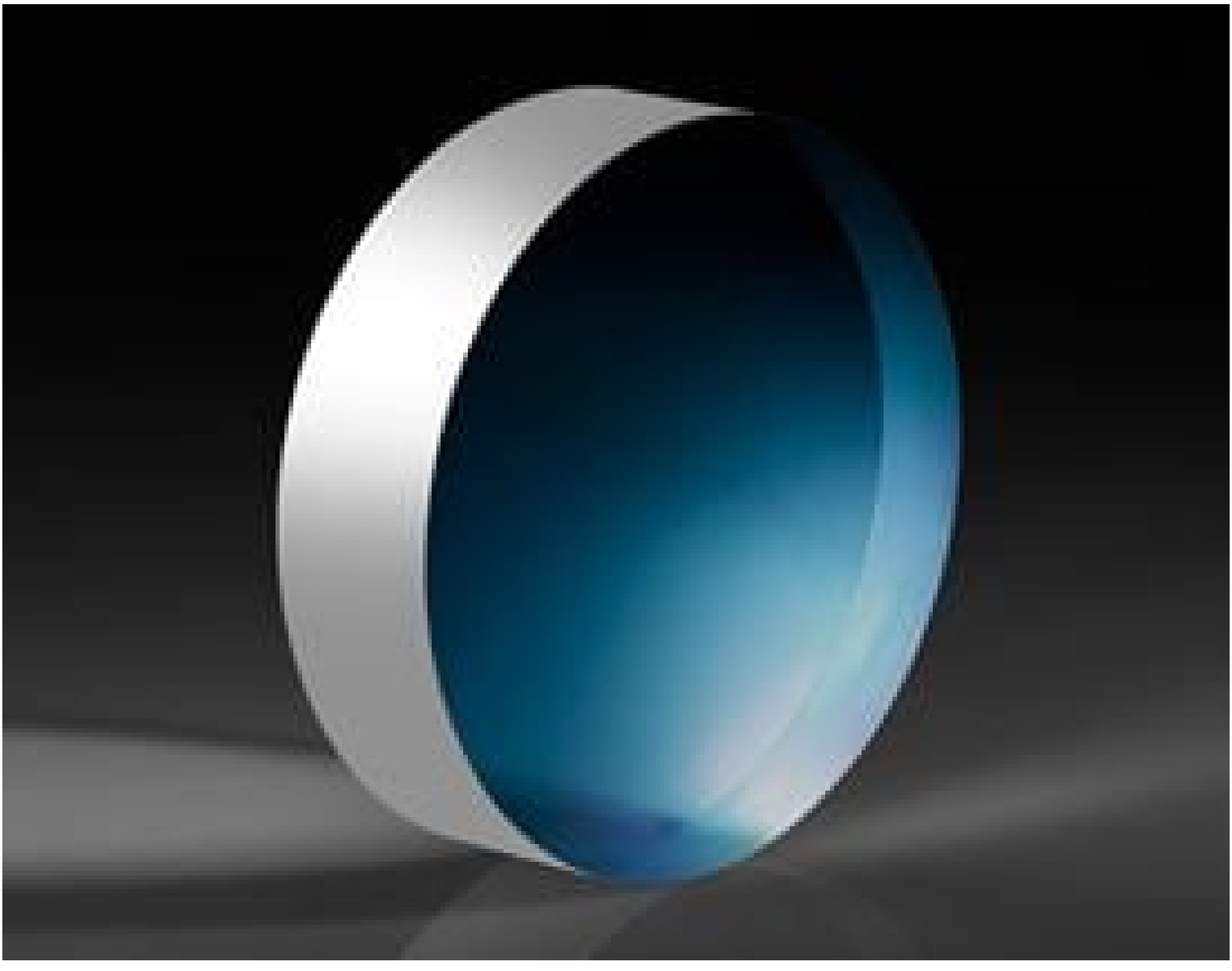
# TECHSPEC 1λ-Quarzglasfenster, 50,8 mm Durchmesser, 4 mm Dicke, unbeschichtet



Produkt **#15-309** **9 In Stock**

- 1 + **€132**.00

**+ WARENKORB**

| Mengenrabatte | |
|---|---|
| Stk. 1-5 | **€132,00** stückpreis |
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Preise exklusiv der geltenden Mehrwertsteuer und Abgaben

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## Produktdetails

**Typ:**
Protective Window

## Physikalische und mechanische Eigenschaften

**Freie Apertur CA (mm):**
45.72

**Durchmesser (mm):**
50.80 +0.00/-0.20

| | |
|---|---|
| **Dicke (mm):** | 4.00 ±0.38 |
| **Parallelität (Bogenminuten):** | <5 |
| **Toleranz Größe (mm):** | +0.00/-0.20 |
| **Fase:** | Protective as needed |
| **Freie Apertur (%):** | 90 |
| **Kanten:** | Fine Ground |
| **Poisson-Zahl:** | 0.16 |
| **Elastizitätsmodul (GPa):** | 73 |
| **Knoop-Härte (kg/mm$^2$):** | 522.00 |

## Optische Eigenschaften

| | |
|---|---|
| **Beschichtung:** | Uncoated |
| **Substrat:** | **Fused Silica** (Corning 7980) |
| **Brechungsindex ($n_d$):** | 1.458 |
| **Oberflächenqualität:** | 60-40 |
| **Abbe-Zahl ($v_d$):** | 67.8 |
| **Wellenlängenbereich (nm):** | 200 - 2200 |
| **Oberflächenebenheit (P-V):** | 1λ |

## Materialeigenschaften

| | |
|---|---|
| **Dichte (g/cm$^3$):** | 2.20 |
| **Thermischer Ausdehnungskoeffizient CTE ($10^{-6}$/°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

| | |
|---|---|
| **Konformitätszertifikat:** | **Anzeigen** |

## 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.

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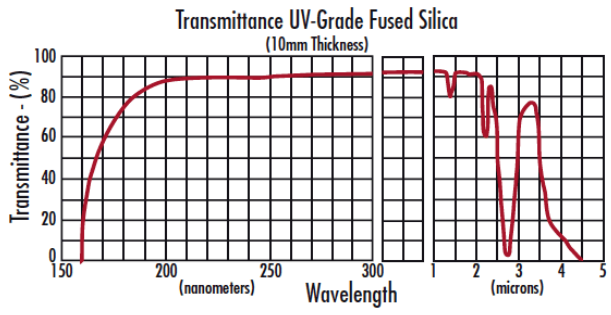
# Produktdetails

- 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

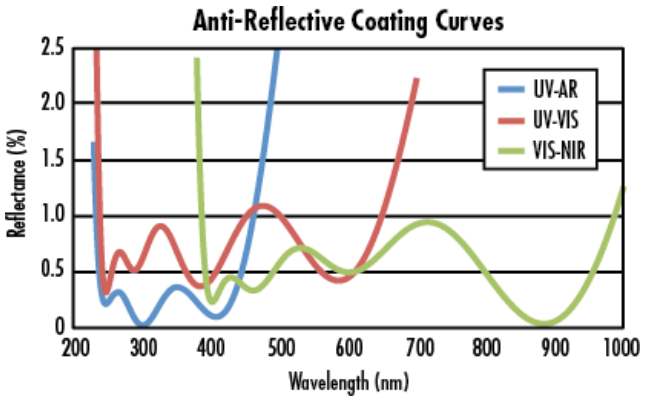
TECHSPEC® 1λ-Fenster aus UV-Quarzglas werden präzise aus synthetischem UV-Quarzglas gefertigt. Das synthetische Quarzglas hat nicht nur bessere Transmissionseigenschaften, sondern auch bessere thermische Eigenschaften und zeichnet sich durch außergewöhnliche Reinheit und Beständigkeit gegenüber Umwelteinflüssen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

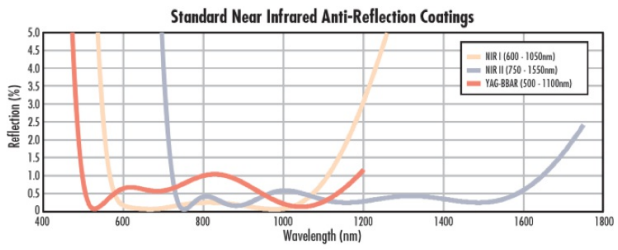
**Bitte beachten Sie:** Neue Produkte, die zu dieser Produktfamilie hinzugefügt werden, können mit der transmittierten Wellenfrontverzerrung (TWD) und nicht mehr mit der Oberflächenebenheit spezifiziert sein. Weitere Informationen über den Unterschied zwischen den beiden Spezifikationen finden Sie unter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

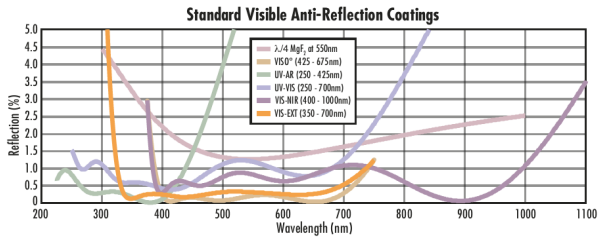
# Technische Informationen

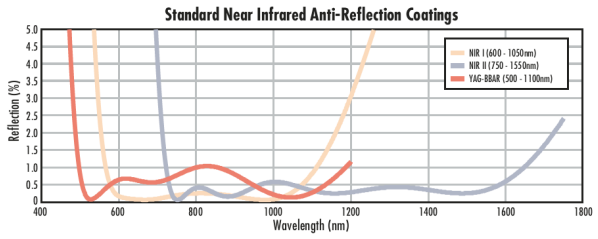



*UV FS Transmission Curve*

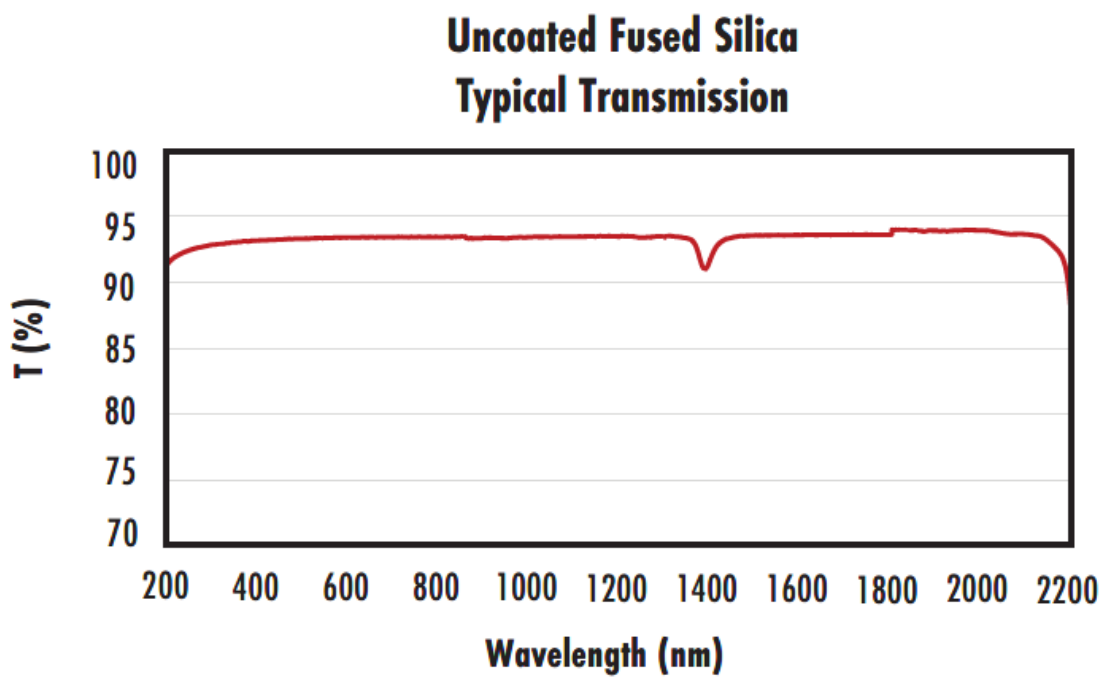



FUSED SILICA




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

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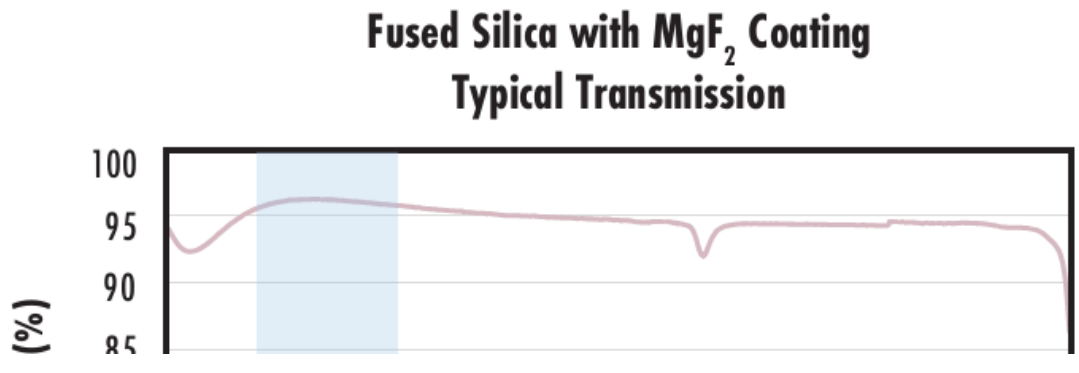
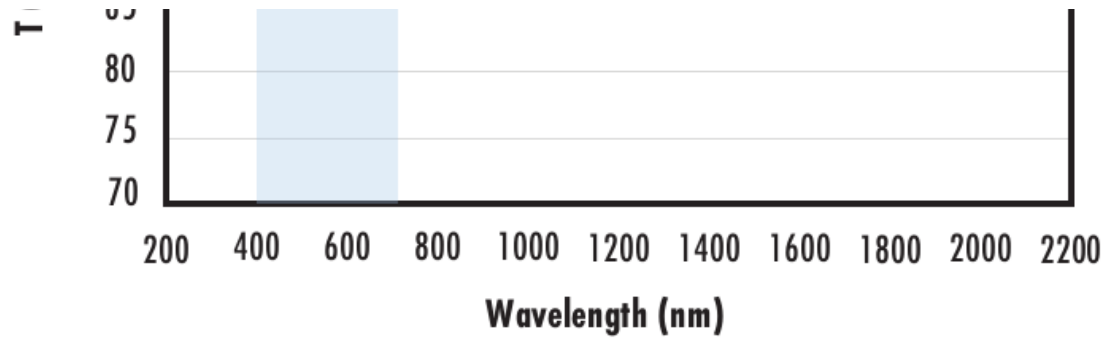



Typical transmission of a 3mm thick fused silica window with MgF2 (400-700nm) coating at 0° AOI.

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

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

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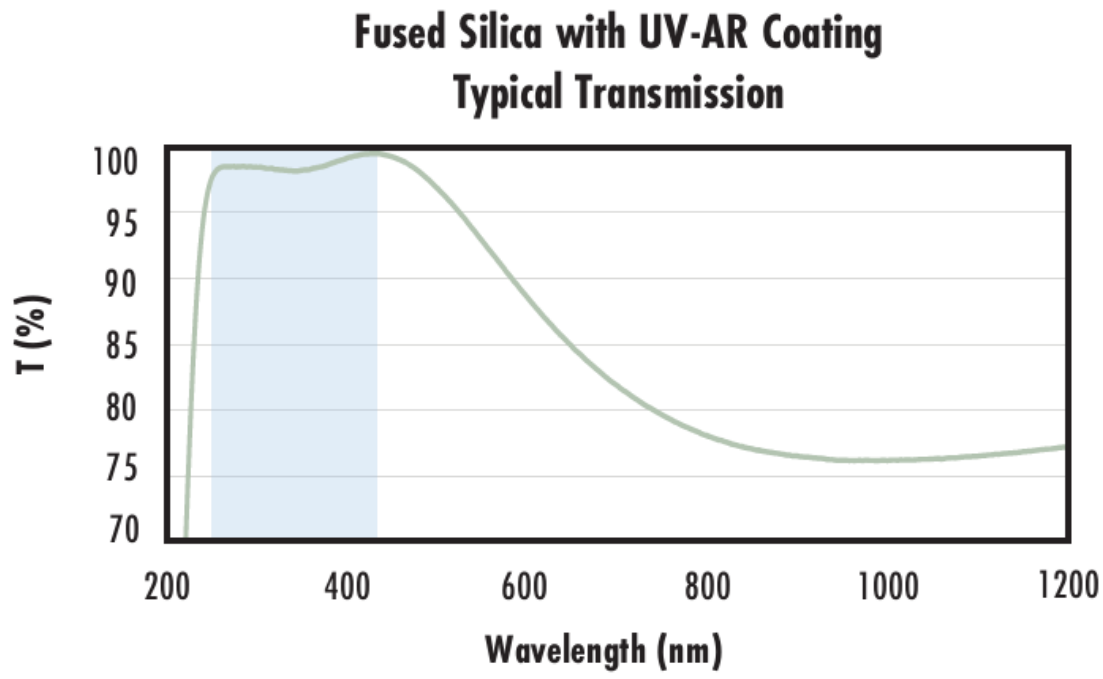


Typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) coating at 0° AOI.

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

$R_{abs} \leq 1.0\%$ @ 250 - 425nm
$R_{avg} \leq 0.75\%$ @ 250 - 425nm
$R_{avg} \leq 0.5\%$ @ 370 - 420nm

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

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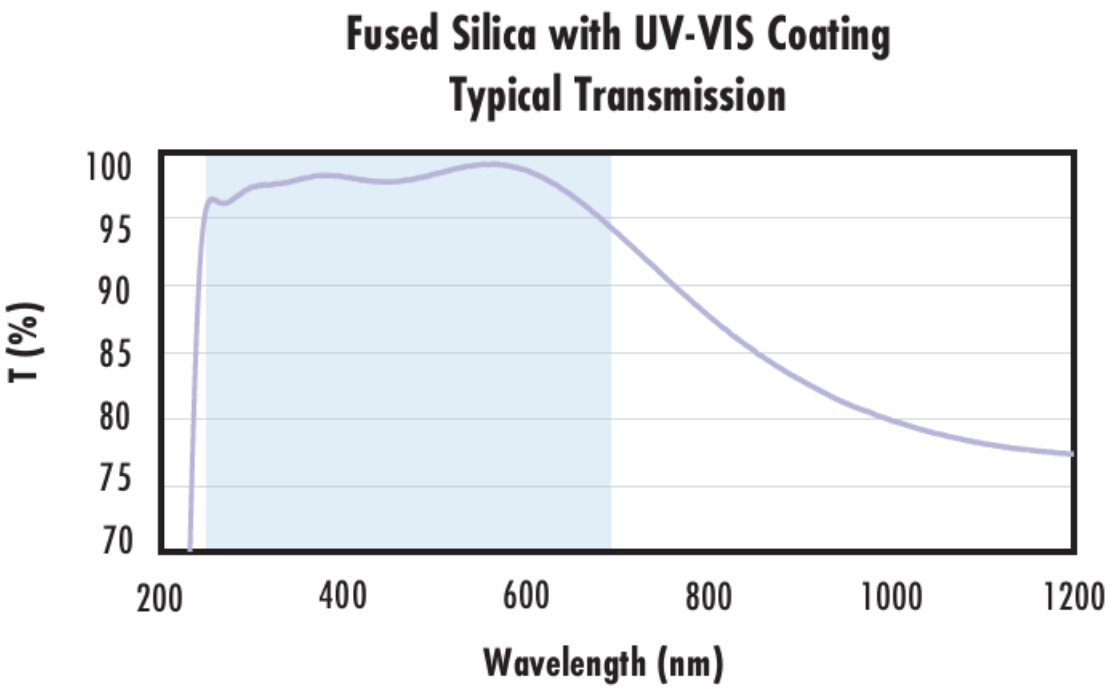


Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.

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

$R_{abs} \leq 1.0\%$ @ 350 - 450nm
$R_{avg} \leq 1.5\%$ @ 250 - 700nm

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

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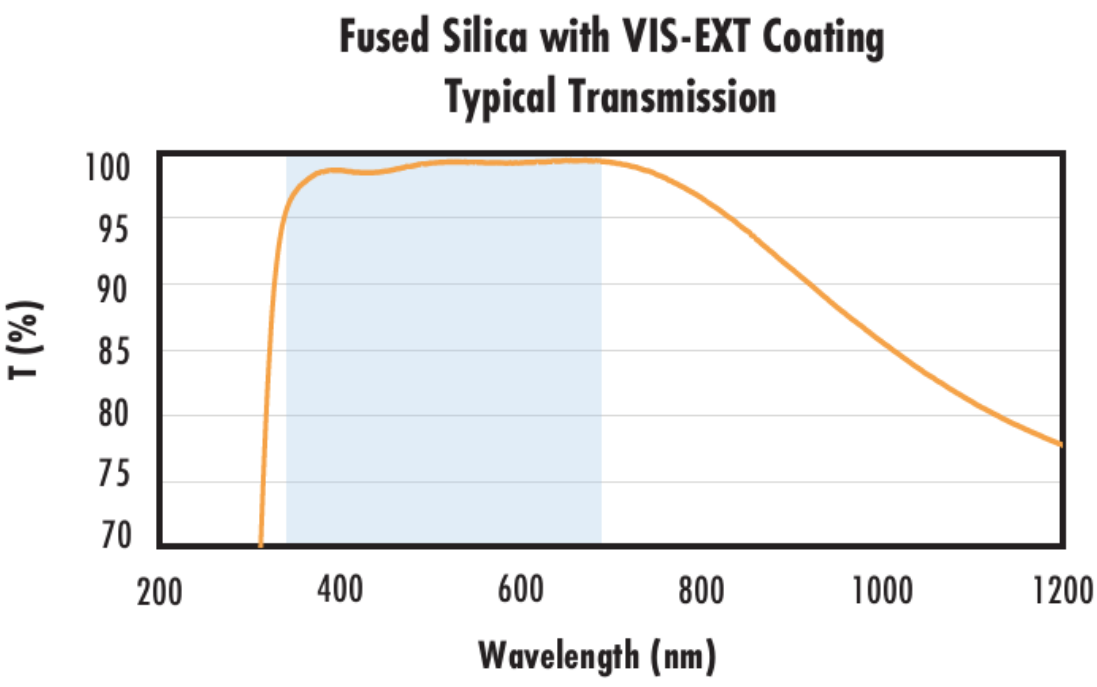


Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.

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

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

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

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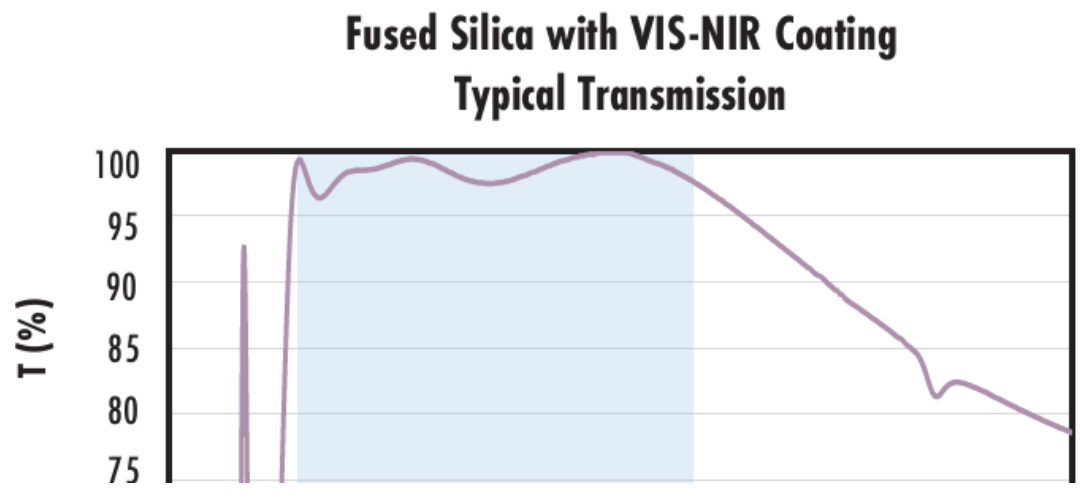
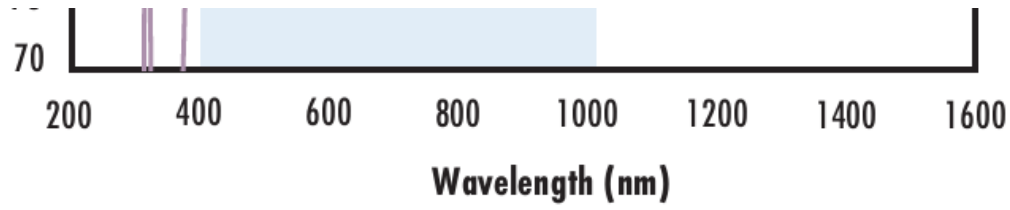



Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.

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

$R_{abs} \leq 0.25\%$ @ 880nm
$R_{avg} \leq 1.25\%$ @ 400 - 870nm
$R_{avg} \leq 1.25\%$ @ 890 - 1000nm

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

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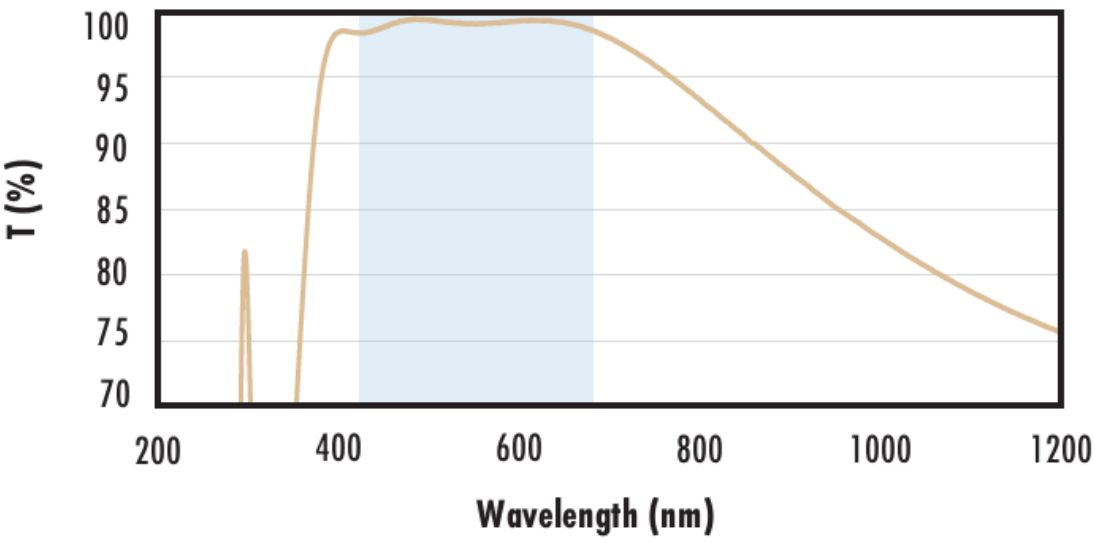
## Fused Silica with VIS 0° Coating Typical Transmission




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 wavelengh range, with the following specification:

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

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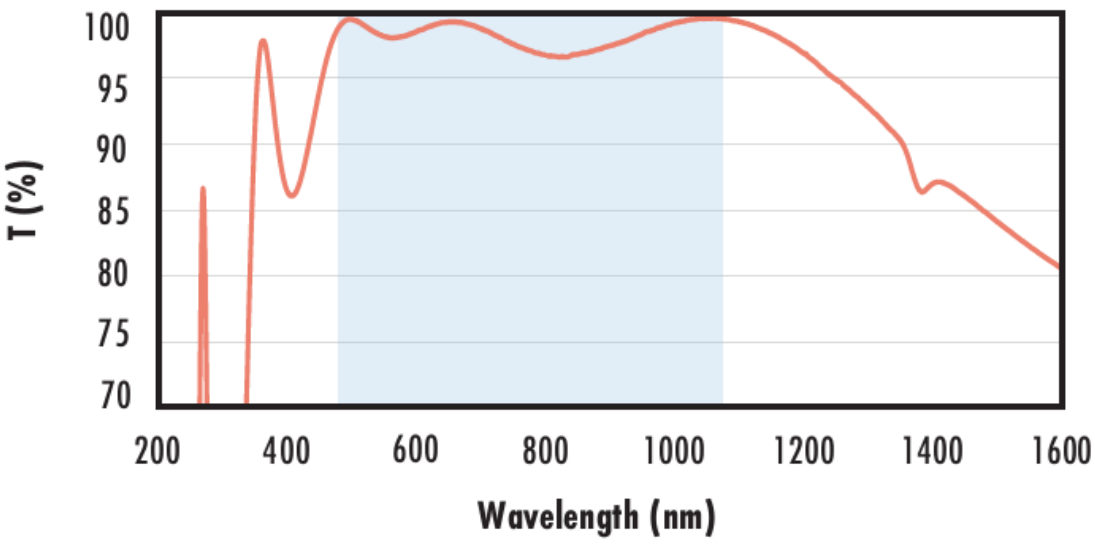
## Fused Silica with YAG-BBAR Coating Typical Transmission




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 wavelengh range, with the following specification:

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

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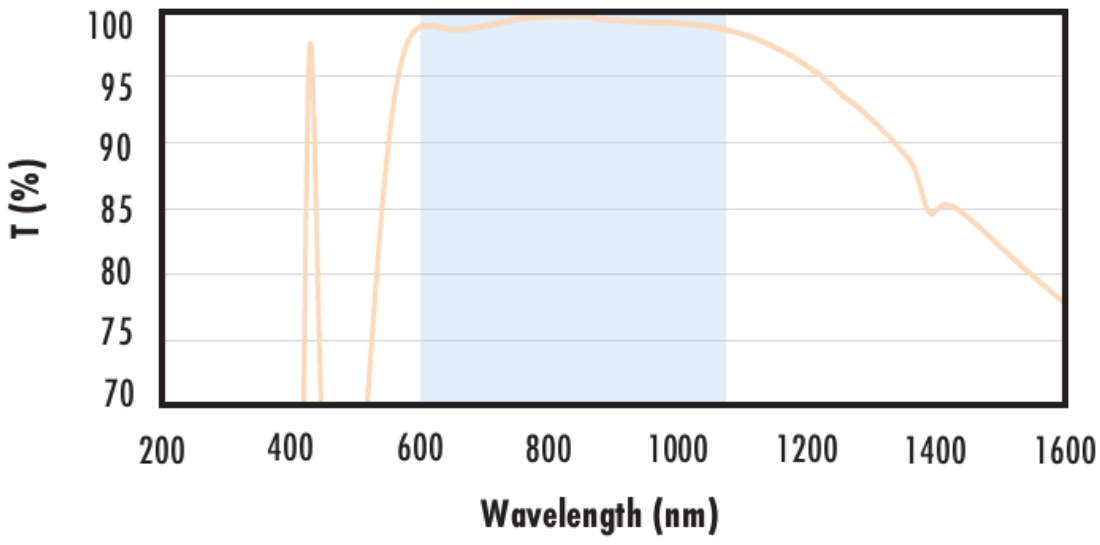
## Fused Silica with NIR I Coating Typical Transmission




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 wavelengh range, with the following specification:

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

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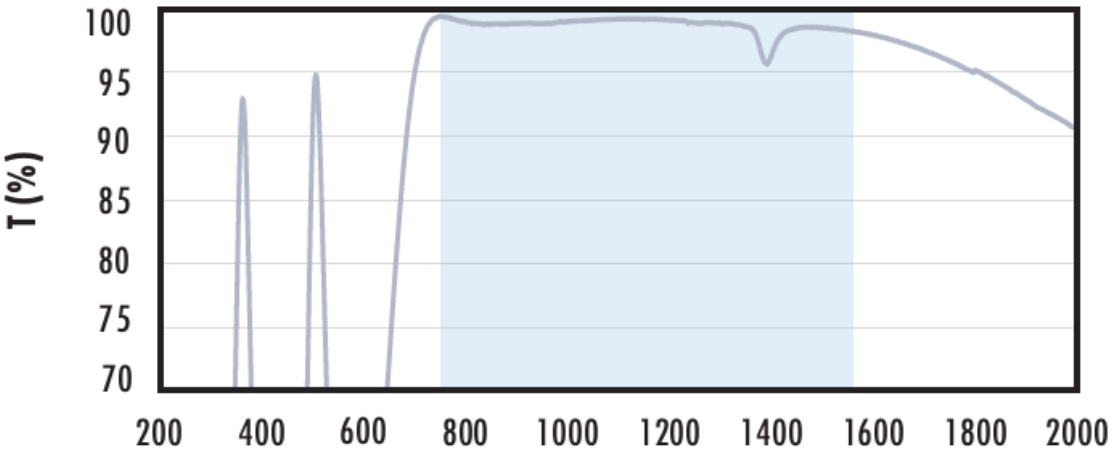
## Fused Silica with NIR II Coating Typical Transmission




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 wavelengh 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.

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| Wavelength (nm) | |
|---|---|

## Kompatible Halterungen

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