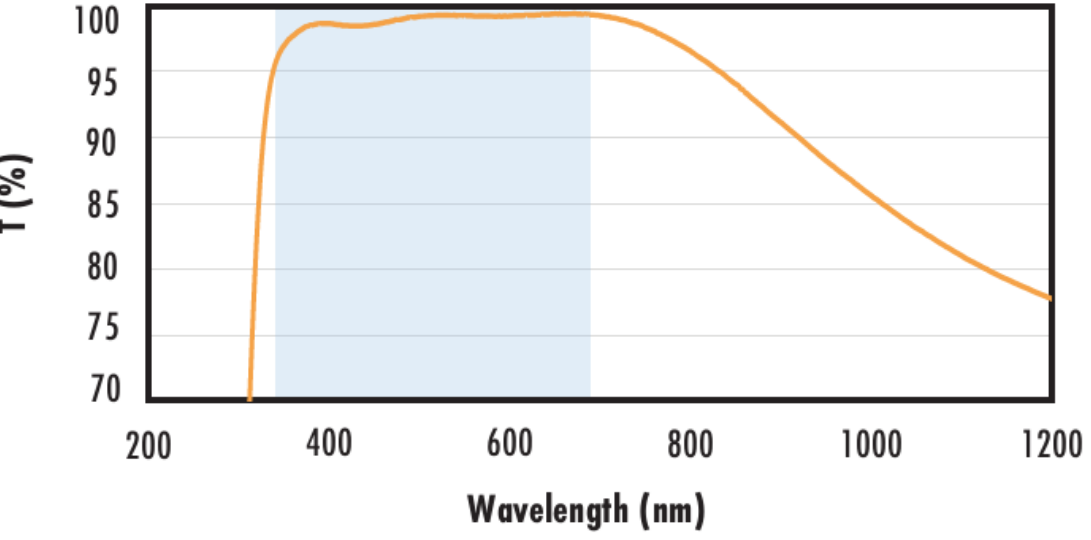
The graph displays the transmittance of UV-Grade Fused Silica with a 10mm thickness. The left y-axis represents Transmittance in percent (%), ranging from 0 to 100. The bottom x-axis represents Wavelength in nanometers (nm), ranging from 150 to 300. The right y-axis represents Transmittance in percent (%), ranging from 0 to 100. The right x-axis represents Wavelength in microns, ranging from 1 to 5. The curve shows high transmittance (above 80%) from approximately 200 nm to 300 nm, with a sharp drop-off in the ultraviolet region below 200 nm. A secondary plot on the right shows transmittance in the infrared region from 1 to 5 microns, with a sharp drop-off below 1 micron and a peak around 3.5 microns.

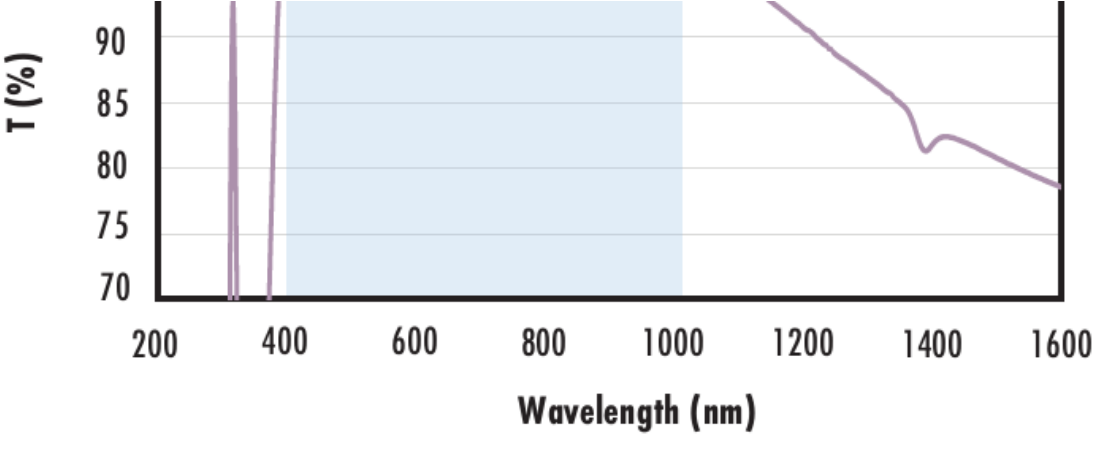
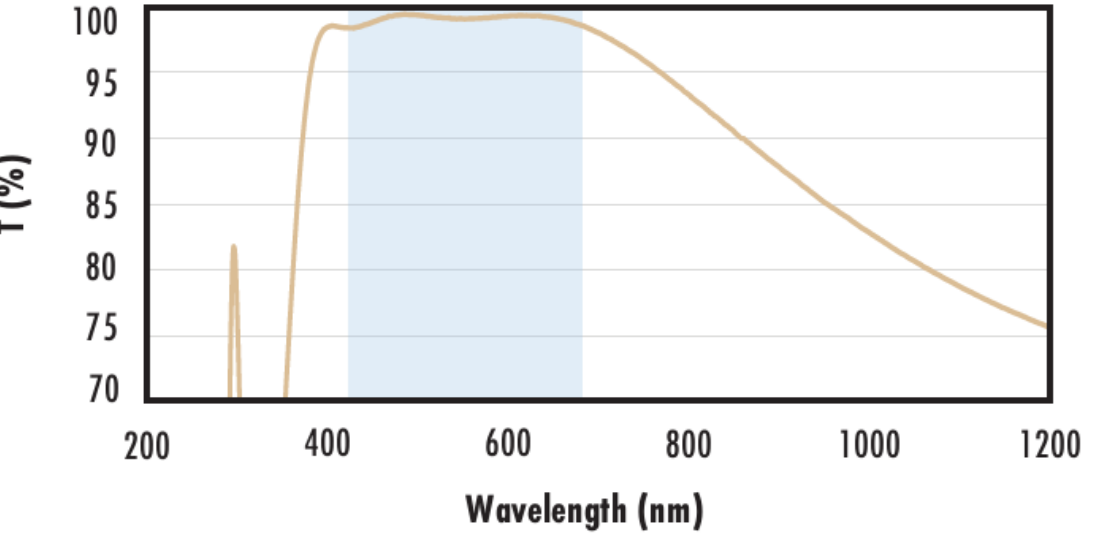
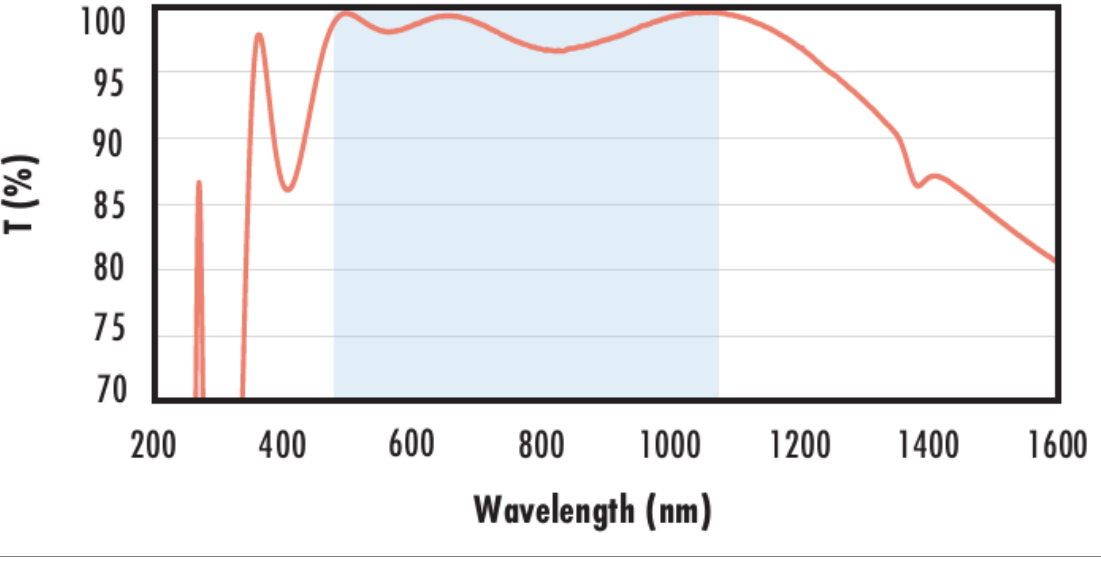
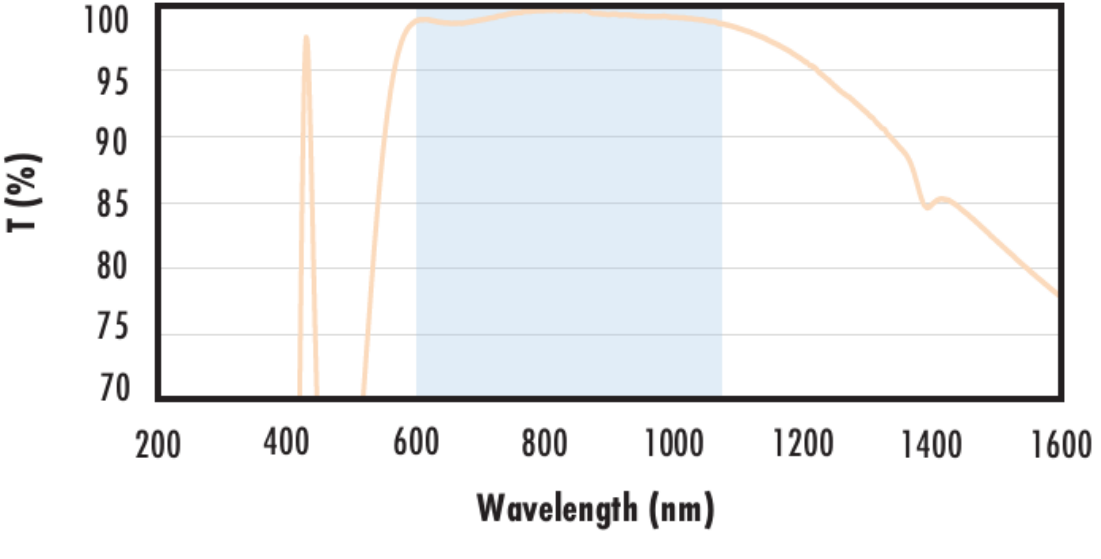
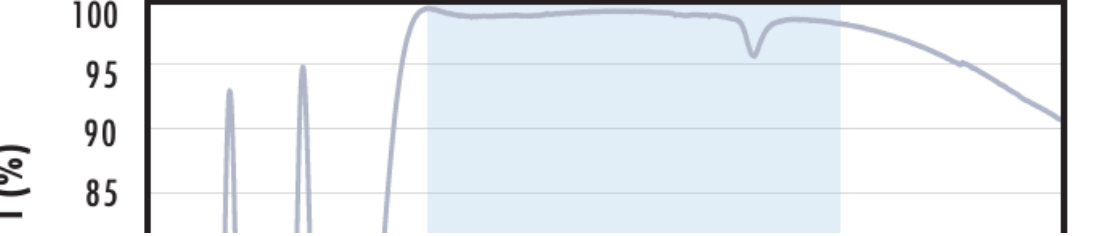
**Anti-Reflective Coating Curves**

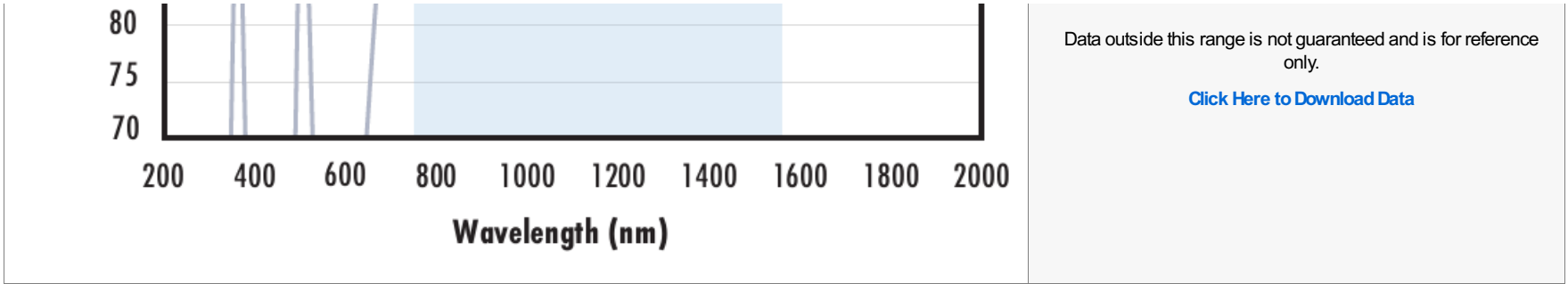
| Wavelength (nm) | UV-AR Reflectance (%) | UV-VIS Reflectance (%) | VIS-NIR Reflectance (%) |
|-----------------|-----------------------|------------------------|-------------------------|
| 200             | 1.6                   | 2.5                    | 2.5                     |
| 250             | 0.2                   | 0.4                    | 0.4                     |
| 300             | 0.1                   | 0.5                    | 0.5                     |
| 350             | 0.2                   | 0.8                    | 0.8                     |
| 400             | 0.3                   | 0.4                    | 0.4                     |
| 450             | 0.4                   | 0.6                    | 0.6                     |
| 500             | 0.5                   | 0.8                    | 0.8                     |
| 550             | 0.6                   | 0.6                    | 0.6                     |
| 600             | 0.5                   | 0.4                    | 0.4                     |
| 650             | 0.4                   | 0.6                    | 0.6                     |
| 700             | 0.3                   | 0.8                    | 0.8                     |
| 750             | 0.2                   | 0.6                    | 0.6                     |
| 800             | 0.1                   | 0.4                    | 0.4                     |
| 850             | 0.1                   | 0.2                    | 0.2                     |
| 900             | 0.2                   | 0.4                    | 0.4                     |
| 950             | 0.4                   | 0.6                    | 0.6                     |
| 1000            | 0.6                   | 0.8                    | 0.8                     |



|                                                                                                                                                                                                                                                  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p><b>FUSED SILICA</b></p> <p><b>Uncoated Fused Silica<br/>Typical Transmission</b></p> <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> |  |
| <p><b>Fused Silica with MgF<sub>2</sub> Coating<br/>Typical Transmission</b></p>                                                                                                                                                                 |  |

|                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     | <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>                                                                                                                      |



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