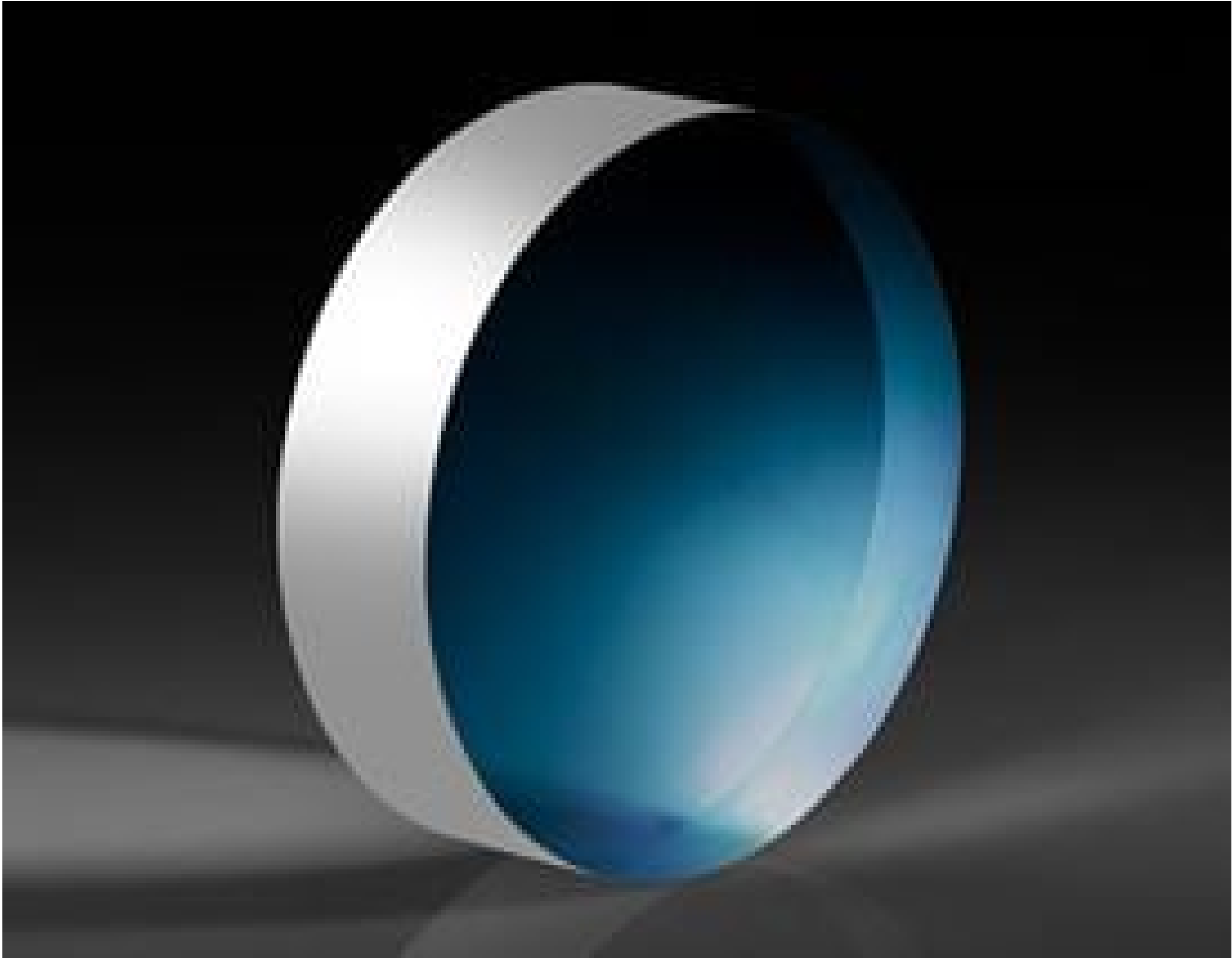


TECHSPEC[®] 1λ-Quarzglasfenster, 25 mm Durchmesser, 3 mm Dicke, MgF₂-beschichtet



Produkt **#19-852** **5 In Stock**

-

1

+

€101^{,00}

+ WARENKORB

Mengenrabatte	
Stk. 1-5	€101,00 stückpreis
Stk. 6-25	€81,00 stückpreis
Stk. 26-49	€76,00 stückpreis
Need More?	Angebotsanfrage

! Preise exklusiv der geltenden Mehrwertsteuer und Abgaben

Downloadbereich

Produktdetails

Protective Window

Typ:

Physikalische und mechanische Eigenschaften

22.50

Freie Apertur CA (mm):

25.00 +0.00/-0.20

Durchmesser (mm):

3.00 ±0.38	Dicke (mm):
<5	Parallelität (Bogenminuten):
Protective as needed	Fase:
90	Freie Apertur (%):
Fine Ground	Kanten:
0.16	Poisson-Zahl:
73	Elastizitätsmodul (GPa):
522.00	Knoop-Härte (kg/mm²):

Optische Eigenschaften

MgF ₂ (400-700nm)	Beschichtung:
Fused Silica (Corning 7980)	Substrat: ☐
1.458	Brechungsindex (n _d):
60-40	Oberflächenqualität:
1λ	Transmittierte Wellenfront, P-V:
67.8	Abbe-Zahl (v _d):
R _{avg} ≤1.75% @ 400 - 700nm	Beschichtungsspezifikation:
400 - 700	Wellenlängenbereich (nm):
10 J/cm² @ 532nm, 10ns	Zerstörschwelle, laut Design: ☐

Materialeigenschaften

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

Konformität mit Standards

Konform	RoHS 2015:
Anzeigen	Konformitätszertifikat:
Konform	Reach 235:

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

TECHSPEC® 1λ-Fenster aus UV-Quarzglas werden präzise aus synthetischem UV-Quarzglas gefertigt. Das synthetische Quarzglas hat nicht nur bessere Transmissionseigenschaften, sondern auch bessere thermische Eigenschaften und zeichnet sich durch außergewöhnliche Reinheit und Beständigkeit gegenüber Umwelteinflüssen bei anspruchsvollen Anwendungen aus. Die Fenster eignen sich ideal für kostensensible Breitband-

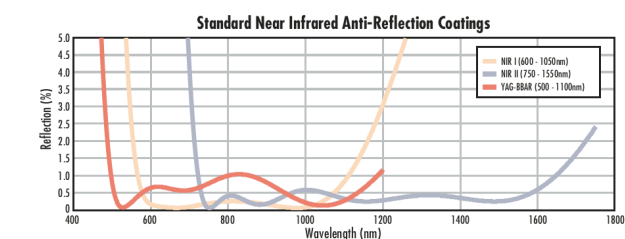
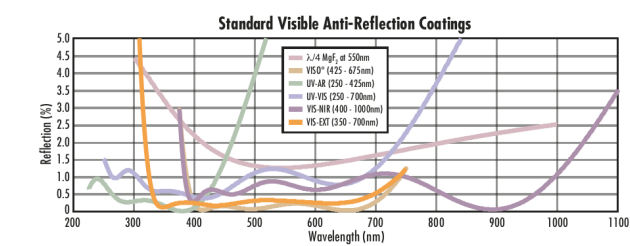
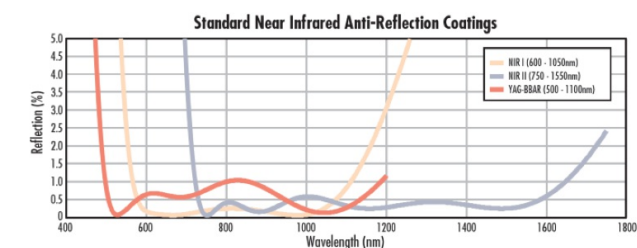
Bitte beachten Sie: Neue Produkte, die zu dieser Produktfamilie hinzugefügt werden, können mit der transmittierten Wellenfrontverzerrung (TWD) und nicht mehr mit der Oberflächenebenheit spezifiziert sein. Weitere Informationen über den Unterschied zwischen den beiden Spezifikationen finden Sie unter [Grundlagen optischer Fenster](#).

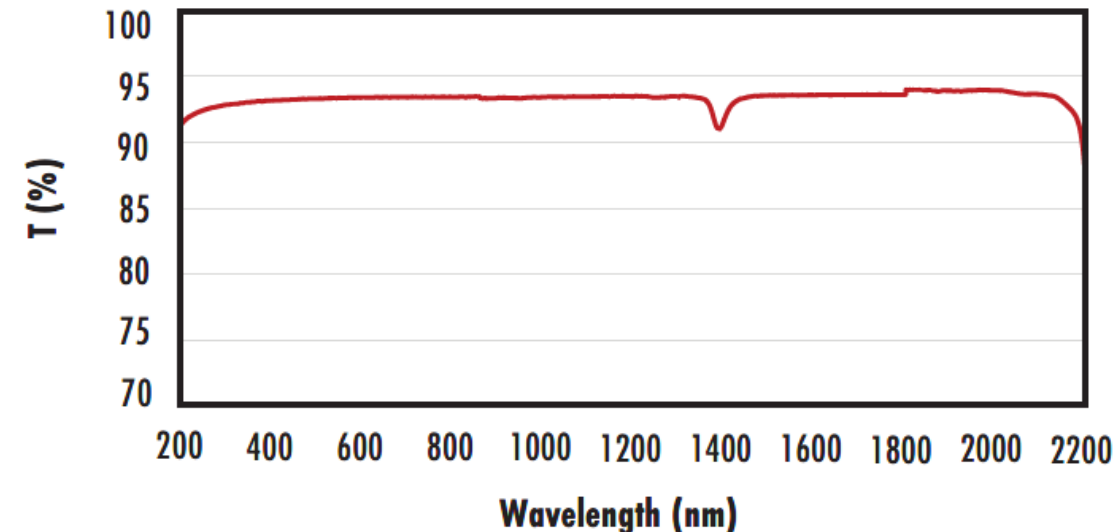
The graph displays the transmittance of UV-Grade Fused Silica with a 10mm thickness. The left y-axis represents Transmittance in percent (%), ranging from 0 to 100. The bottom x-axis represents Wavelength in nanometers (nm), ranging from 150 to 300. The right x-axis represents Wavelength in microns, ranging from 1 to 5. The curve shows that the material is highly transparent in the UV range, with transmittance rising sharply from 150 nm and plateauing near 100% by 200 nm. In the visible and IR regions, there are several absorption peaks, notably around 1.7 microns (588 nm), 2.1 microns (476 nm), and a broad absorption band starting around 3.5 microns (285 nm).

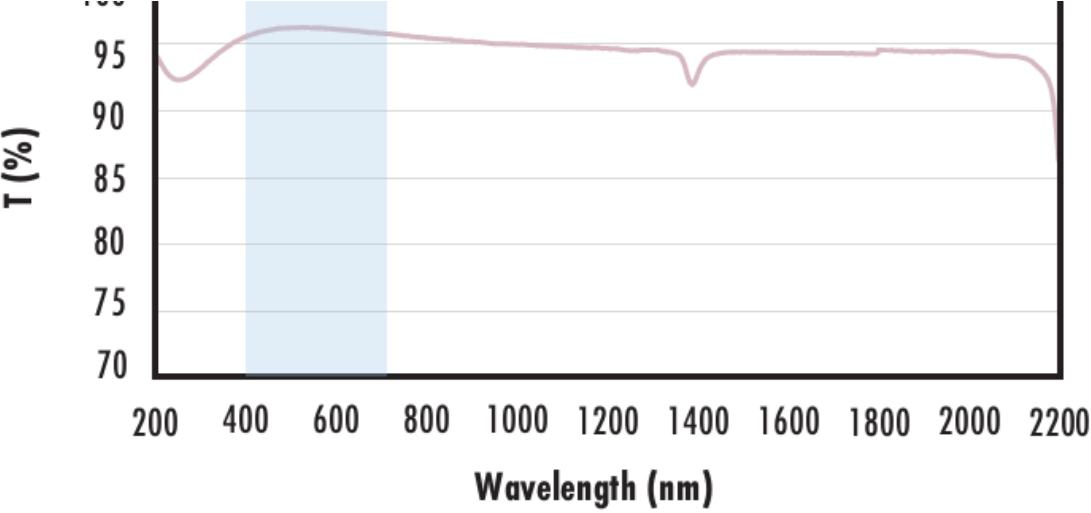
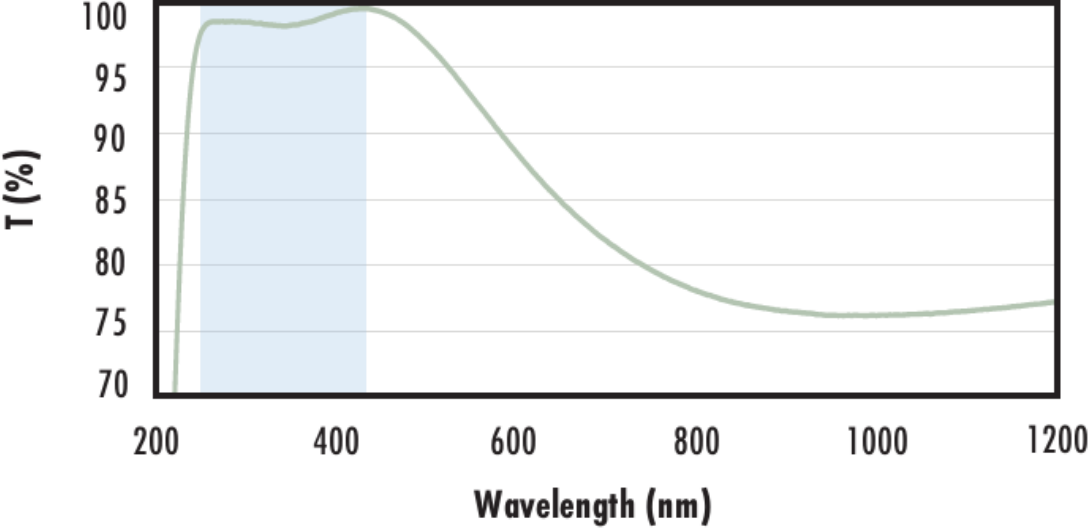
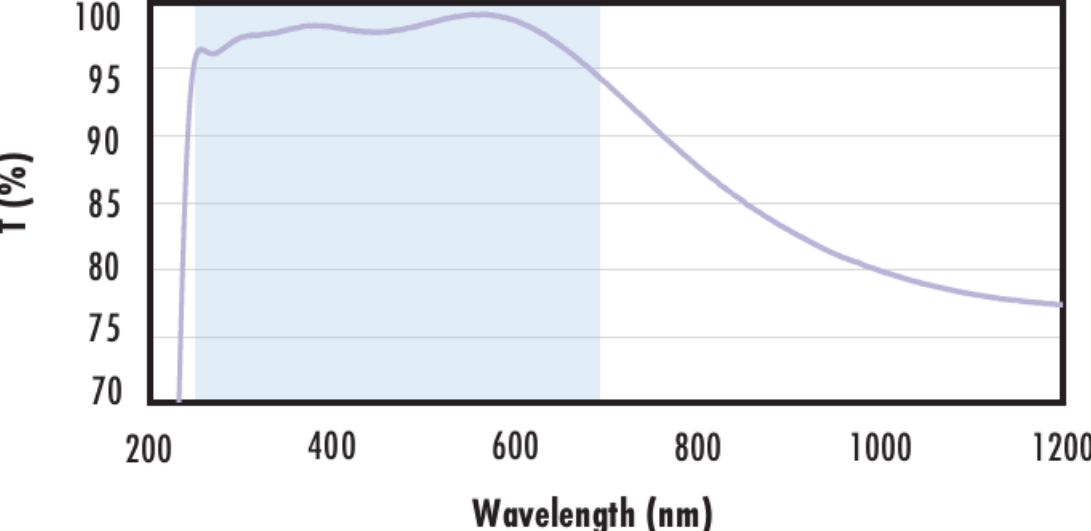
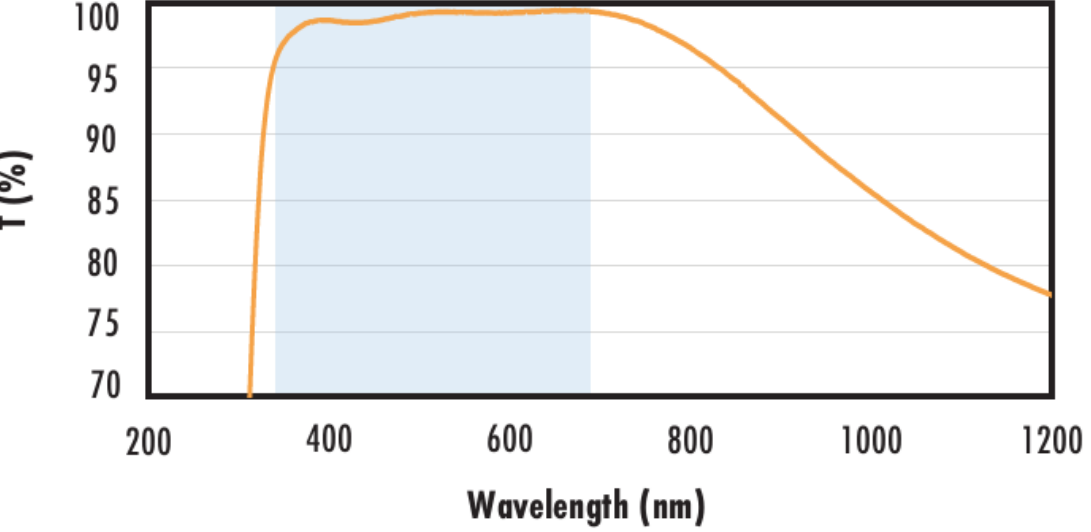
Anti-Reflective Coating Curves

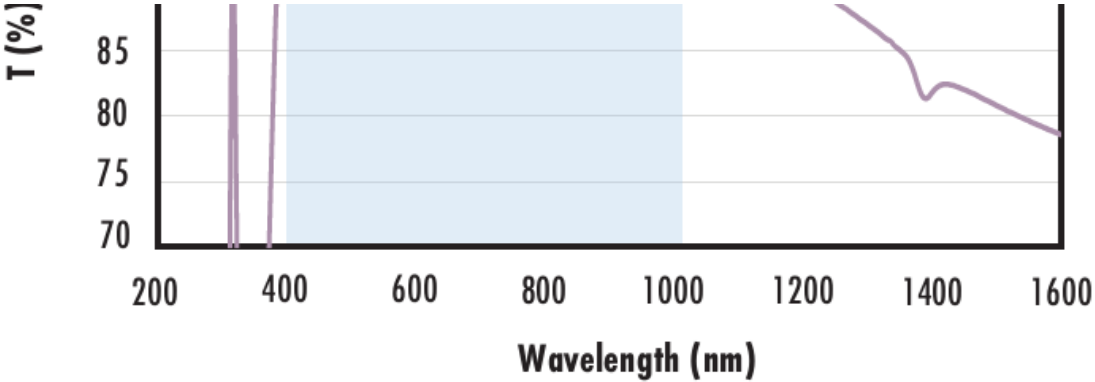
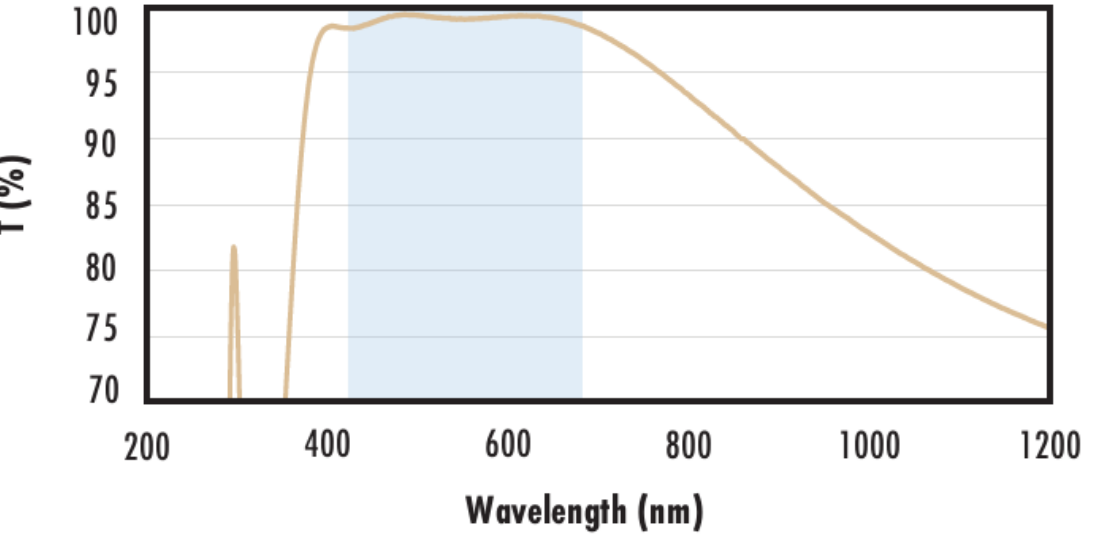
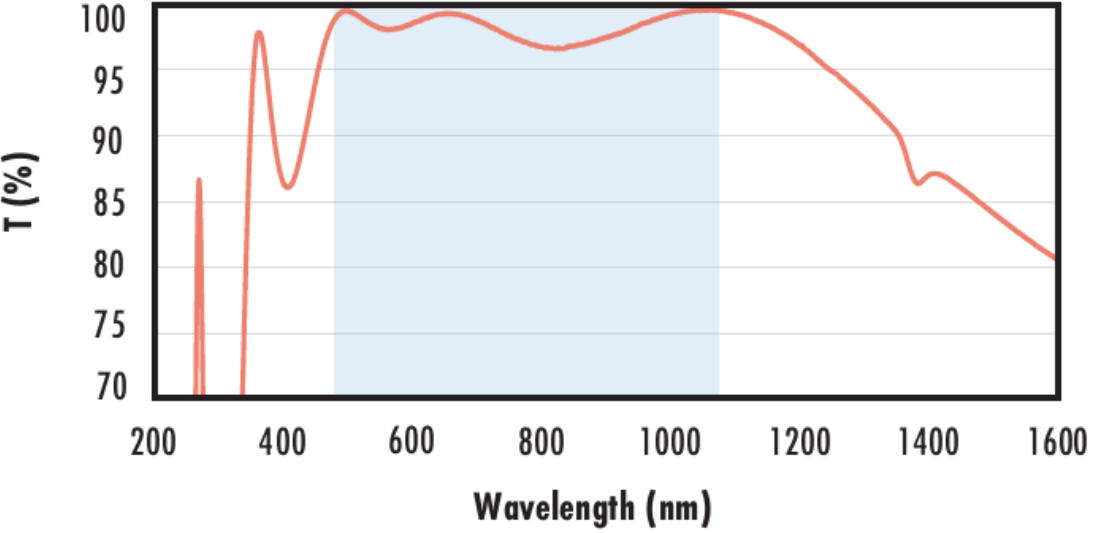
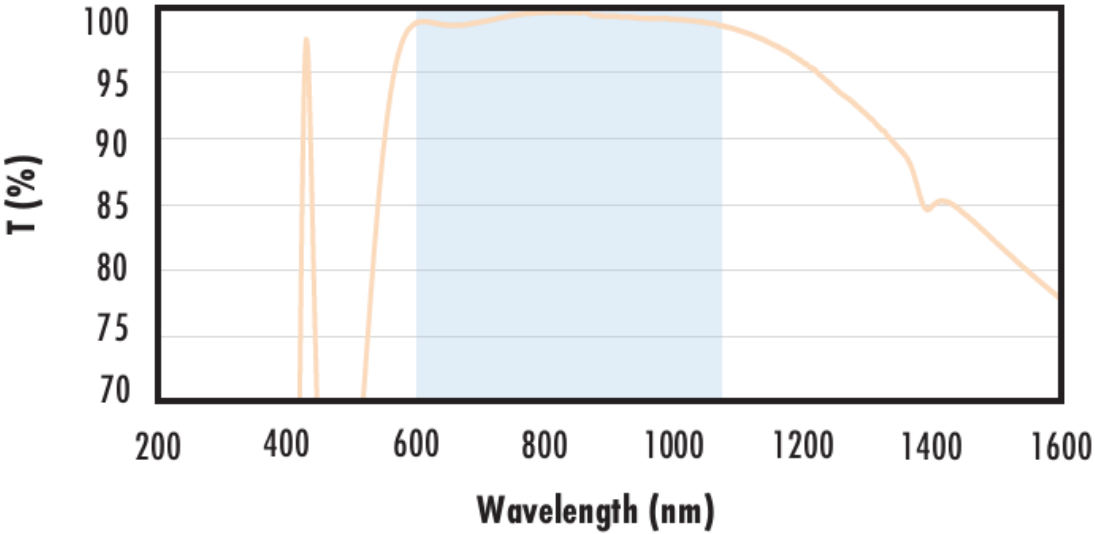
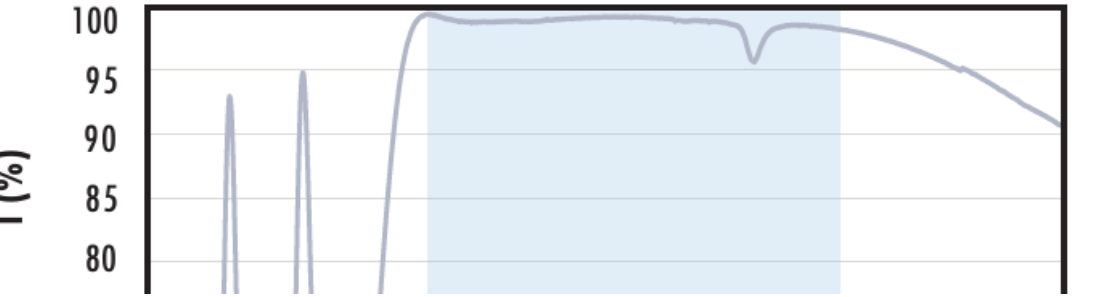
The graph displays the reflectance characteristics of three different anti-reflective coatings across a wide wavelength range. The UV-AR coating (blue) is optimized for the ultraviolet region, showing a sharp minimum reflectance near 350 nm. The UV-VIS coating (red) provides broad-spectrum performance, with a minimum reflectance around 450 nm. The VIS-NIR coating (green) is designed for the visible and near-infrared regions, showing a broad minimum reflectance around 850 nm.

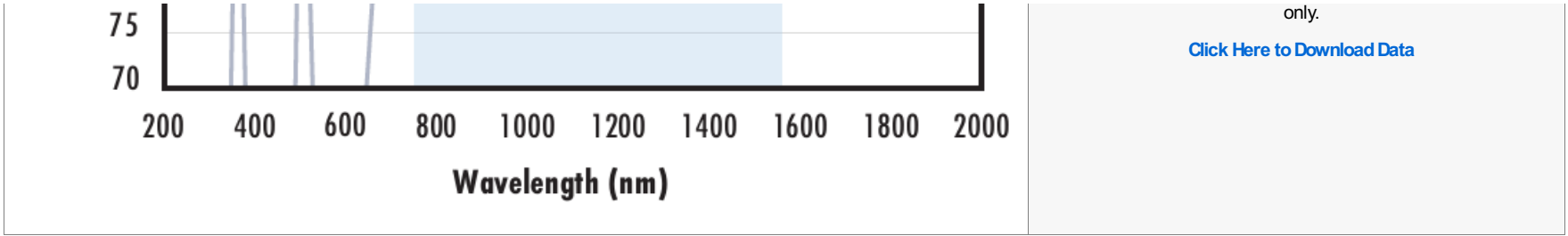
Wavelength (nm)	UV-AR Reflectance (%)	UV-VIS Reflectance (%)	VIS-NIR Reflectance (%)
200	1.6	2.5	2.5
300	0.2	0.5	2.5
400	0.2	0.4	2.5
500	0.5	1.0	0.4
600	0.5	0.4	0.5
700	0.5	1.5	0.9
800	0.5	0.5	0.5
900	0.5	0.5	0.2
1000	0.5	0.5	1.2



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>Transmission 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>91</td></tr><tr><td>1600</td><td>94</td></tr><tr><td>1800</td><td>94</td></tr><tr><td>2000</td><td>94</td></tr><tr><td>2200</td><td>90</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	92	400	94	600	94	800	94	1000	94	1200	94	1400	91	1600	94	1800	94	2000	94	2200	90	Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra. Click Here to Download Data
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	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:

	$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
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\% \text{ @ } 532\text{nm}$$R_{abs} \leq 0.25\% \text{ @ } 1064\text{nm}$$R_{avg} \leq 1.0\% \text{ @ } 500 - 1100\text{nm}$ 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: $R_{avg} \leq 0.5\% \text{ @ } 600 - 1050\text{nm}$ 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\% \text{ @ } 750 - 800\text{nm}$$R_{abs} \leq 1.0\% \text{ @ } 800 - 1550\text{nm}$$R_{avg} \leq 0.7\% \text{ @ } 750 - 1550\text{nm}$ Data outside this range is not guaranteed and is for reference



Beschichtungskurven

Kompatible Halterungen