

TECHSPEC®

25.4 x 25.4mm x 50mm FL, Uncoated Laser Grade PCX Cylinder Lens



TECHSPEC Beam Shaping Fused Silica Cylinder Lenses

Stock #36-090 **20+ In Stock**

1 £135.⁰⁰

ADD TO CART

Volume Pricing	
Qty 1-5	£135.00 each
Qty 6-25	£122.00 each
Qty 26-49	£117.00 each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads	
STEP:step	PDF Drawing:pdf
IGES:igs	Zemax:zar
Zemax:zmx	eDrawing:eprt
Code V:seq	EO Spec Sheet
Download All	

General

Type: Cylinder Lens, Plano-Convex

Physical & Mechanical Properties

Bevel:	Protective as needed	Center Thickness CT (mm):	5.00
Center Thickness Tolerance (mm):	±0.1	Clear Aperture CA (mm):	22.86 x 22.86
Dimensional Tolerance (mm):	+0.0/-0.025	Dimensions (mm):	25.4 x 25.4
Edge Thickness ET (mm):	1.16	Axial Twist (arcmin):	<3

Optical Properties

Effective Focal Length EFL (mm):	50.00	Substrate: Fused Silica (Corning 7980)	
f/#:	2.00	Numerical Aperture NA:	0.17
Coating:	Uncoated	Wavelength Range (nm):	200 - 2200
Back Focal Length BFL (mm):	46.58	Radius R₁ (mm):	22.93

Surface Quality:	20-10	Power (P-V) @ 632.8nm:	1.5λ
Irregularity (P-V) @ 632.8nm:	λ/4	Plano Axis Wedge (arcmin):	<3
Power Axis Wedge (arcmin):	<4.5		

Regulatory Compliance

RoHS 2015:	Compliant	Reach 223:	Compliant
Certificate of Conformance:	View		

Need different specs or modifications?

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

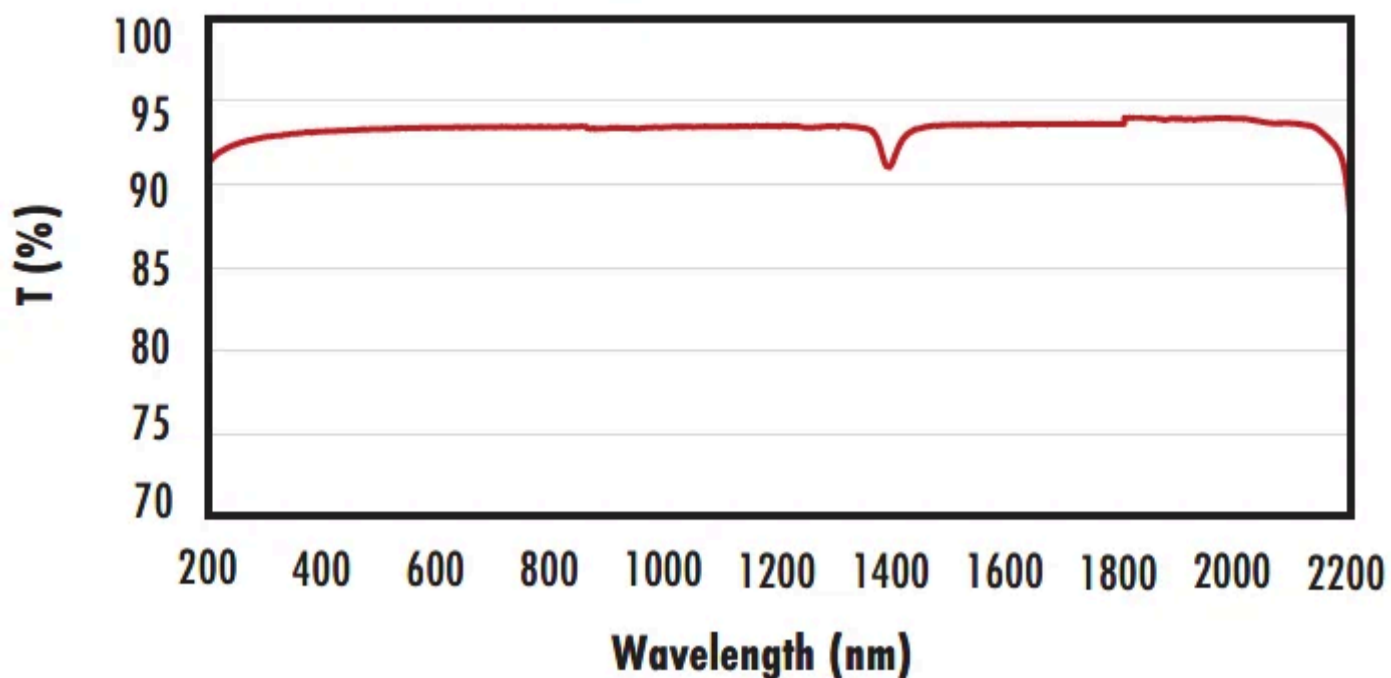
Product Details

- Offers Superior Performance from UV to IR
- Fused Silica Substrate
- Laser Optic Surface Quality

TECHSPEC® Laser Grade Broadband Cylinder Lenses feature precision specifications for the most demanding applications. These lenses are constructed of premium grade fused silica optical glass and are tailored for laser applications with a surface quality of 20-10. Our TECHSPEC Laser Grade Broadband Cylinder Lenses feature tight wedge tolerances, typically less than 3 arcmin in all dimensions. Integration of these lenses is facilitated by square form factors allowing convenient mounting options.

Technical Information

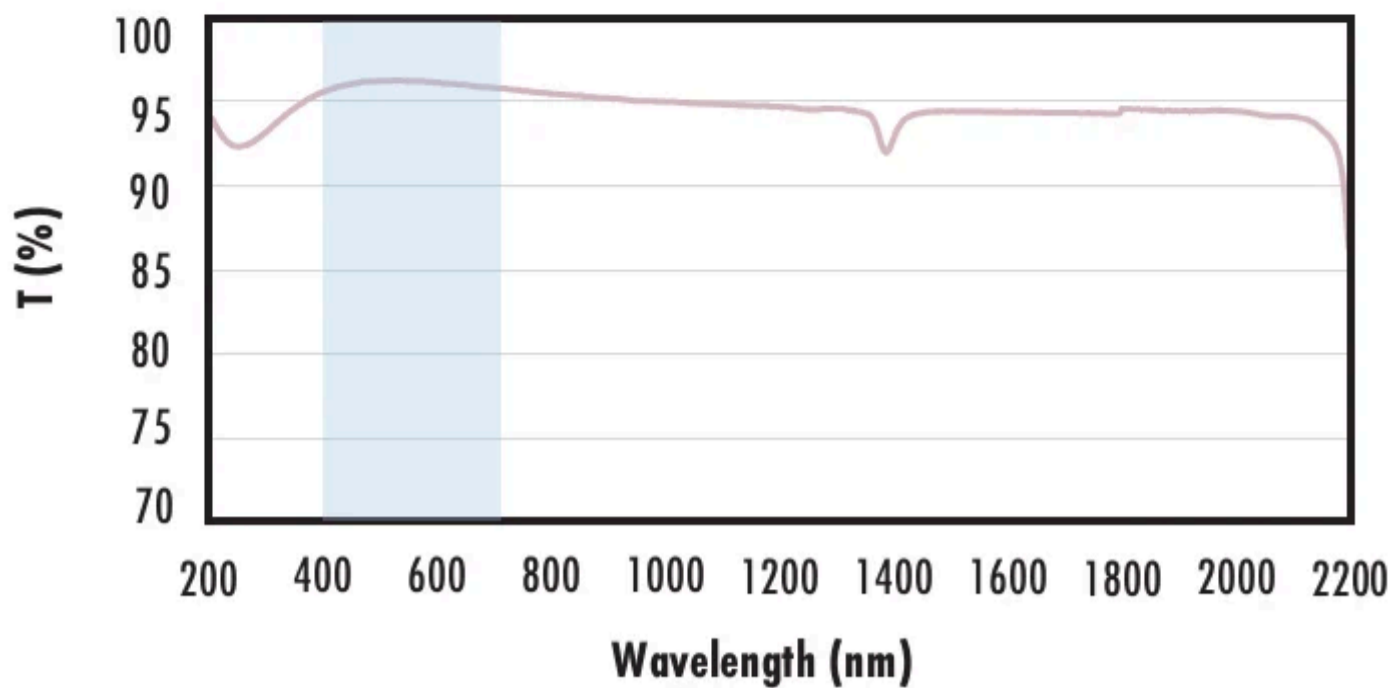
Uncoated Fused Silica Typical Transmission



Typical transmission of an uncoated fused silica window across the UV - NIR spectra.

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Fused Silica with MgF₂ Coating Typical Transmission



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

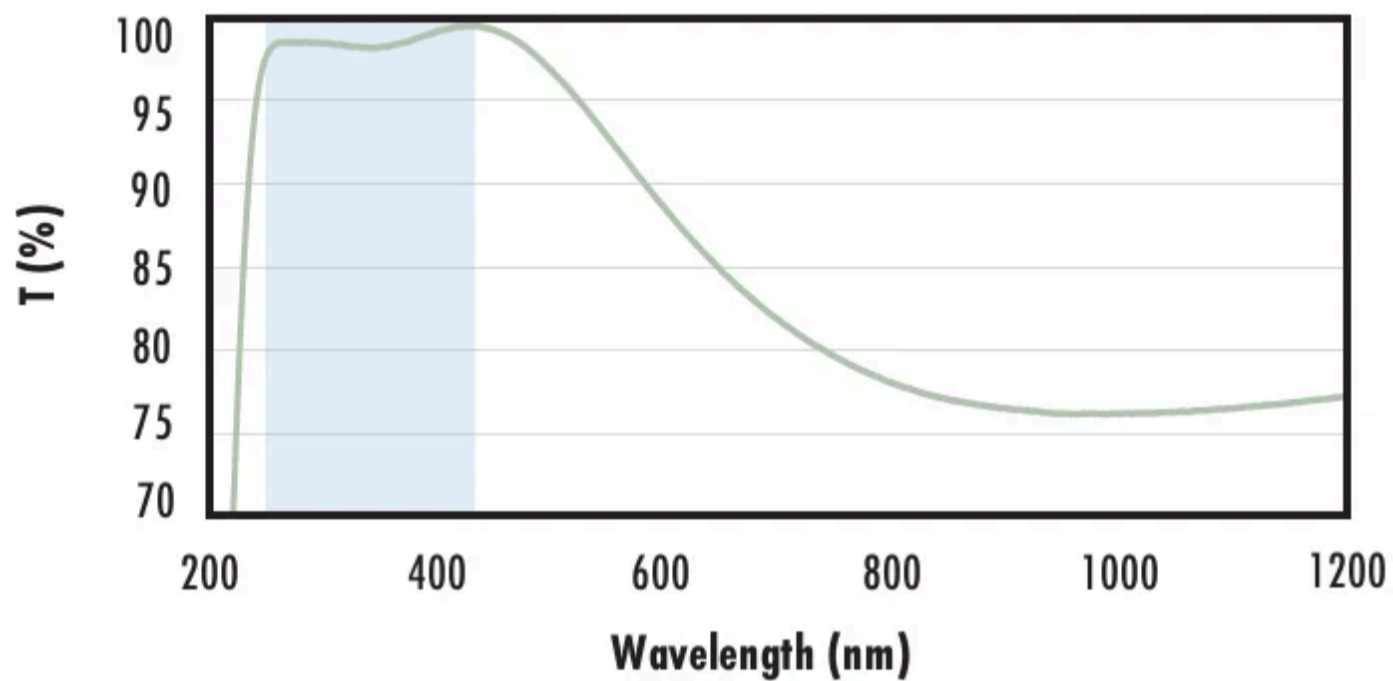
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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 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:

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

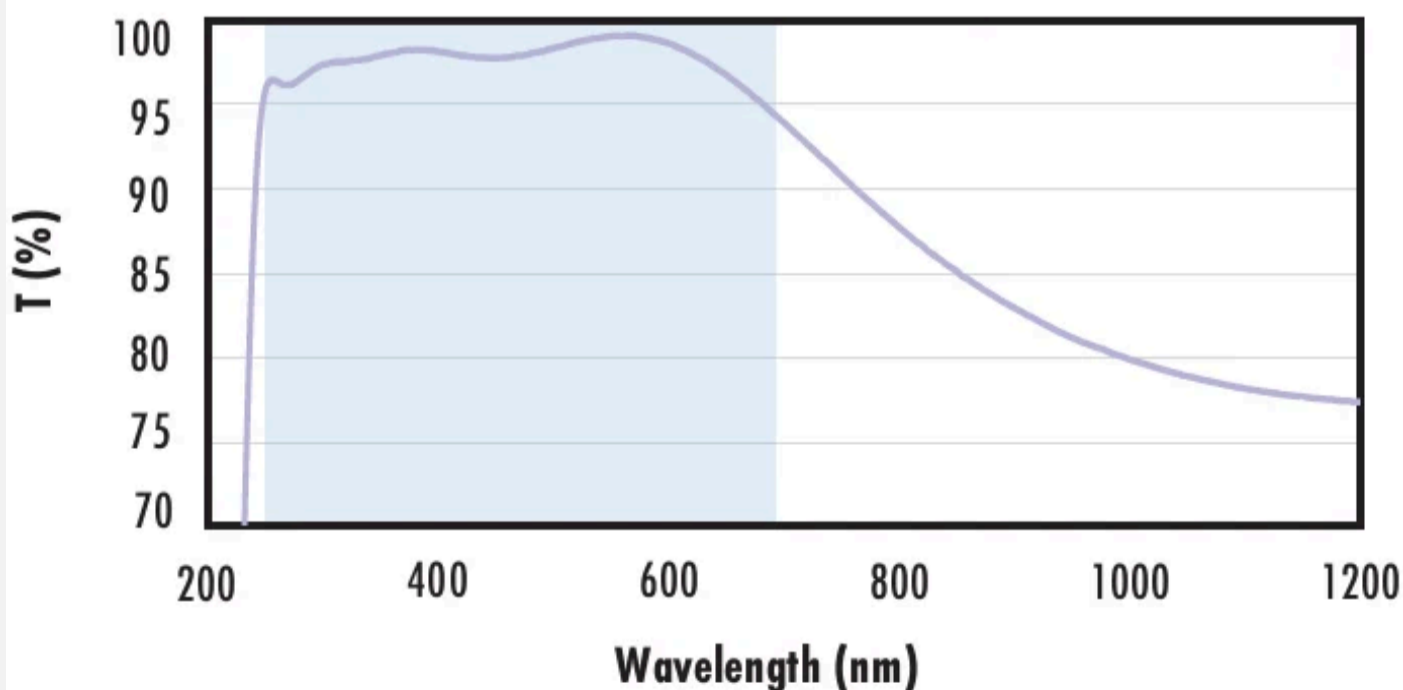
$$R_{avg} \leq 0.75\% \text{ @ } 250 - 425\text{nm}$$

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

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 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:

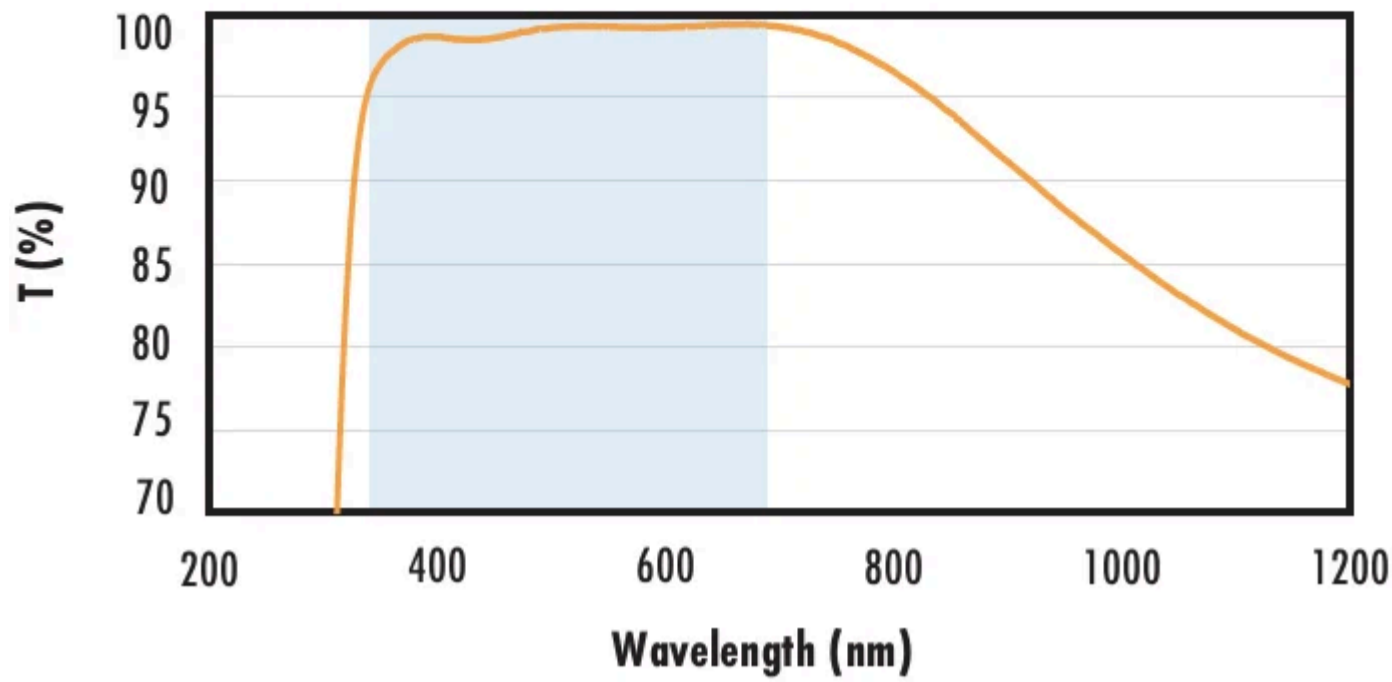
$$R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}$$

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

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 fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.

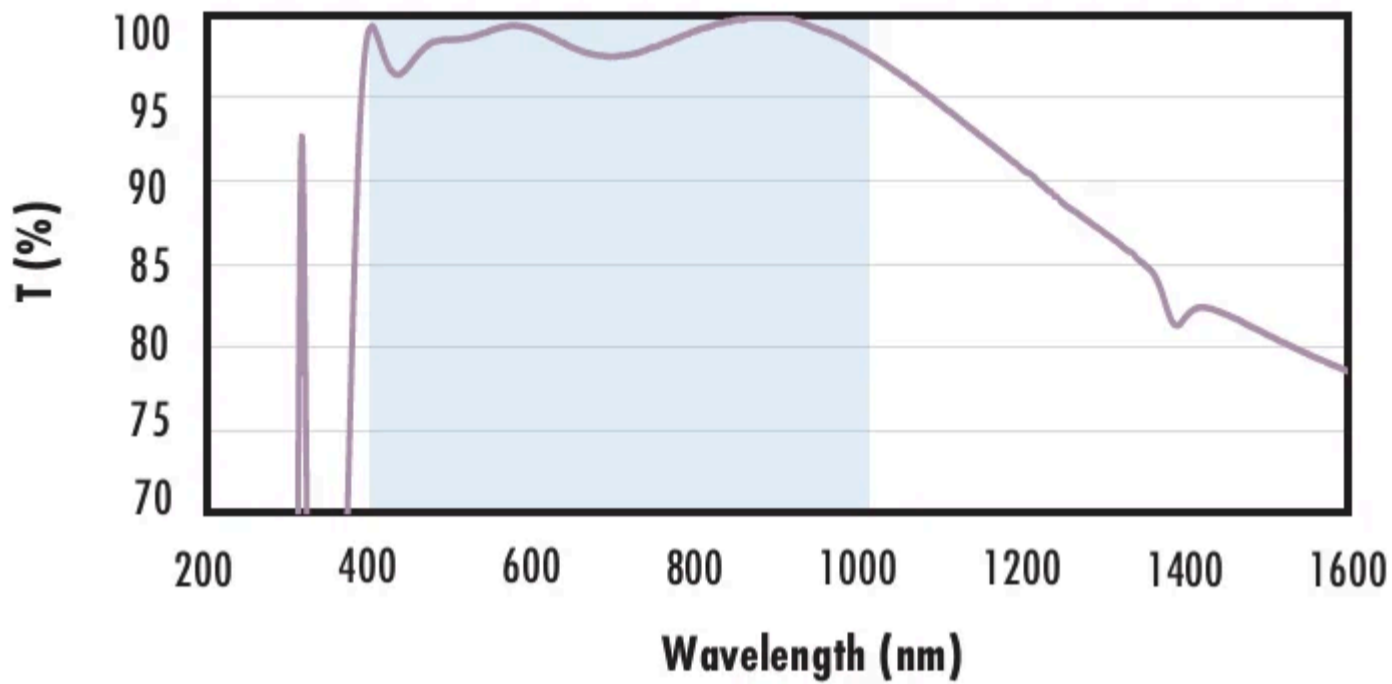
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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 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:

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

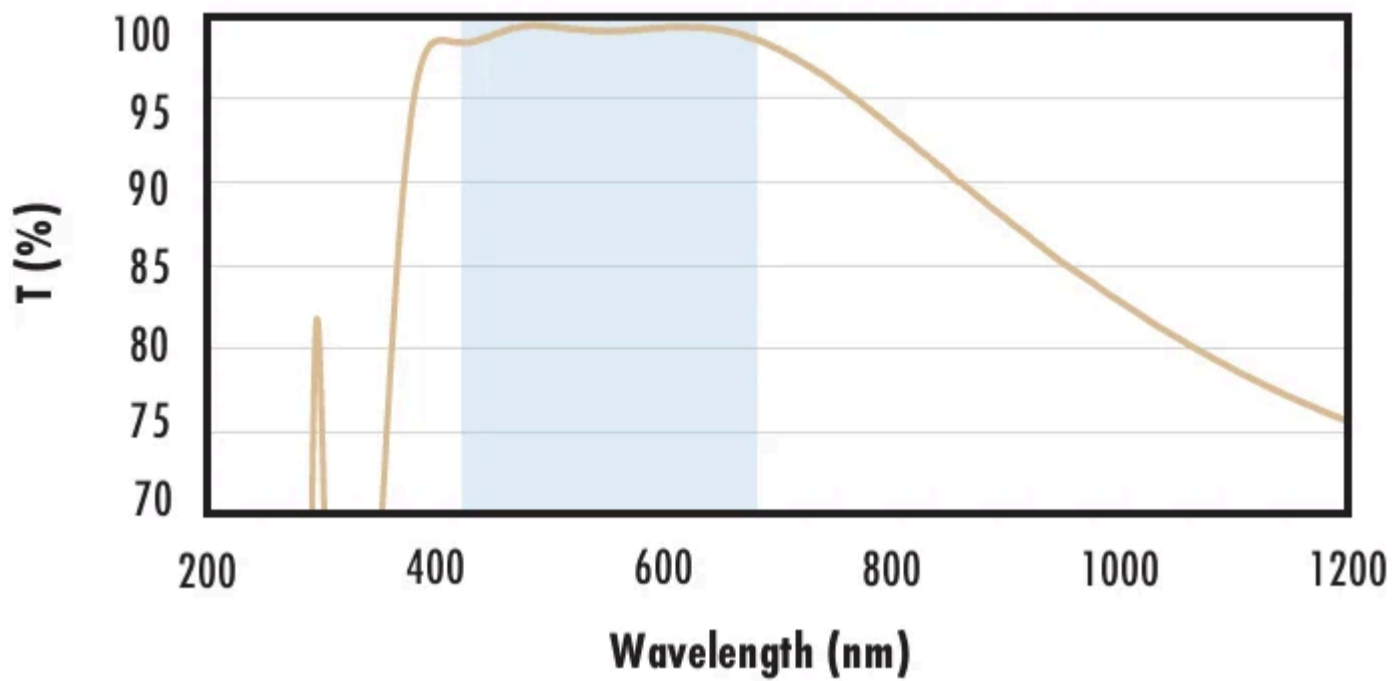
$$R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}$$

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

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 fused silica window with VIS (425-675nm) coating at 0° AOI.

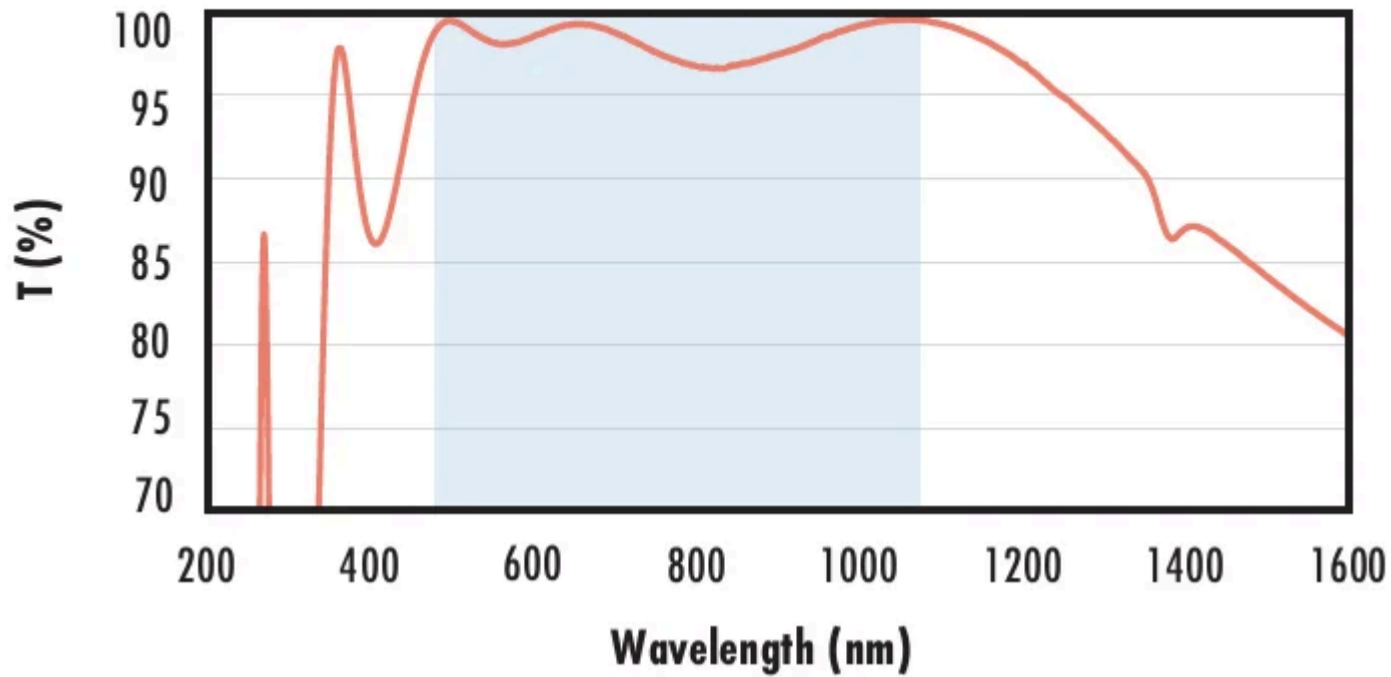
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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Fused Silica with YAG-BBAR Coating Typical Transmission



Typical transmission of a fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.

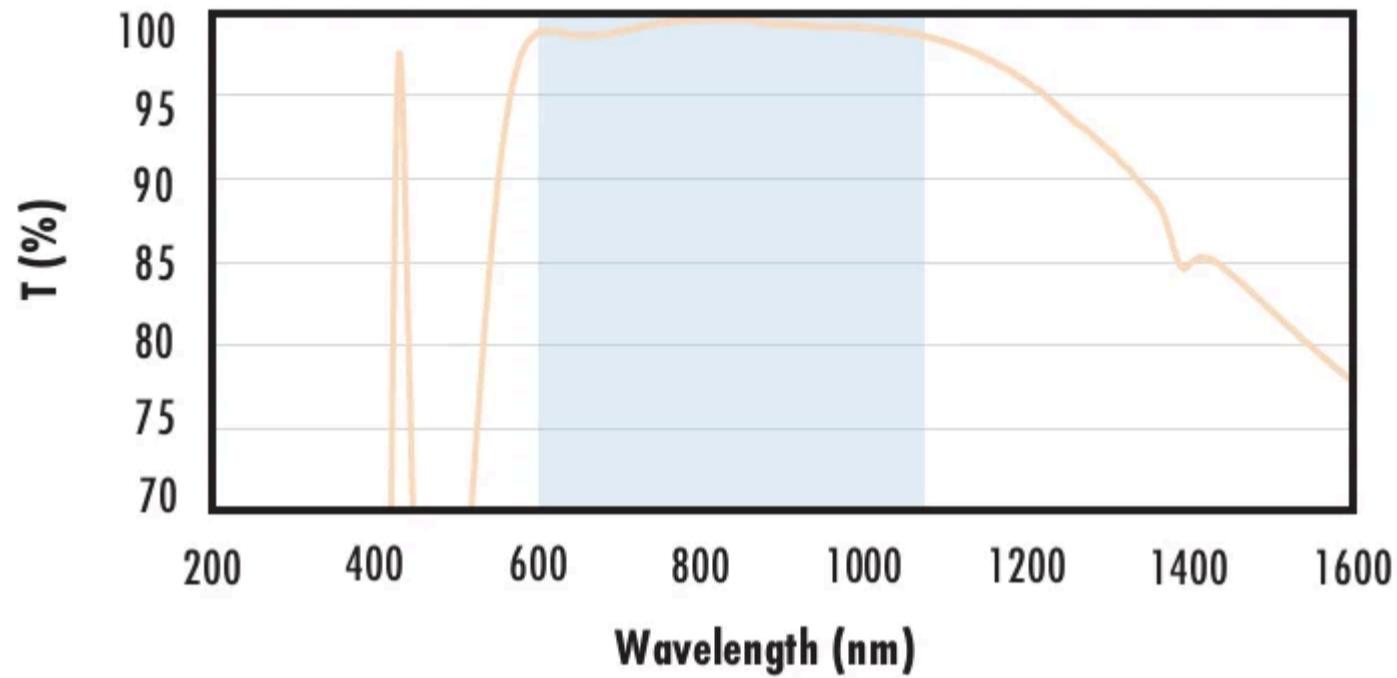
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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Fused Silica with NIR I Coating Typical Transmission



Typical transmission of a fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.

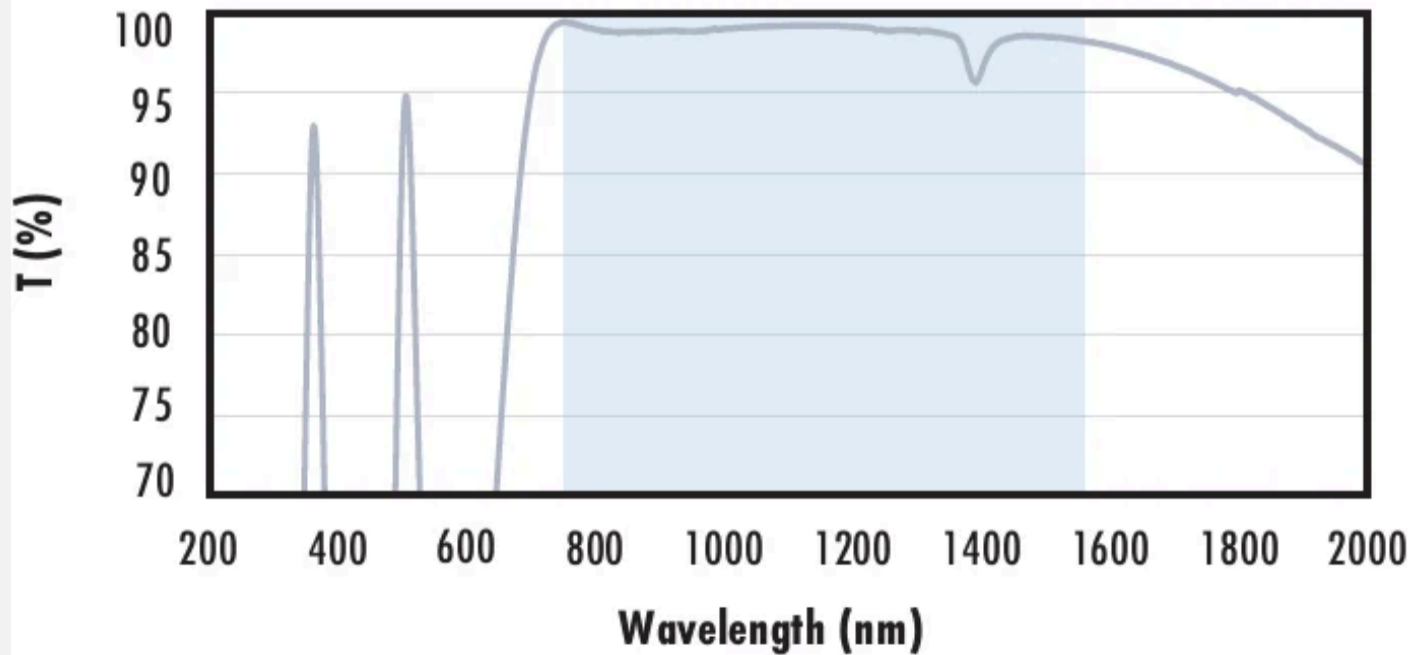
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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

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Fused Silica with NIR II Coating Typical Transmission



Typical transmission of a fused silica window with NIR II (750 - 1550nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength 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

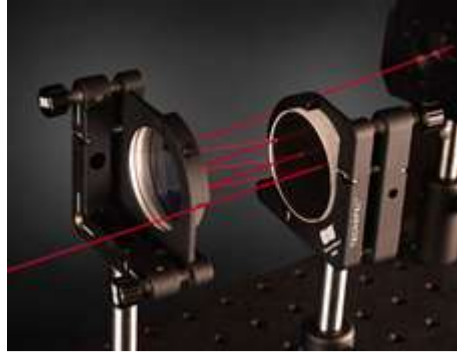
Data outside this range is not guaranteed and is for reference only.

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Related Products



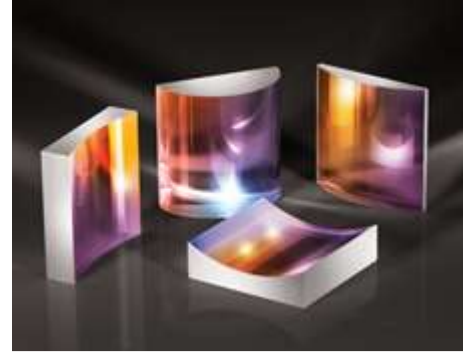
Laser Beam Shaping



Laser Optics



Laser Grade Laser Line
Cylinder Lenses



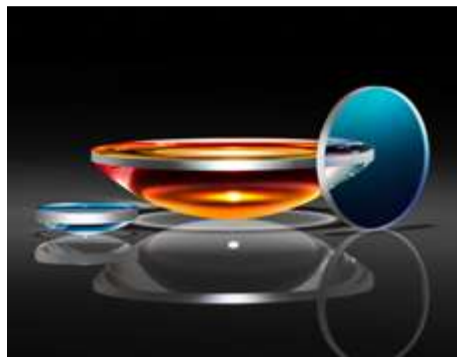
Cylinder Lenses

Frequently Purchased Together



#45-334 - 25 x 25mm UV Enhanced
Aluminum, $\lambda/4$ Mirror
£64.00

Qty



#48-276 - 25mm Dia. x 100mm FL
Uncoated, UV Plano-Convex Lens
£116.00

Qty



#48-315 - 25.0mm Dia. x -50 FL,
Uncoated, UV Plano-Concave Lens
£112.00

Qty



#49-241 - 9mm Dia. x 9mm FL,
Uncoated, UV Double-Convex Lens
£103.20

Qty

Resources

Media Type

- Application Note
- Trending in Optics
- Published Article
- FAQ
- Glossary
- Video

APPLICATION NOTE

Anti-Reflection
(AR) Coatings

APPLICATION NOTE

Laser Beam
Shaping
Overview

TRENDING IN OPTICS

Non-Circular
Optics for
System
Miniaturization

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What are
Cylinder
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APPLICATION NOTE

Considerations
When Using
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