

**TECHSPEC®**

**Plankonkave Linse aus UV-Quarzglas, 9 mm D. x -13,5 mm eff. Brennweite, VIS-NIR-beschichtet**



UV Fused Silica Plano-Concave (PCV) Lenses



Produkt **#21-046** **5 In Stock**

[Andere Beschichtungen](#)

- 1 + €150<sup>00</sup>

**+ WARENKORB**

Mengenrabatte	
Stk. 1-5	€150,00 stückpreis
Stk. 6-25	€120,00 stückpreis
Stk. 26-49	€113,00 stückpreis
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ⓘ Preise exklusiv der geltenden Mehrwertsteuer und Abgaben

Downloadbereich

**Produktdetails**

Typ:

Plano-Concave Lens

Max. Flat Annulus is 0.3mm

Hinweis:

## Physikalische und mechanische Eigenschaften

Durchmesser (mm):

9.00 +0.0/-0.025

Mittendicke CT (mm):

2.00

Toleranz Mittendicke (mm):

±0.05

Zentrierung (Bogenminuten):

<1

Freie Apertur CA (mm):

8.1

Randdicke ET (mm):

3.64

## Optische Eigenschaften

Effektive Brennweite EFL (mm):

-13.50

Substrat:

[Fused Silica](#) (Corning 7980)

Blende:

1.5

Numerische Apertur NA:

0.33

Beschichtung:

VIS-NIR (400-1000nm)

Wellenlängenbereich (nm):

400 - 1000

Hintere Brennweite BFL (mm):

-14.89

Beschichtungsspezifikation:

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

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

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

Designwellenlänge Brennweite (nm):

587.6

Toleranz Brennweite (%):

±1

Radius  $R_1$  (mm):

-6.20

Oberflächenqualität:

40-20

Zerstörschwelle, Referenz:

5 J/cm<sup>2</sup> @ 532nm, 10ns

Power (P-V) @ 632,8 nm:

1.5λ

Unregelmäßigkeit (P-V) @ 632,8 nm:

M4

## Konformität mit Standards

RoHS 2015:

[Konform](#)

Konformitätszertifikat:

[Anzeigen](#)

Reach 235:

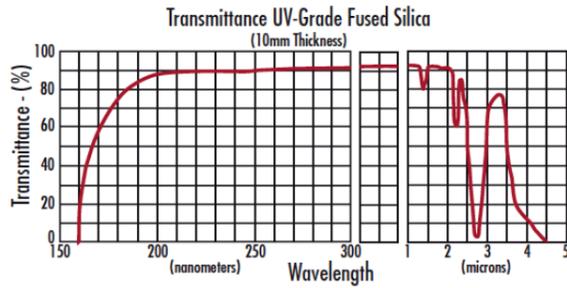
[Konform](#)

## Produktdetails

- Negative Brennweiten zur Strahlaufweitung oder Lichtprojektion
- Wellenlängenbereich von 200 - 2200 nm
- UV-AR-Beschichtungen verfügbar

Diese hochqualitativen optischen Elemente werden mit CNC-Maschinen nach dem neuesten Stand der Technik gefertigt. Die UV-Linsen werden aus synthetischem Quarzglas hergestellt. Zusätzlich zur exzellenten Transmission und hohen Temperaturbeständigkeit, bieten die Linsen eine besonders hohe chemische Reinheit. Diese Linsen sind die ideale Wahl für viele Laseranwendungen und bildgebende Anwendungen, besonders im UV-Bereich. Die breitbandige Antireflexbeschichtung ermöglicht eine höhere Transmission im UV-Bereich.

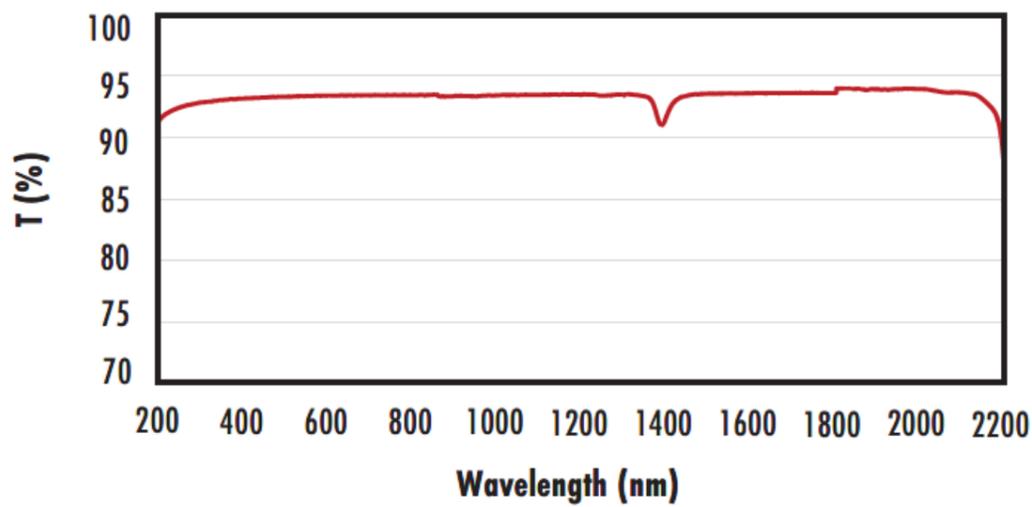
## Technische Informationen



UV FS Transmission Curve

FUSED SILICA

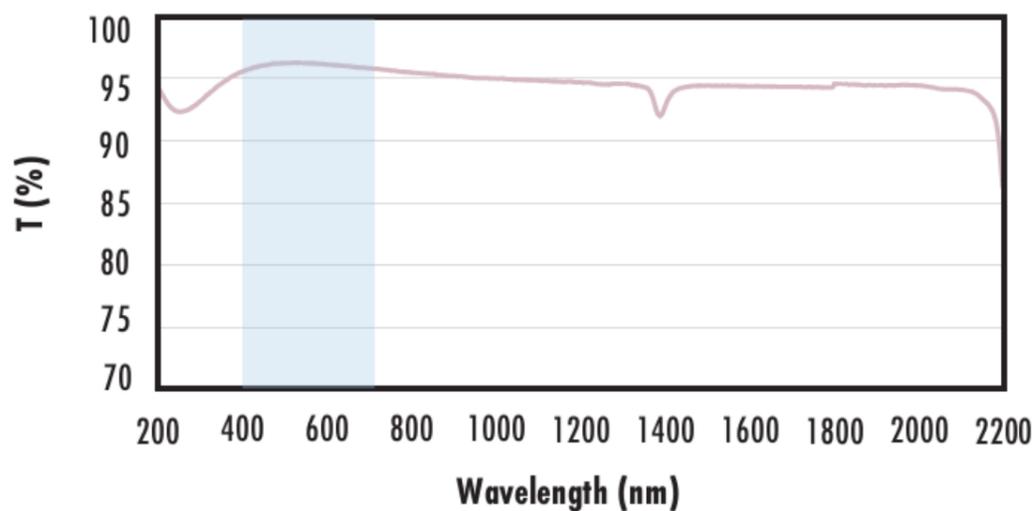
### Uncoated Fused Silica Typical Transmission



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

[Click Here to Download Data](#)

### Fused Silica with MgF<sub>2</sub> Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.

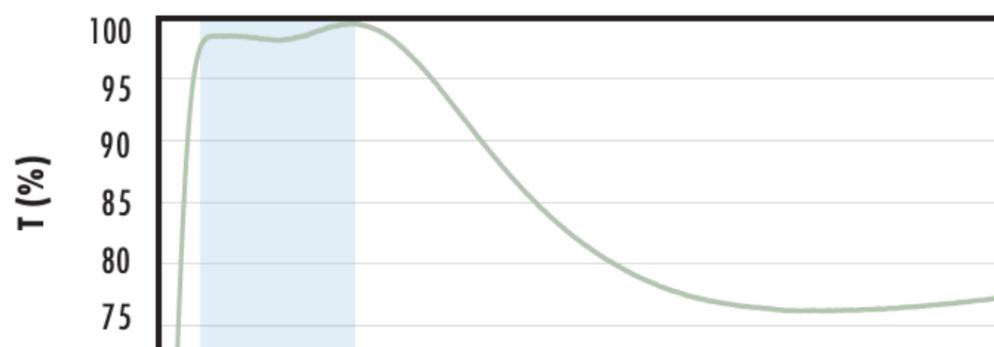
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

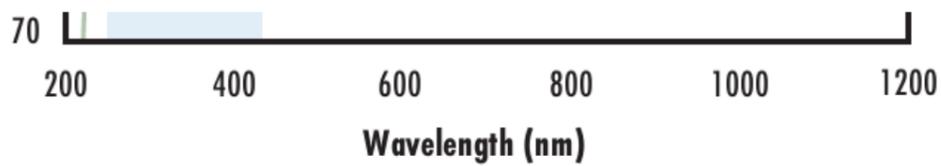
$R_{abs} \leq 1.0\% @ 250 - 425\text{nm}$

$R_{avg} \leq 0.75\% @ 250 - 425\text{nm}$

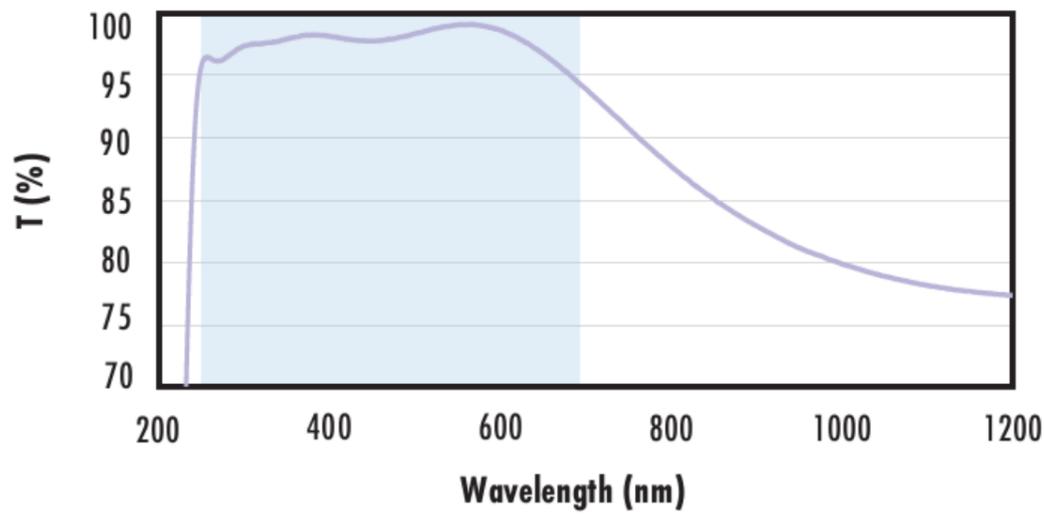
$R_{avg} \leq 0.5\% @ 370 - 420\text{nm}$

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

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### 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:

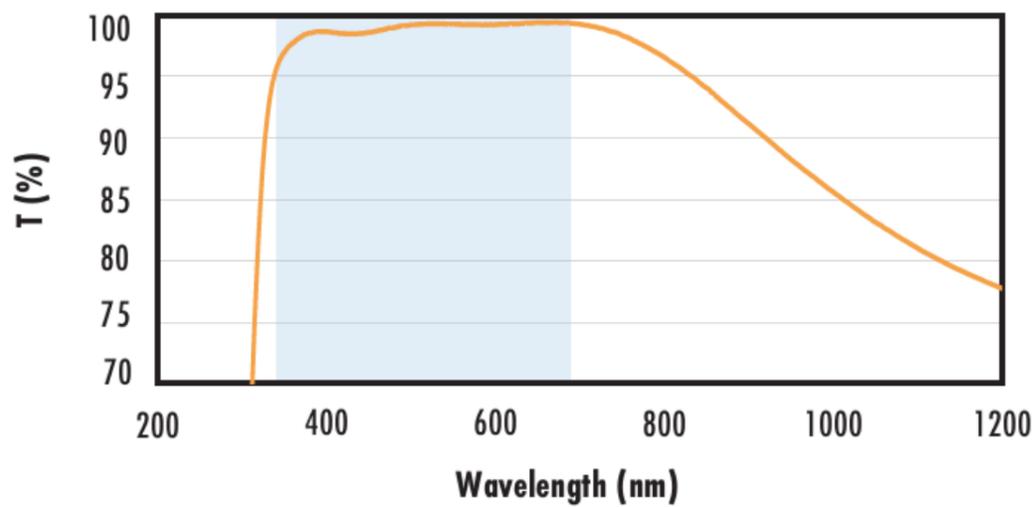
$$R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}$$

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

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

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### 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.

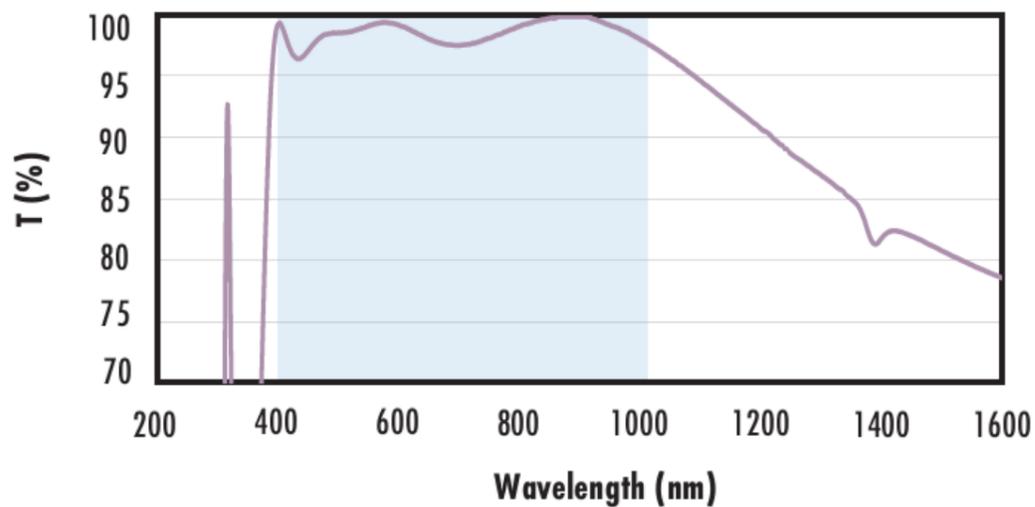
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

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

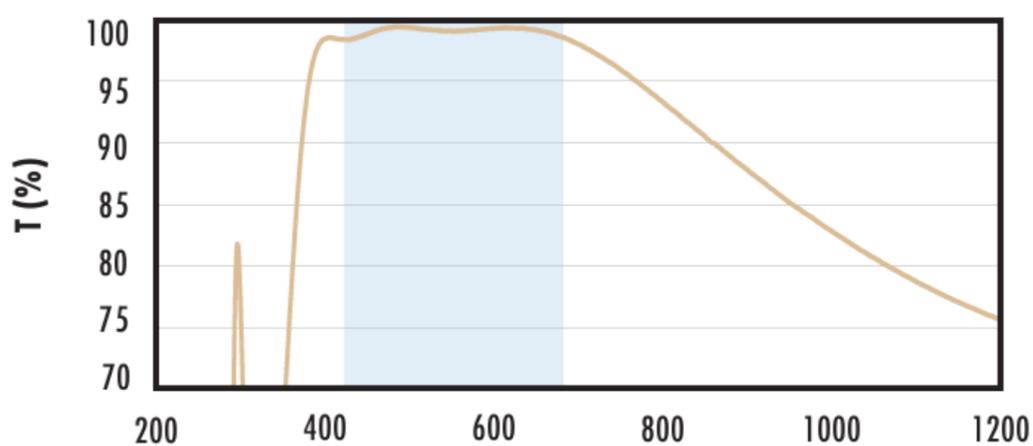
$$R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}$$

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

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

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### Fused Silica with VIS 0° Coating Typical Transmission



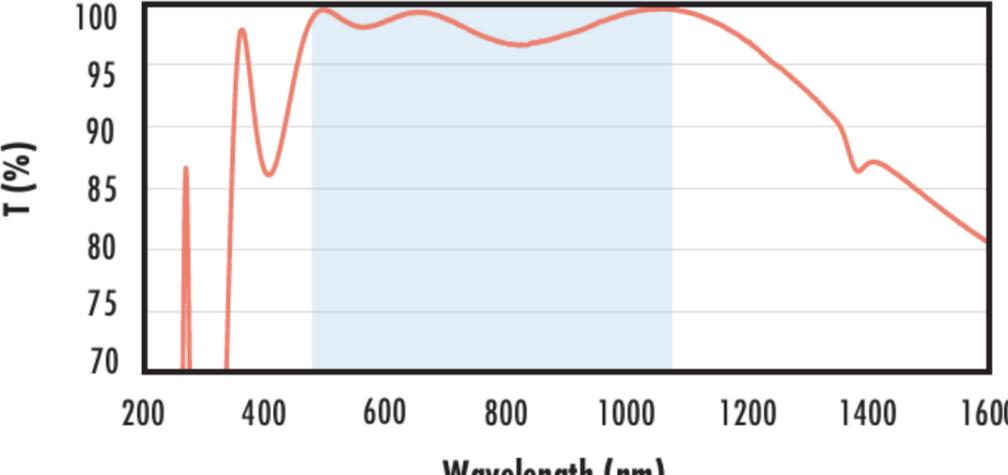
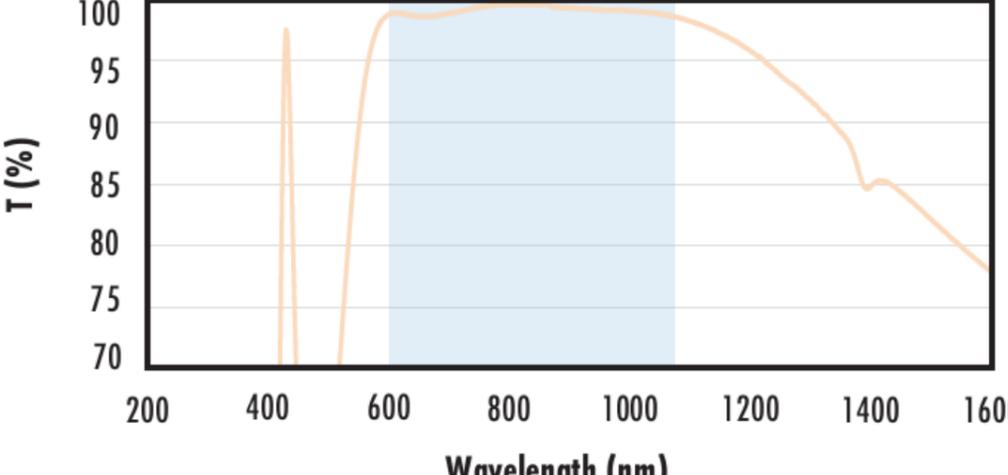
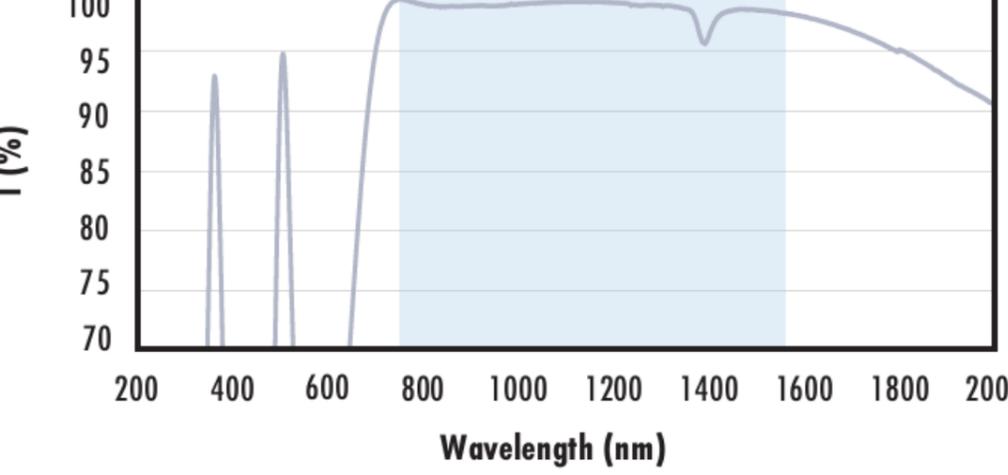
Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.

The blue shaded region indicates the coating design 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.

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Wavelength (nm)	
<p style="text-align: center;"><b>Fused Silica with YAG-BBAR Coating</b> <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 style="text-align: center;"><math>R_{abs} \leq 0.25\% @ 532nm</math>  <math>R_{abs} \leq 0.25\% @ 1064nm</math>  <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 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>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 - 1050nm</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>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 - 800nm</math>  <math>R_{abs} \leq 1.0\% @ 800 - 1550nm</math>  <math>R_{avg} \leq 0.7\% @ 750 - 1550nm</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>

## Beschichtungskurven

### 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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- Skalierbare Produktion – vom Prototypen zur Serie

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### Kompatible Halterungen

