

**TECHSPEC®**

**Doppelkonvexe Linse aus UV-Quarzglas, 25 mm D. x 125 mm eff. BW, unbeschichtet**



UV Fused Silica Double-Convex (DCX) Lenses



Produkt **#48-298** **20+ In Stock**

[Andere Beschichtungen](#)

⊖ 1 ⊕ €133.<sup>00</sup>

**+ WARENKORB**

Mengenrabatte	
Stk. 1-5	€133,00 stückpreis
Stk. 6-25	€106,00 stückpreis
Stk. 26-49	€100,00 stückpreis
Need More?	<a href="#">Angebotsanfrage</a>

ⓘ Preise exklusiv der geltenden Mehrwertsteuer und Abgaben

Downloadbereich

**Produktdetails**

Double-Convex Lens **Typ:**

## Physikalische und mechanische Eigenschaften

Durchmesser (mm):  
25.00 +0.0/-0.025

Zentrierung (Bogenminuten):  
<1

Fase:  
Protective as needed

Mittendicke CT (mm):  
3.42 ±0.10

Randdicke ET (mm):  
2.05

Freie Apertur CA (mm):  
24.00

## Optische Eigenschaften

Hintere Brennweite BFL (mm):  
123.82

Effektive Brennweite EFL (mm):  
125.00

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<sub>1</sub>=R<sub>2</sub> (mm):  
114.08

Blende:  
5.00

Designwellenlänge Brennweite (nm):  
587.6

Toleranz Brennweite (%):  
±1

Numerische Apertur NA:  
0.10

Wellenlängenbereich (nm):  
200 - 2200

## Konformität mit Standards

RoHS 2015:  
**Konform**

Reach 219:  
**Konform**

Konformitätszertifikat:  
**Anzeigen**

## Gewünschte Spezifikationen nicht dabei?

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.

Unser Service beinhaltet:

- Kundenspezifische Abmessungen, Materialien und mehr
- Hochpräzise Oberflächenqualität und -ebenheit
- Enge Toleranzen und komplexe Formen
- Skalierbare Produktion – vom Prototypen zur Serie

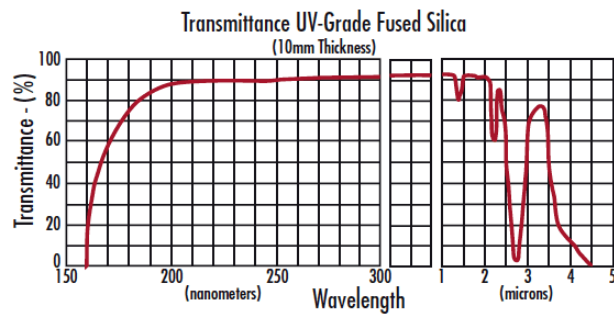
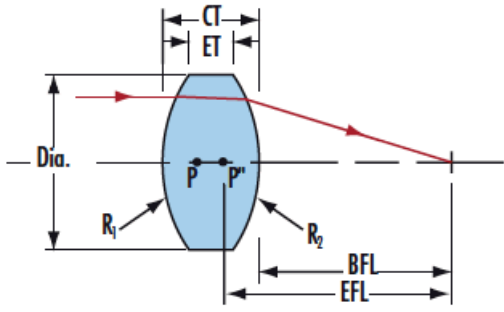
Erfahren Sie mehr über unsere [kundenspezifischen Fertigungsmöglichkeiten](#) oder senden Sie [hier](#) eine Anfrage.

## Produktdetails

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

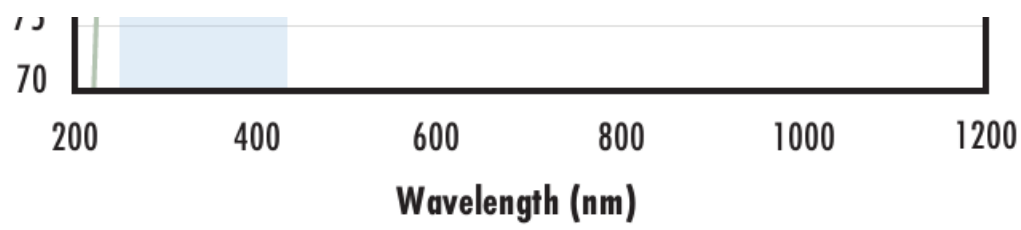
Die TECHSPEC® doppelkonvexen Linsen (DCX-Linsen) aus UV-Quarzglas, auch bikonvexe Linsen genannt, haben zwei positive, symmetrische Oberflächen mit gleichem Krümmungsradius auf beiden Seiten. Die Linsen werden generell für Bildgebungen mit endlichem Abstand und Konjugiertenverhältnis (Verhältnis zwischen 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



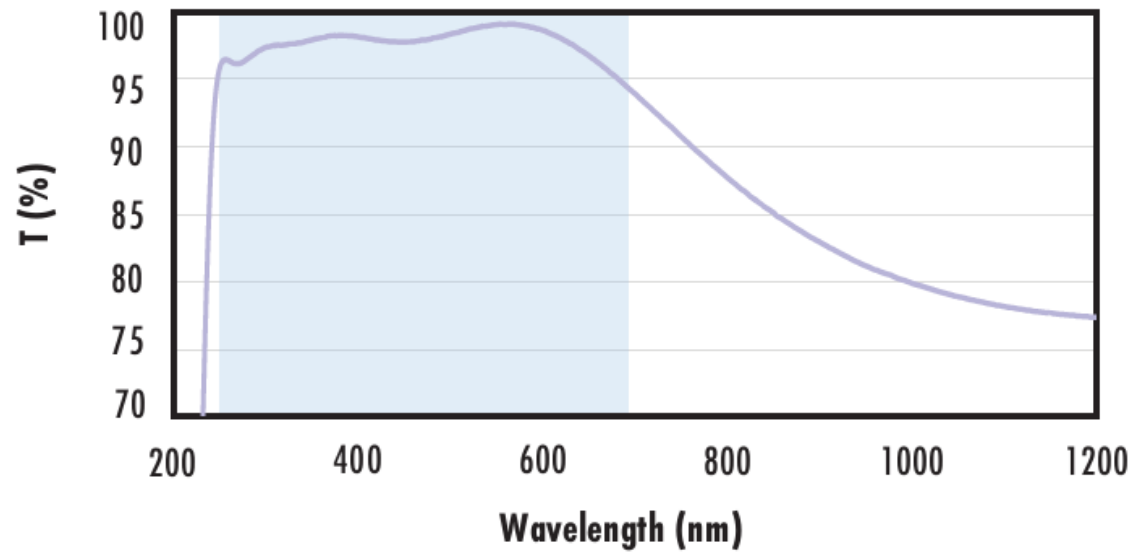
UV FS Transmission Curve

FUSED SILICA	
<h3>Uncoated Fused Silica Typical Transmission</h3>	<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>
<h3>Fused Silica with MgF<sub>2</sub> Coating Typical Transmission</h3>	<p>Typical transmission of a 3mm thick fused silica window with MgF<sub>2</sub> (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>
<h3>Fused Silica with UV-AR Coating Typical Transmission</h3>	<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>  <math>R_{avg} \leq 0.75\% @ 250 - 425\text{nm}</math>  <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>



[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:

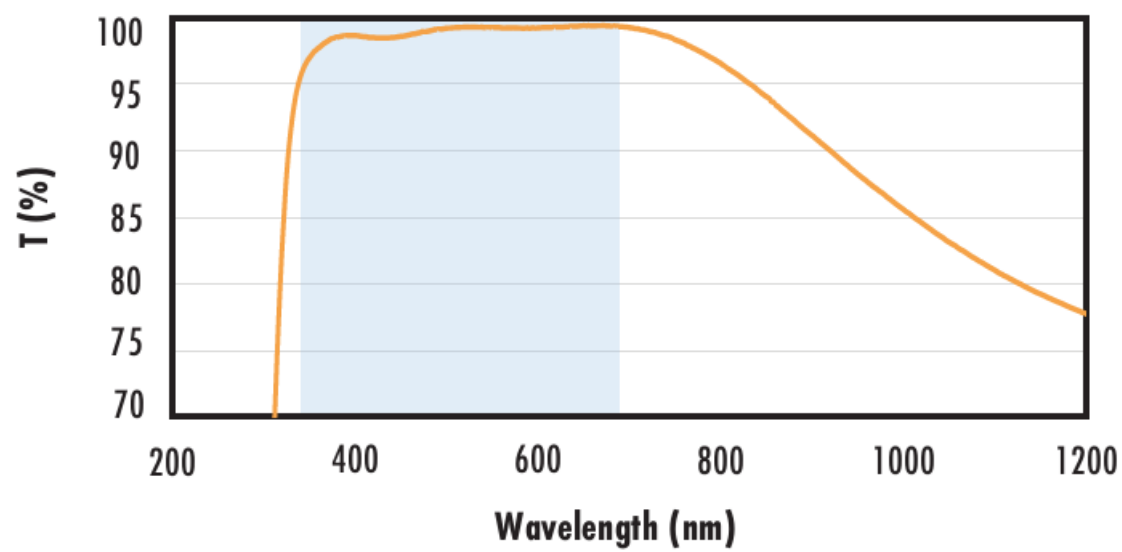
$$R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}$$

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

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.

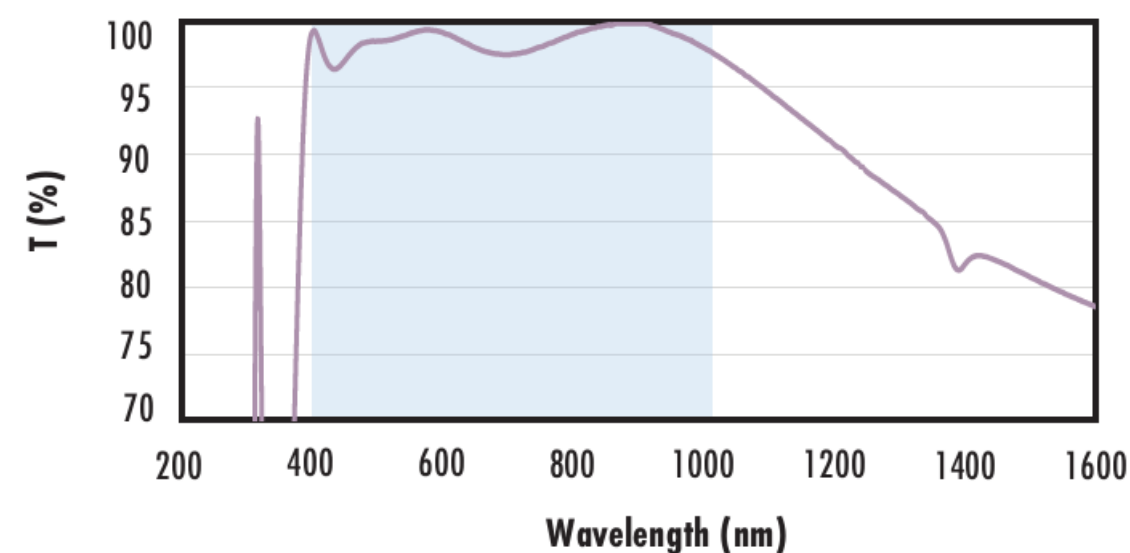
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

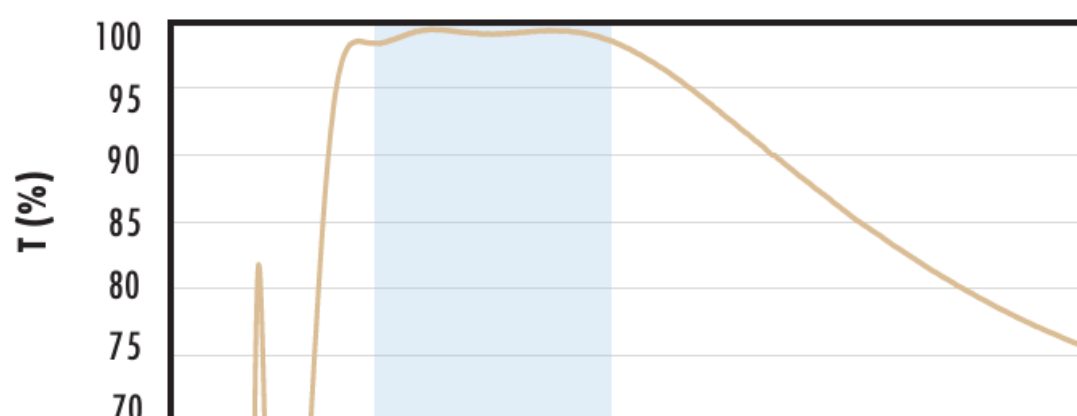
$$R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}$$

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

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



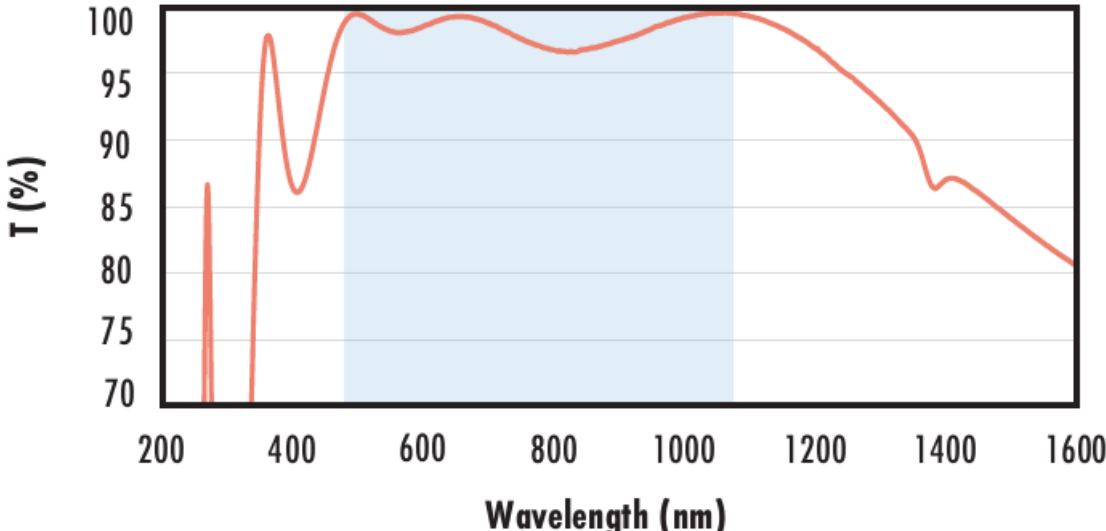
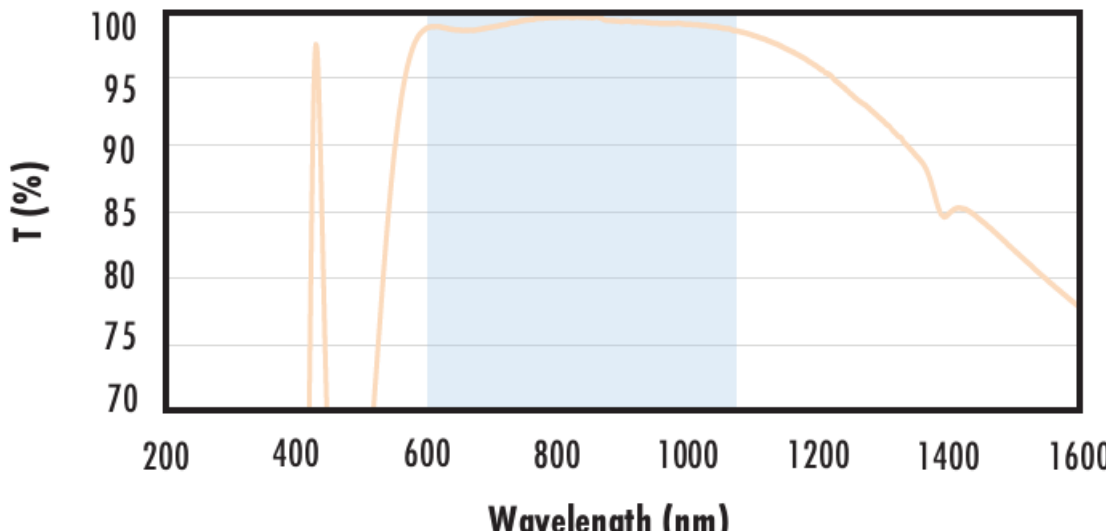
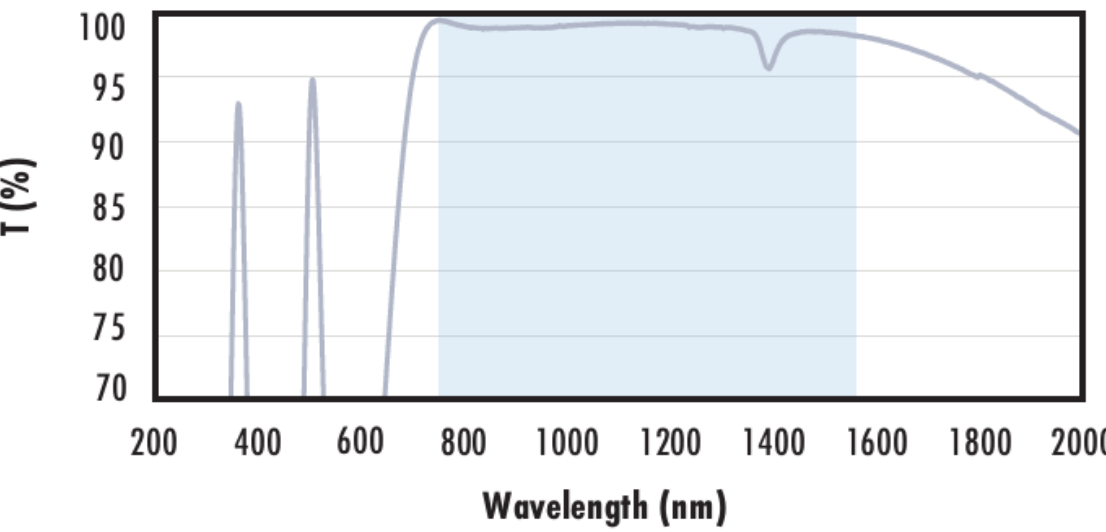
Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.

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](#)

<p>200      400      600      800      1000      1200</p> <p style="text-align: center;">Wavelength (nm)</p>	
<p style="text-align: center;"><b>Fused Silica with YAG-BBAR Coating</b> <b>Typical Transmission</b></p>  <p style="text-align: center;">200      400      600      800      1000      1200      1400      1600</p> <p style="text-align: center;">Wavelength (nm)</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;"><math>R_{abs} \leq 0.25\% @ 532\text{nm}</math>  <math>R_{abs} \leq 0.25\% @ 1064\text{nm}</math>  <math>R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p style="text-align: center;"><a href="#">Click Here to Download Data</a></p>
<p style="text-align: center;"><b>Fused Silica with NIR I Coating</b> <b>Typical Transmission</b></p>  <p style="text-align: center;">200      400      600      800      1000      1200      1400      1600</p> <p style="text-align: center;">Wavelength (nm)</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;"><math>R_{avg} \leq 0.5\% @ 600 - 1050\text{nm}</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p style="text-align: center;"><a href="#">Click Here to Download Data</a></p>
<p style="text-align: center;"><b>Fused Silica with NIR II Coating</b> <b>Typical Transmission</b></p>  <p style="text-align: center;">200      400      600      800      1000      1200      1400      1600      1800      2000</p> <p style="text-align: center;">Wavelength (nm)</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;"><math>R_{abs} \leq 1.5\% @ 750 - 800\text{nm}</math>  <math>R_{abs} \leq 1.0\% @ 800 - 1550\text{nm}</math>  <math>R_{avg} \leq 0.7\% @ 750 - 1550\text{nm}</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p style="text-align: center;"><a href="#">Click Here to Download Data</a></p>

**Kompatible Halterungen**