

TECHSPEC[®] 1λ-Quarzglasfenster, 40 mm Durchmesser, 1 mm Dicke, YAG-BBAR-beschichtet



TECHSPEC® 1λ UV Fused Silica Windows

Produkt **#25-232** [KONTAKT](#)

-

1

+

€148⁰⁰

+ WARENKORB

Mengenrabatte	
Stk. 1-5	€148,00 stückpreis
Stk. 6-25	€118,00 stückpreis
Stk. 26-49	€110,00 stückpreis
Need More?	Angebotsanfrage

Preise exklusiv der geltenden Mehrwertsteuer und Abgaben

Downloadbereich

Produktdetails

Protective Window

Typ:

Physikalische und mechanische Eigenschaften

36.00

Freie Apertur CA (mm):

Durchmesser (mm):

40.00 +0.00/-0.20	
	Dicke (mm):
1.00 ±0.38	
	Parallelität (Bogenminuten):
<5	
	Fase:
Protective as needed	
	Freie Apertur (%):
90	
	Kanten:
Fine Ground	
	Poisson-Zahl:
0.16	
	Elastizitätsmodul (GPa):
73	
	Knoop-Härte (kg/mm²):
522.00	

Optische Eigenschaften

	Beschichtung:
YAG-BBAR (500-1100nm)	
	Substrat: ☐
Fused Silica (Corning 7980)	
	Brechungsindex (n _d):
1.458	
	Oberflächenqualität:
60-40	
	Transmittierte Wellenfront, P-V:
1λ	
	Abbe-Zahl (v _d):
67.8	
	Beschichtungsspezifikation:
R _{abs} ≤0.25% @ 532nm R _{abs} ≤0.25% @ 1064nm R _{avg} ≤1.0% @ 500 - 1100nm	
	Wellenlängenbereich (nm):
500 - 1100	
	Zerstörschwelle, Referenz: ☐
5 J/cm² @ 532nm, 10ns	

Materialeigenschaften

	Dichte (g/cm³):
2.20	
	Thermischer Ausdehnungskoeffizient CTE (10 ⁻⁶ /°C):
0.52 (+5 to +35°C) 0.57 (0 to +200°C) 0.48 (-100 to +200°C)	
	Güte Quarzglas:
7980 0G	

Konformität mit Standards

	RoHS 2015:
Konform	
	Konformitätszertifikat:
Anzeigen	
	Reach 235:
Konform	

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.

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

- 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

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](#).

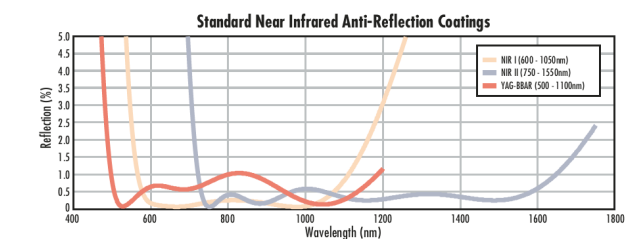
Transmittance UV-Grade Fused Silica
(10mm Thickness)

The graph displays the transmittance of UV-Grade Fused Silica with a 10mm thickness. The left y-axis represents Transmittance in percent (%), ranging from 0 to 100. The bottom x-axis represents Wavelength in nanometers (nm), ranging from 150 to 300. The right y-axis represents Transmittance in percent (%), ranging from 0 to 100. The right x-axis represents Wavelength in microns, ranging from 1 to 5. The curve shows high transmittance (above 80%) from approximately 200 nm to 300 nm, with a sharp drop-off in the ultraviolet region below 200 nm. A secondary plot on the right shows transmittance in the infrared region from 1 to 5 microns, with a sharp drop-off below 1 micron and a peak around 3.5 microns.

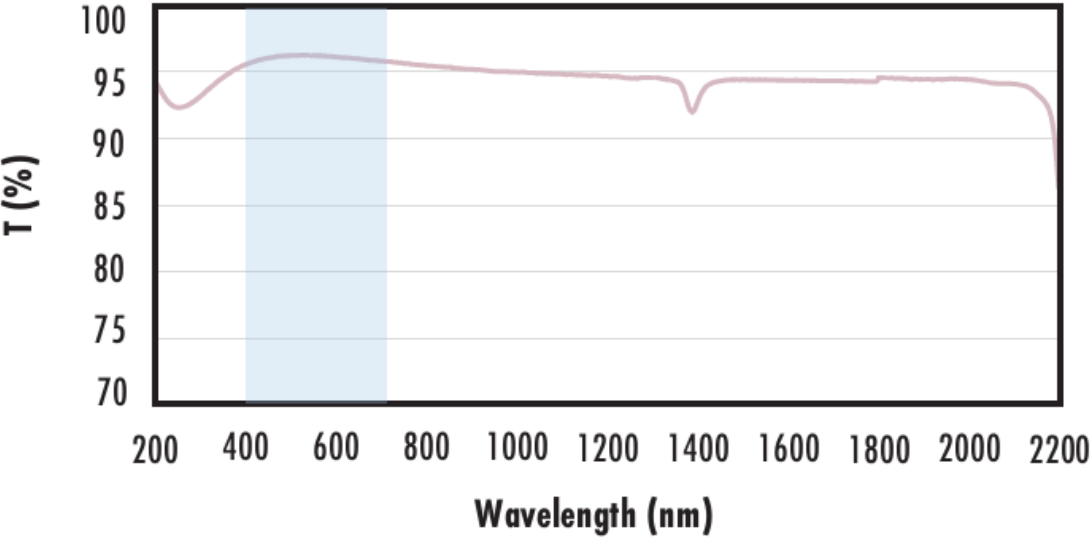
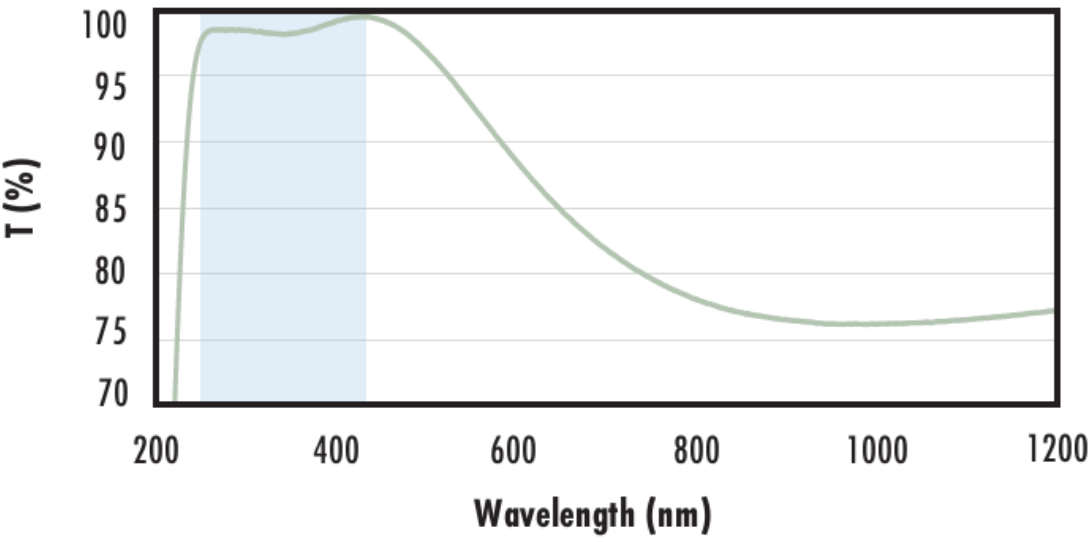
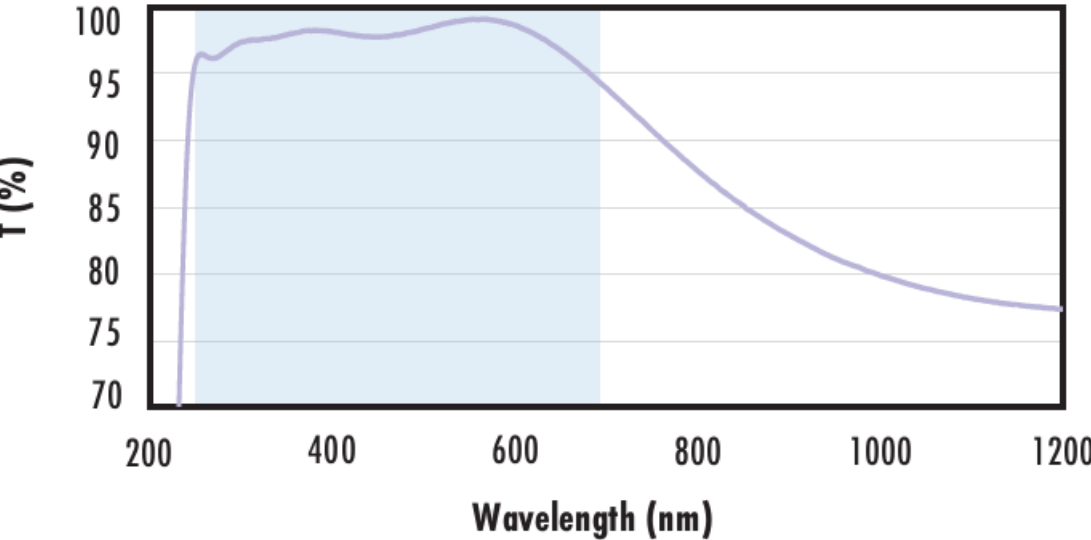
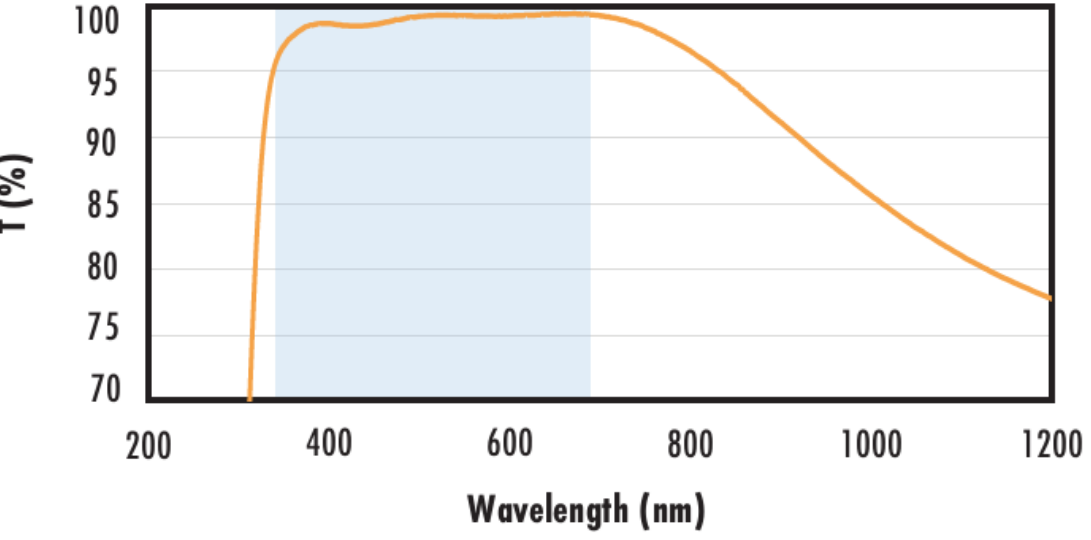
Anti-Reflective Coating Curves

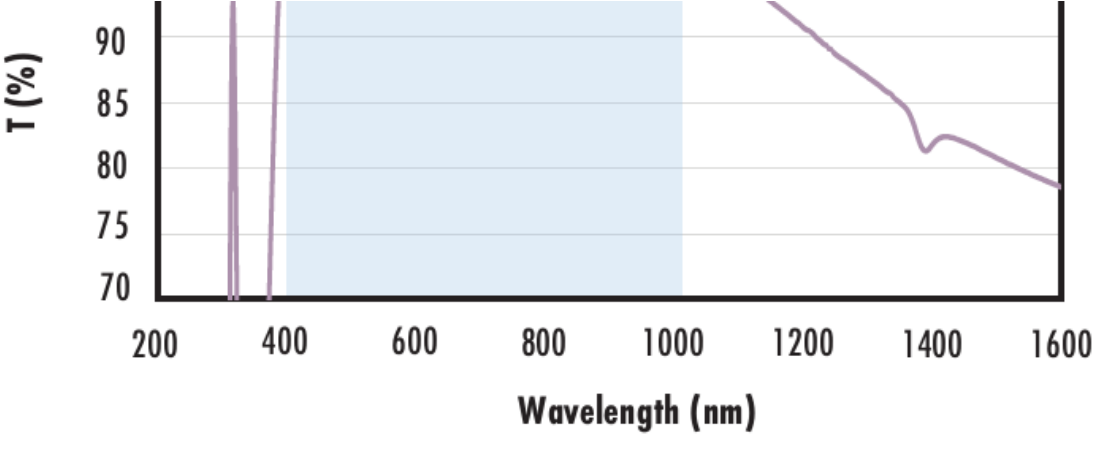
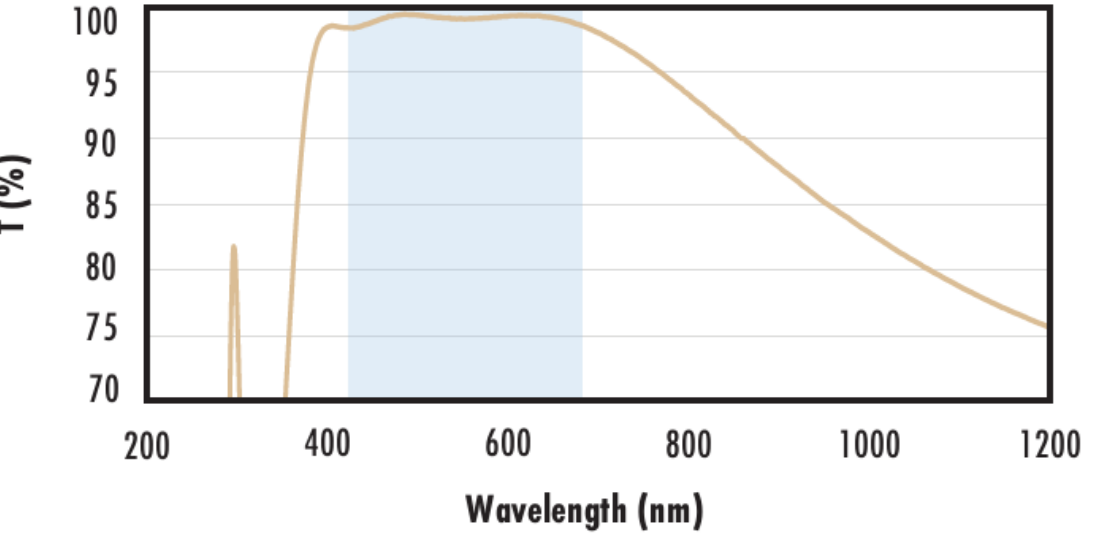
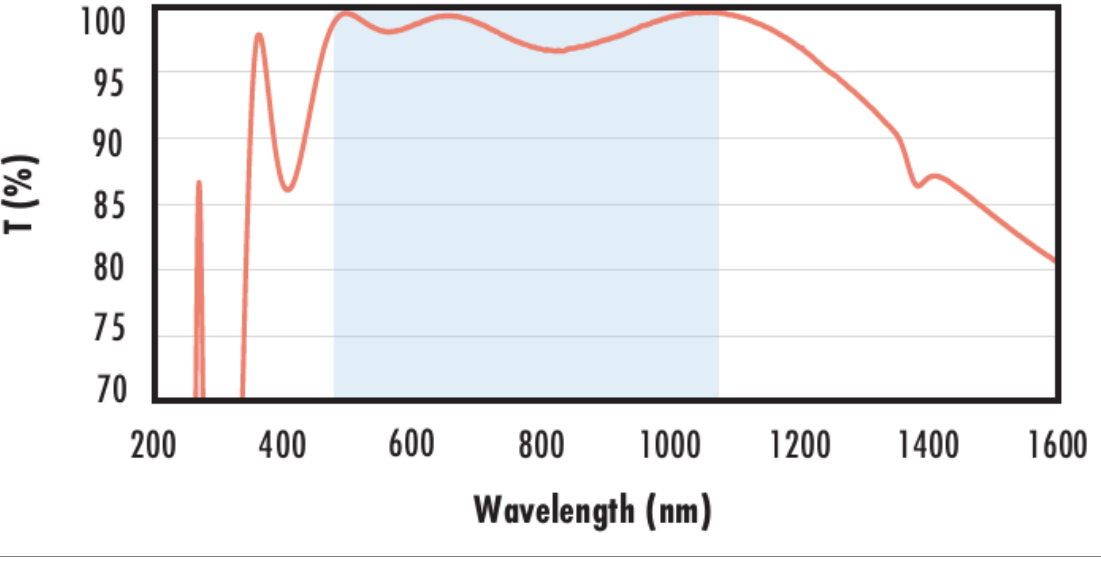
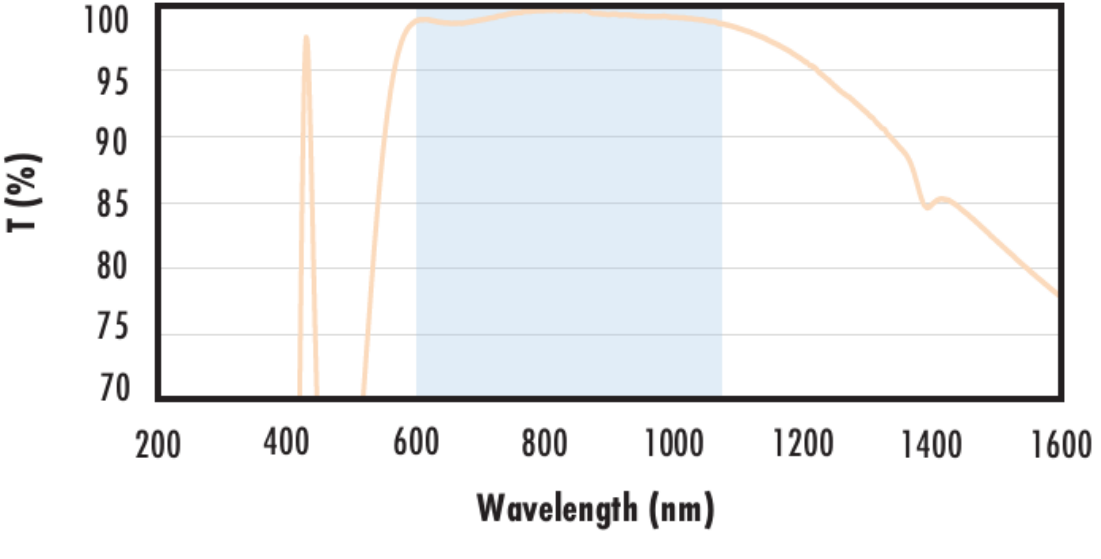
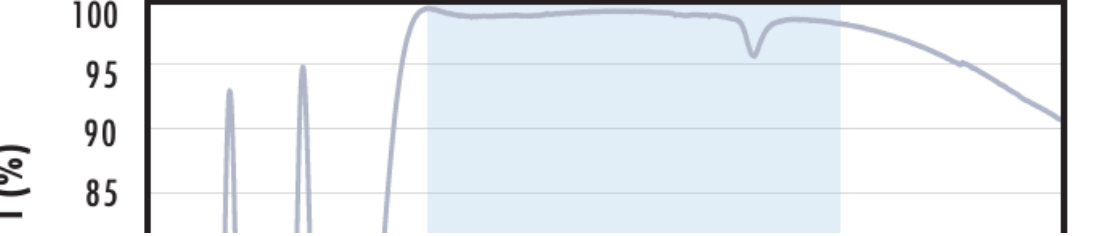
The graph displays the reflectance characteristics of three different anti-reflective coatings across a wide wavelength range. The UV-AR coating (blue) is optimized for the ultraviolet region, the UV-VIS coating (red) for the ultraviolet to visible region, and the VIS-NIR coating (green) for the visible to near-infrared region.

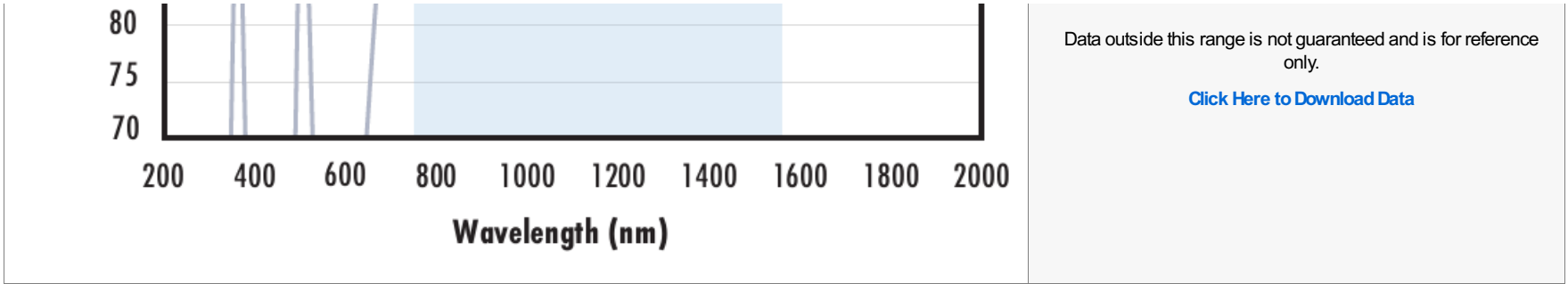
Wavelength (nm)	UV-AR Reflectance (%)	UV-VIS Reflectance (%)	VIS-NIR Reflectance (%)
200	1.6	2.5	2.5
300	0.2	0.5	2.5
400	0.3	0.4	2.5
500	2.5	1.0	0.6
600	0.4	0.4	0.6
700	0.4	2.2	0.9
800	0.4	0.4	0.4
900	0.4	0.4	0.1
1000	0.4	0.4	1.2



FUSED SILICA																									
Uncoated Fused Silica Typical Transmission <table border="1"><caption>Approximate data points for Uncoated Fused Silica Transmission</caption><thead><tr><th>Wavelength (nm)</th><th>Transmittance T (%)</th></tr></thead><tbody><tr><td>200</td><td>92</td></tr><tr><td>400</td><td>94</td></tr><tr><td>600</td><td>94</td></tr><tr><td>800</td><td>94</td></tr><tr><td>1000</td><td>94</td></tr><tr><td>1200</td><td>94</td></tr><tr><td>1400</td><td>92</td></tr><tr><td>1600</td><td>94</td></tr><tr><td>1800</td><td>94.5</td></tr><tr><td>2000</td><td>94.5</td></tr><tr><td>2200</td><td>90</td></tr></tbody></table>	Wavelength (nm)	Transmittance T (%)	200	92	400	94	600	94	800	94	1000	94	1200	94	1400	92	1600	94	1800	94.5	2000	94.5	2200	90	Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra. Click Here to Download Data
Wavelength (nm)	Transmittance T (%)																								
200	92																								
400	94																								
600	94																								
800	94																								
1000	94																								
1200	94																								
1400	92																								
1600	94																								
1800	94.5																								
2000	94.5																								
2200	90																								
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: $R_{avg} \leq 1.75\% @ 400 - 700\text{nm}$ (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. 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: $R_{abs} \leq 1.0\% @ 350 - 450\text{nm}$ $R_{avg} \leq 1.5\% @ 250 - 700\text{nm}$ 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: $R_{avg} \leq 0.5\% @ 350 - 700\text{nm}$ 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:

	The blue shaded region indicates the coating design wavelength 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. 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: $R_{avg} \leq 0.4\% @ 425 - 675nm$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
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 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. Click Here to Download Data
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 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. Click Here to Download Data
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 wavelength range, with the following specification: $R_{abs} \leq 1.5\% @ 750 - 800nm$ $R_{abs} \leq 1.0\% @ 800 - 1550nm$ $R_{avg} \leq 0.7\% @ 750 - 1550nm$



;