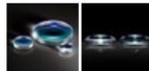


TECHSPEC®

Doppelkonvexe Linse aus UV-Quarzglas, 50 mm D. x 200 mm eff. BW, unbeschichtet



UV Fused Silica Double-Convex (DCX) Lenses



Produkt **#22-429** **3 In Stock**

[Andere Beschichtungen](#)

- 1 + €315⁰⁰

+ WARENKORB

Mengenrabatte	
Stk. 1-5	€315,00 stückpreis
Stk. 6-25	€252,00 stückpreis
Stk. 26-49	€236,00 stückpreis
Need More?	Angebotsanfrage

i Preise exklusiv der geltenden Mehrwertsteuer und Abgaben

Downloadbereich

Produktdetails

Double-Convex Lens **Typ:**

Physikalische und mechanische Eigenschaften

Durchmesser (mm):
50.00 +0.0/-0.025

Zentrierung (Bogenminuten):
<1

Fase:
Protective as needed

Mittendicke CT (mm):
4.67 ±0.10

Randdicke ET (mm):
1.23

Freie Apertur CA (mm):
49.00

Optische Eigenschaften

Hintere Brennweite BFL (mm):
198.39

Effektive Brennweite EFL (mm):
200.00

Beschichtung:
Uncoated

Beschichtungsspezifikation:
Uncoated

Substrat:
[Fused Silica](#) (Corning 7980)

Oberflächenqualität:
40-20

Power (P-V) @ 632,8 nm:
1.5λ

Unregelmäßigkeit (P-V) @ 632,8 nm:
λ/4

Radius $R_1=R_2$ (mm):
182.65

Blende:
4.00

Designwellenlänge Brennweite (nm):
587.6

Toleranz Brennweite (%):
±1

Numerische Apertur NA:
0.13

Wellenlängenbereich (nm):
200 - 2200

Konformität mit Standards

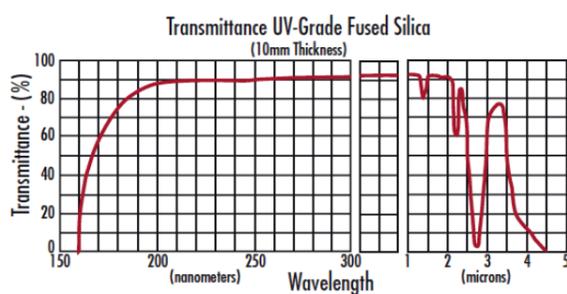
Konformitätszertifikat:
[Anzeigen](#)

Produktdetails

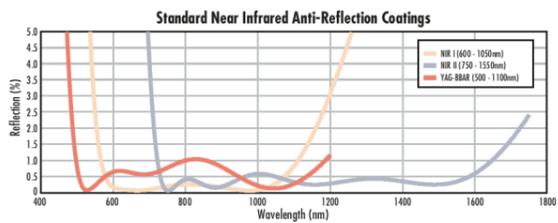
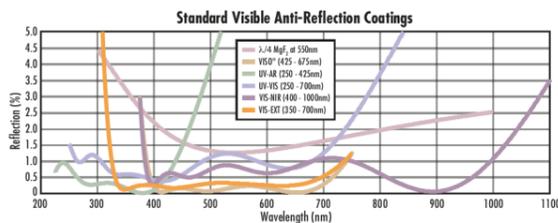
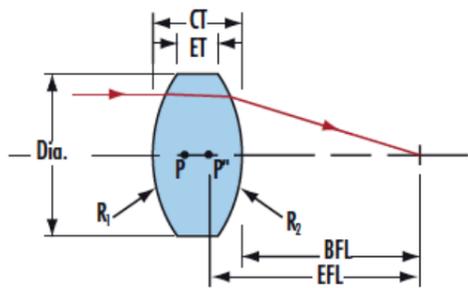
- Ideal für die Bildgebung
- Minimieren Aberrationen wie sphärische Aberration oder Koma
- Präzises Substrat aus Quarzglas

Die TECHSPEC® doppelkonvexen Linsen (DCX-Linsen) aus UV-Quarzglas, auch bikonvexe Linsen genannt, haben zwei positive, symmetrische Oberflächen mit gleichem Krümmungsradius auf beiden Seiten. Die Linsen werden generell für Bildgebungen mit endlichem Abstand und Konjugiertenverhältnis (Verhältnis zwischen Objekt- und Bildweite) zwischen 0,2 und 5 empfohlen. Bei einem Konjugiertenverhältnis von 1 sind Aberrationen wie sphärische Aberration, chromatische Aberration, Koma und Verzeichnung aufgrund des symmetrischen Linsendesigns minimiert oder sogar ganz eliminiert.

Technische Informationen

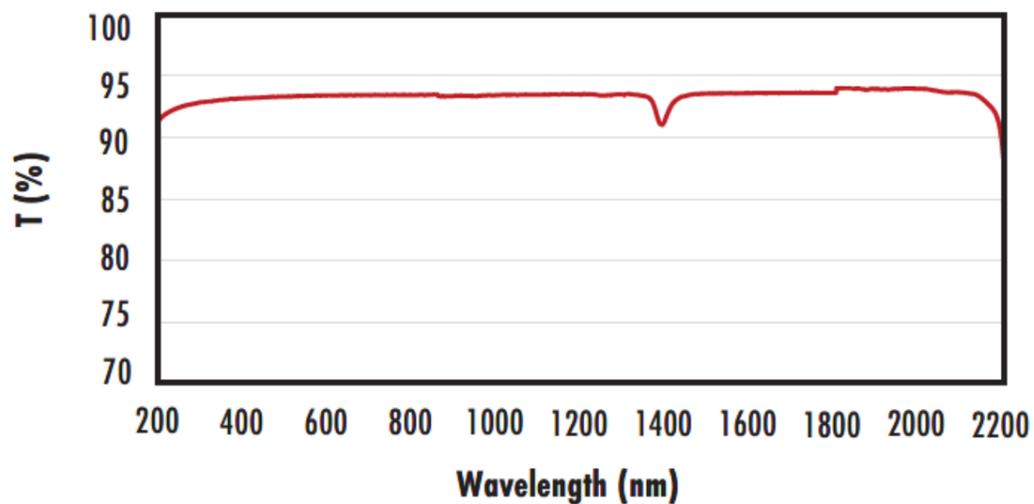


UV FS Transmission Curve



FUSED SILICA

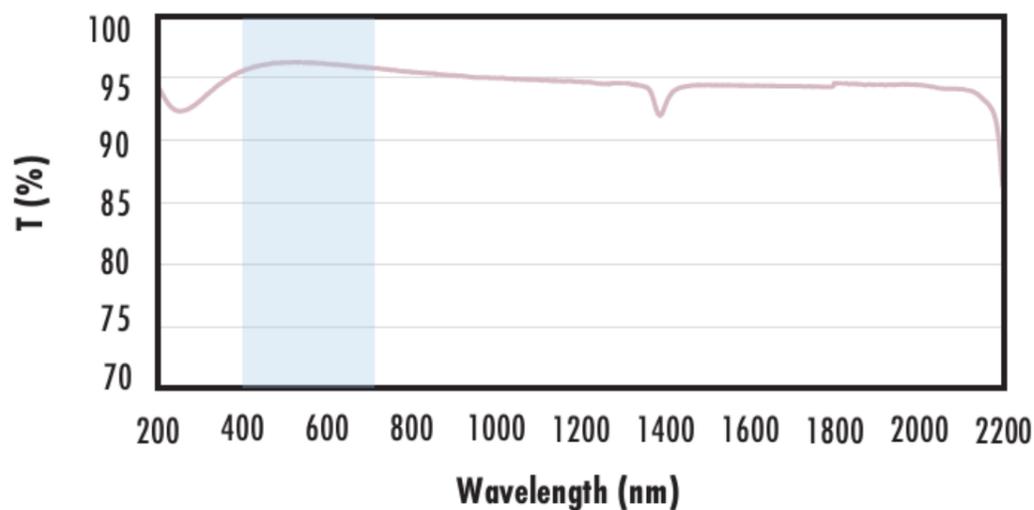
**Uncoated Fused Silica
Typical Transmission**



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

[Click Here to Download Data](#)

**Fused Silica with MgF₂ Coating
Typical Transmission**



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

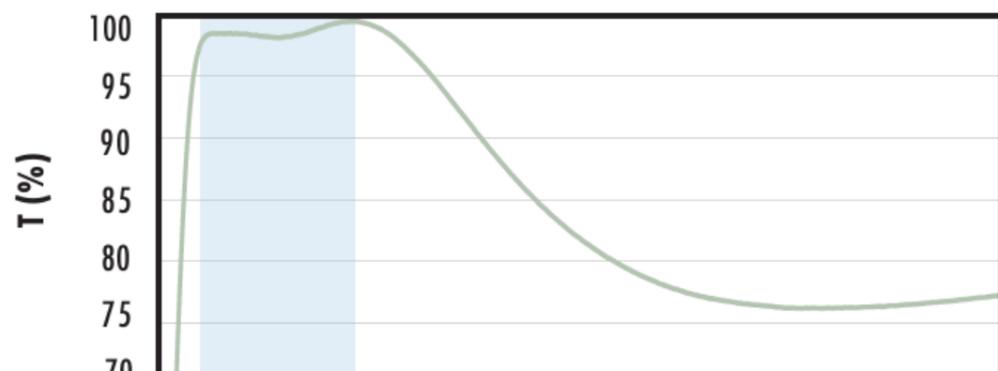
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

**Fused Silica with UV-AR Coating
Typical Transmission**



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 wavelength range, with the following specification:

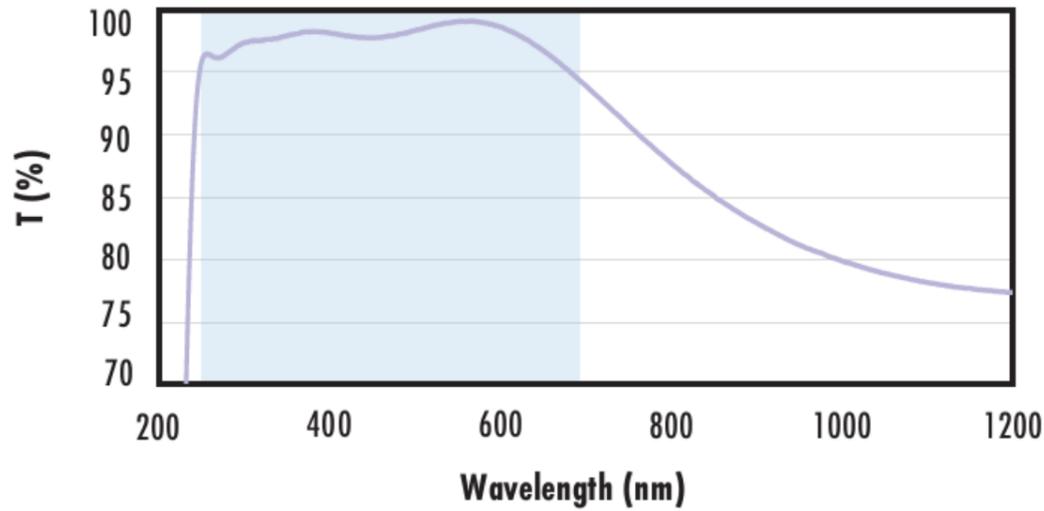
$$\begin{aligned} R_{abs} &\leq 1.0\% \text{ @ } 250 - 425\text{nm} \\ R_{avg} &\leq 0.75\% \text{ @ } 250 - 425\text{nm} \\ R_{avg} &\leq 0.5\% \text{ @ } 370 - 420\text{nm} \end{aligned}$$

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

[Click Here to Download Data](#)



Fused Silica with UV-VIS Coating Typical Transmission



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 wavelength range, with the following specification:

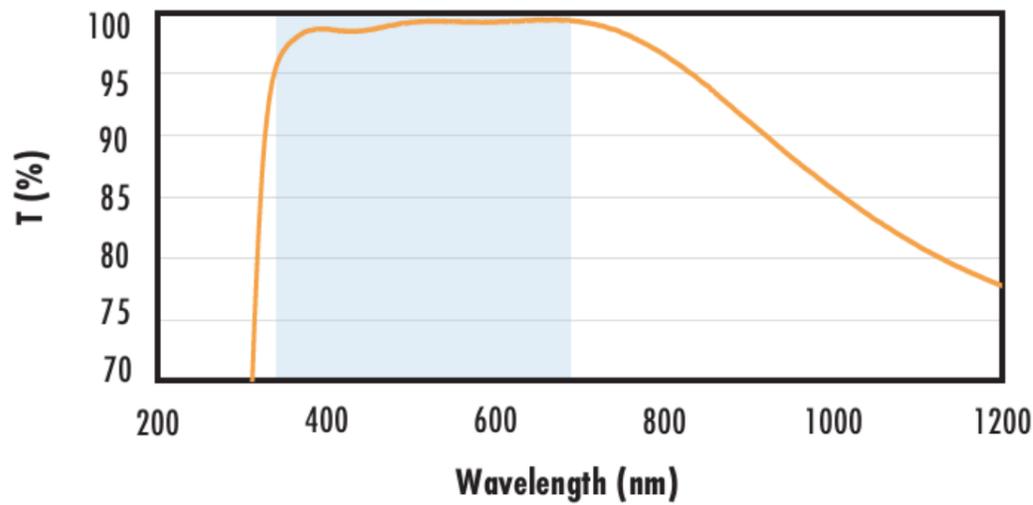
$$R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}$$

$$R_{avg} \leq 1.5\% \text{ @ } 250 - 700\text{nm}$$

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

[Click Here to Download Data](#)

Fused Silica with VIS-EXT Coating Typical Transmission



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

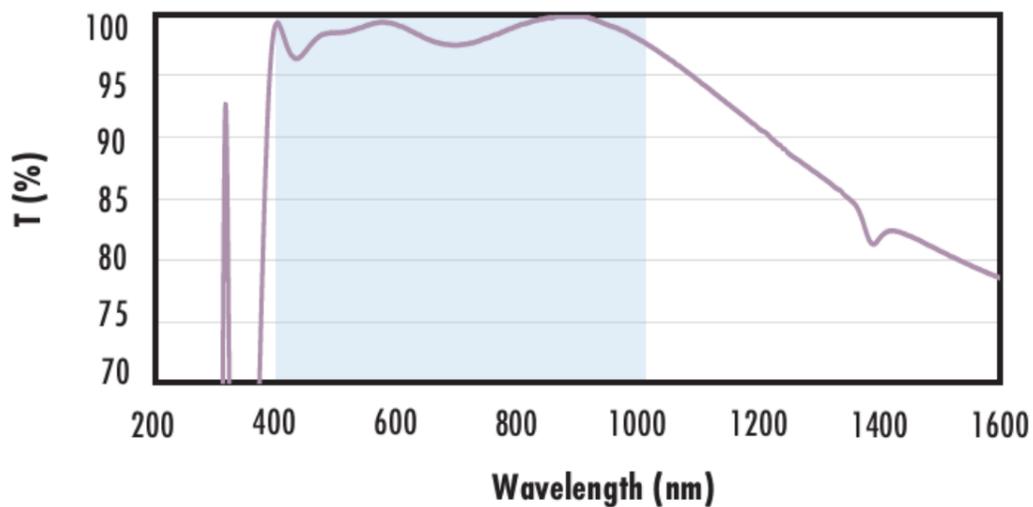
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

[Click Here to Download Data](#)

Fused Silica with VIS-NIR Coating Typical Transmission



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 wavelength range, with the following specification:

$$R_{abs} \leq 0.25\% \text{ @ } 880\text{nm}$$

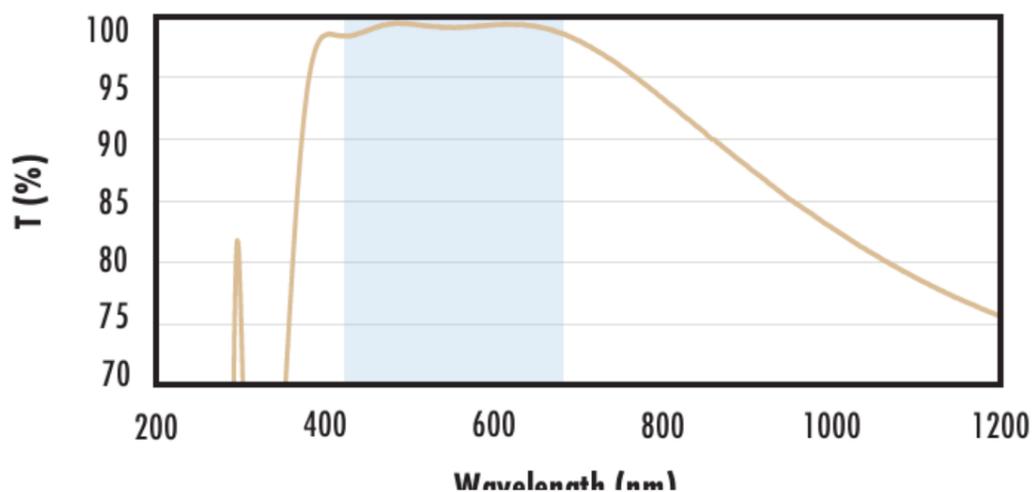
$$R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}$$

$$R_{avg} \leq 1.25\% \text{ @ } 890 - 1000\text{nm}$$

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

[Click Here to Download Data](#)

Fused Silica with VIS 0° Coating Typical Transmission



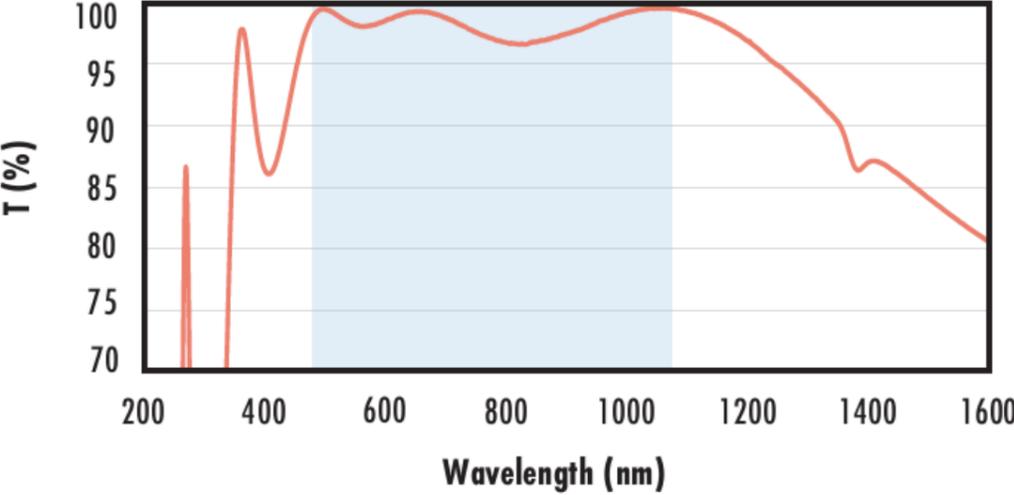
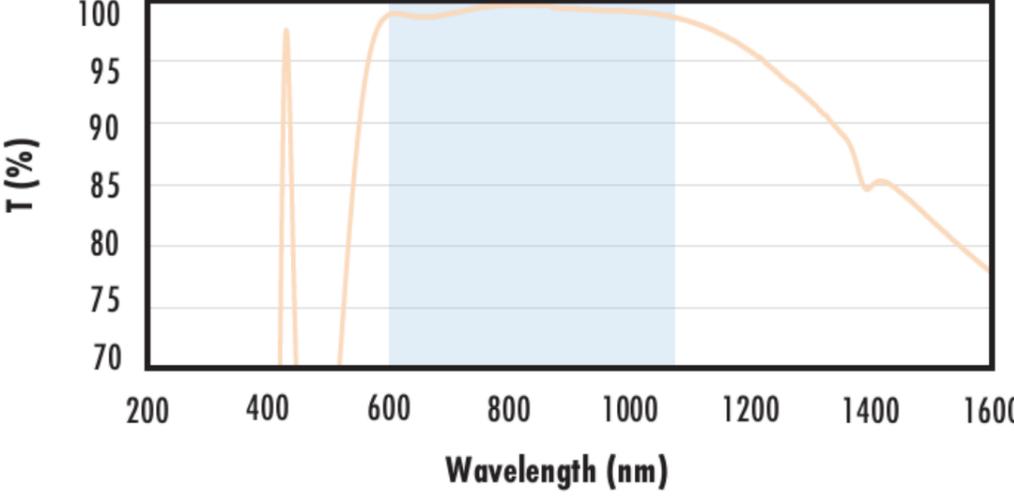
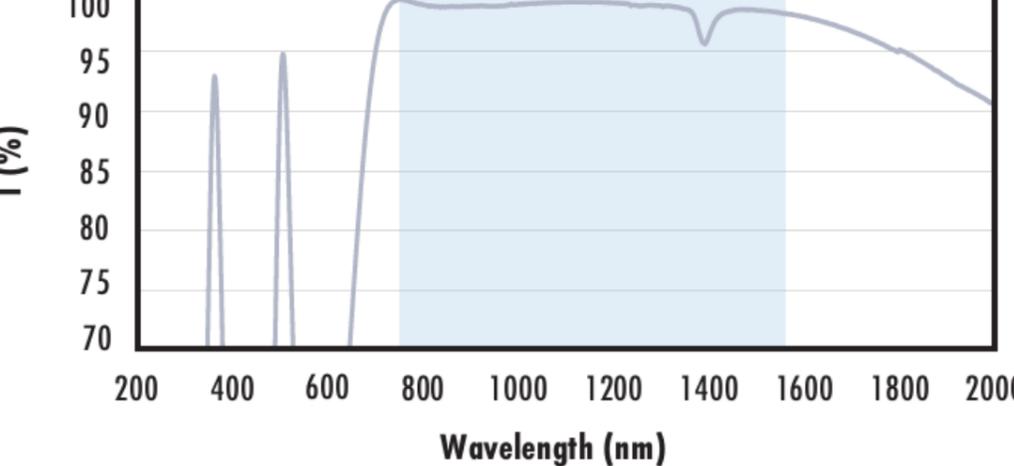
Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.

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

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

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

[Click Here to Download Data](#)

Wavelength (nm)	
<p style="text-align: center;">Fused Silica with YAG-BBAR Coating Typical Transmission</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 style="text-align: center;">$R_{abs} \leq 0.25\%$ @ 532nm $R_{abs} \leq 0.25\%$ @ 1064nm $R_{avg} \leq 1.0\%$ @ 500 - 1100nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p style="text-align: center;">Click Here to Download Data</p>
<p style="text-align: center;">Fused Silica with NIR I Coating Typical Transmission</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 style="text-align: center;">$R_{avg} \leq 0.5\%$ @ 600 - 1050nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p style="text-align: center;">Click Here to Download Data</p>
<p style="text-align: center;">Fused Silica with NIR II Coating Typical Transmission</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 style="text-align: center;">$R_{abs} \leq 1.5\%$ @ 750 - 800nm $R_{abs} \leq 1.0\%$ @ 800 - 1550nm $R_{avg} \leq 0.7\%$ @ 750 - 1550nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p style="text-align: center;">Click Here to Download Data</p>

Kundenspezifische Produkte

Edmund Optics bietet einen umfangreichen kundenspezifischen Fertigungsservice für Optik- und Bildverarbeitungs-komponenten 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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