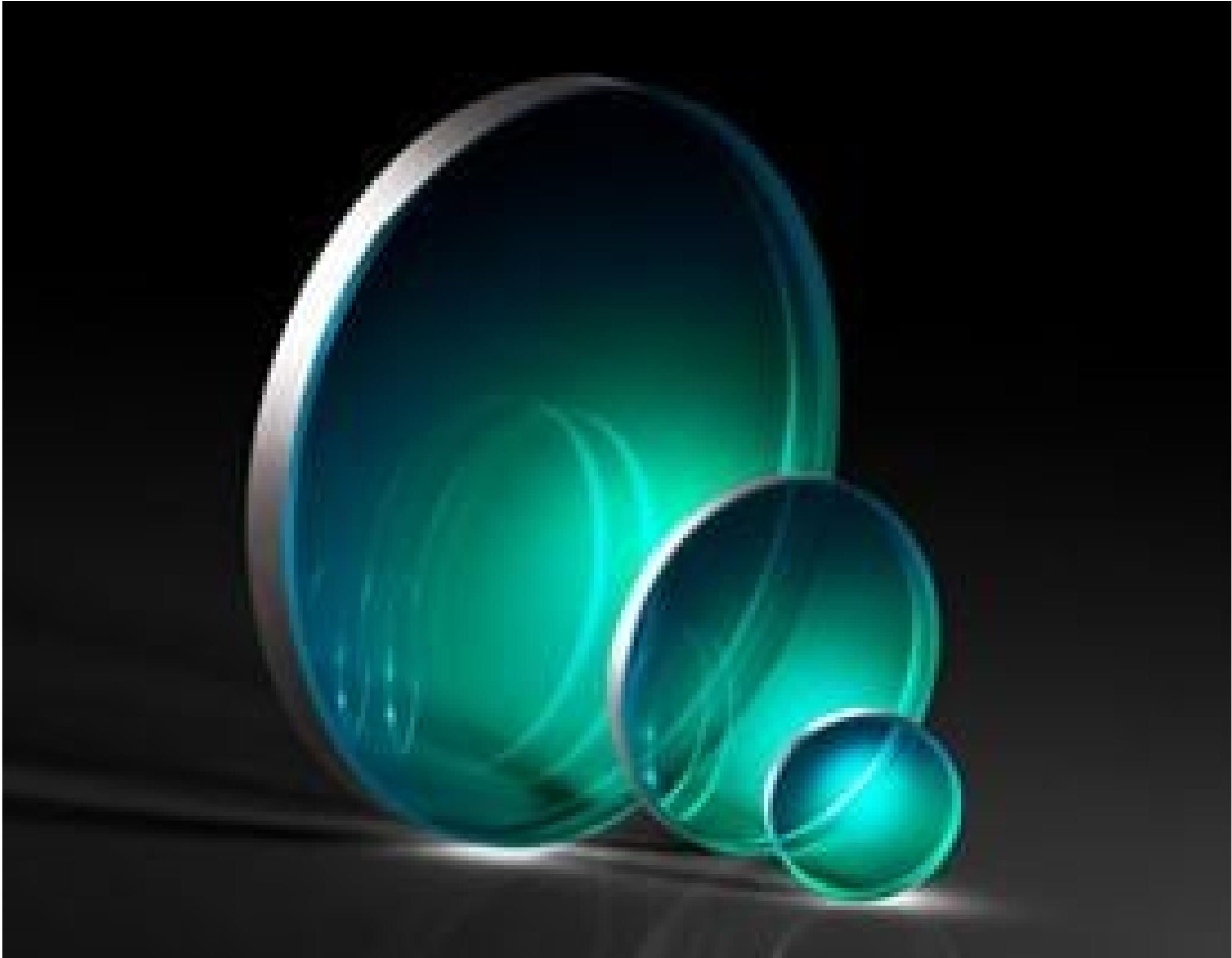


TECHSPEC[®] λ /4-Quarzglasfenster, 20 mm Durchm., 1 mm Dicke, NIR-II-beschichtet



TECHSPEC[®] λ /4 UVFused Silica Windows

Produkt **#72-351** **5 In Stock**

-

1

+

€147⁰⁰

+ WARENKORB

Mengenrabatte	
Stk. 1-5	€147,00 stückpreis
Stk. 6-25	€118,00 stückpreis
Stk. 26-49	€110,00 stückpreis
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 Preise exklusiv der geltenden Mehrwertsteuer und Abgaben

Downloadbereich

Produktdetails

Protective Window

Typ:

Physikalische und mechanische Eigenschaften

18.00

Freie Apertur CA (mm):

Durchmesser (mm):

20.00 +0.00/-0.10	
	Dicke (mm):
1.00 ±0.10	
	Parallelität (Bogenminuten):
<1	
	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:
NIR II (750-1550nm)	
	Substrat: ☐
Fused Silica (Corning 7980)	
	Brechungsindex (n _d):
1.458	
	Oberflächenqualität:
40-20	
	Transmittierte Wellenfront, P-V:
λ/4	
	Abbe-Zahl (v _d):
67.8	
	Beschichtungsspezifikation:
R _{abs} ≤1.5% @ 750 - 800nm R _{abs} ≤1.0% @ 800 - 1550nm R _{avg} ≤0.7% @ 750 - 1550nm	
	Wellenlängenbereich (nm):
750 - 1550	
	Zerstörschwelle, Referenz:
8 J/cm² @ 1064nm, 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)	

Konformität mit Standards

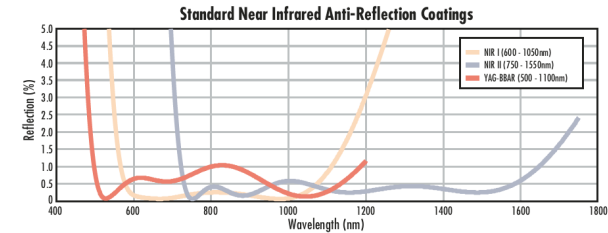
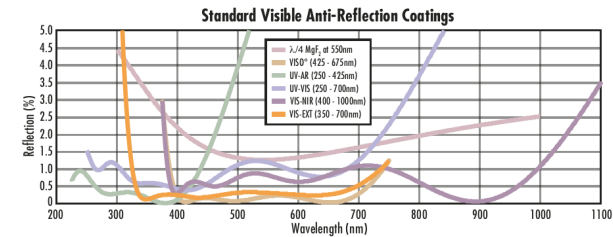
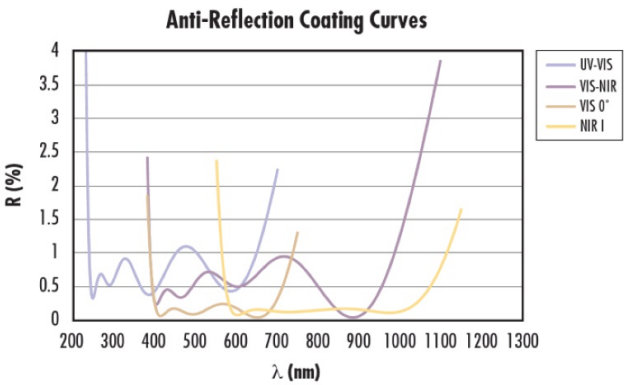
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Konform	
	Konformitätszertifikat:
Anzeigen	
	REACH 241:
Konform	

Produktdetails

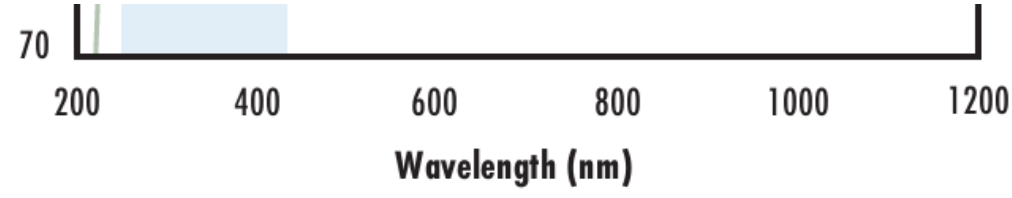
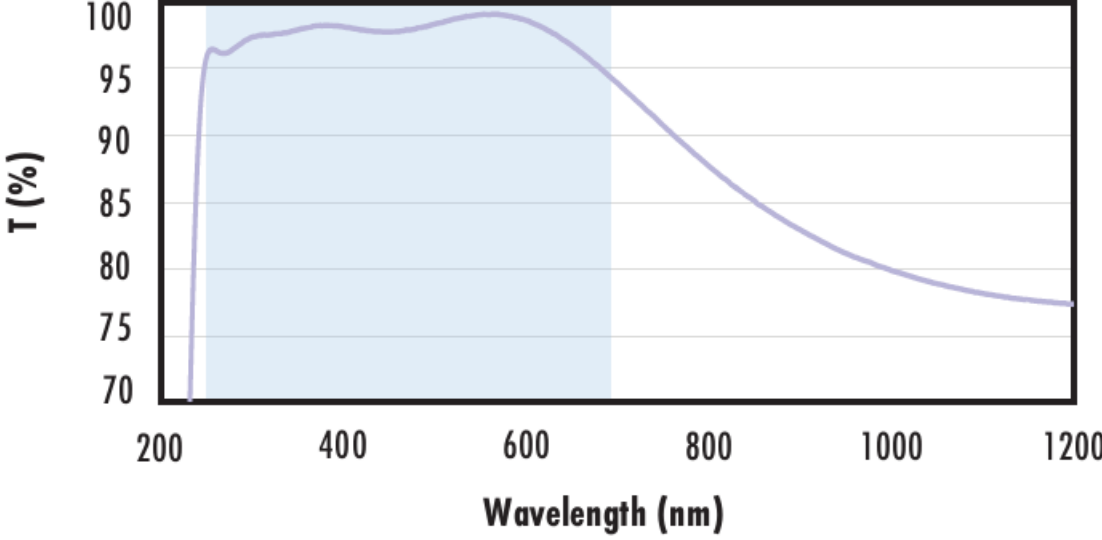
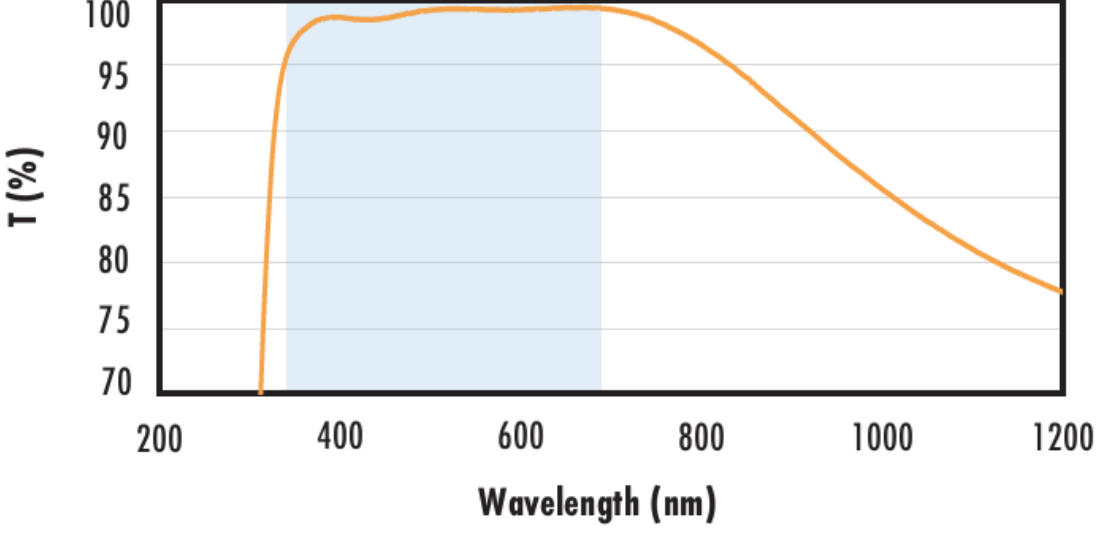
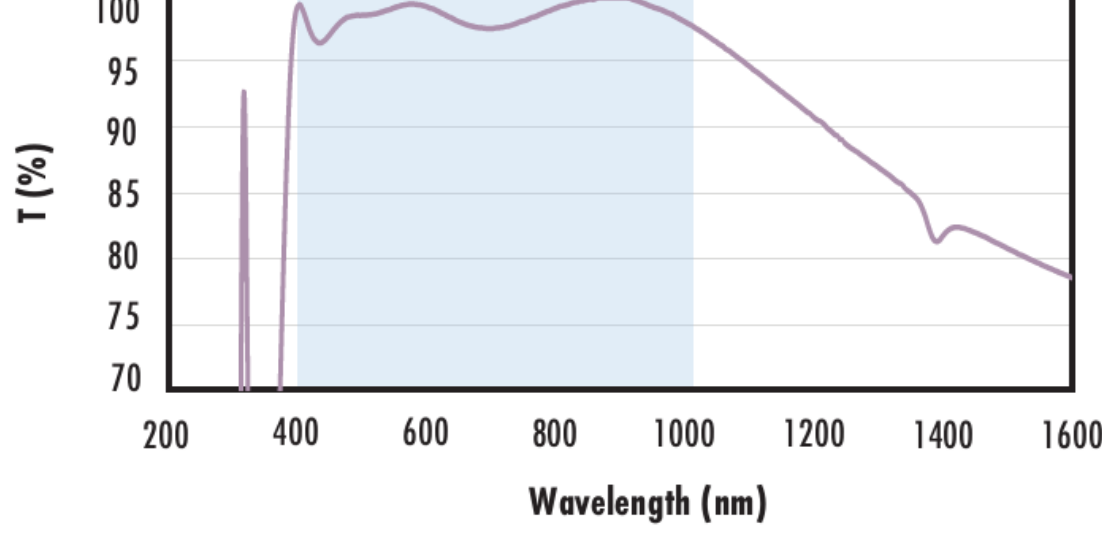
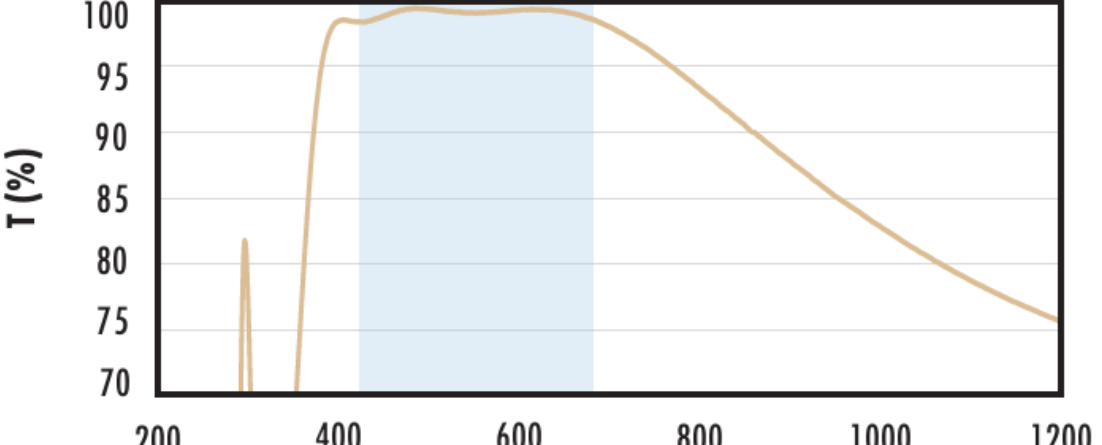
- Verfügbar unbeschichtet sowie BBAR-beschichtet für UV, VIS und NIR
 - Ideal für Bildverarbeitungsanwendungen
 - Rund oder rechteckig mit Größen von 5 bis 200 mm
 - 1λ- oder λ/10-Fenster aus UV-Quarzglas sind ebenfalls verfügbar

TECHSPEC® λ/4-Fenster aus UV-Quarzglas haben eine Oberflächenqualität von 40-20 und einen transmittierten Wellenfrontfehler von λ/4. Dies macht sie ideal für Bildverarbeitungsanwendungen. Die Fenster bestehen aus UV-Quarzglassubstraten und bieten eine hohe Transmission vom ultravioletten über den sichtbaren bis zum nahinfraroten Bereich. Es sind breitbandige Antireflexionsbeschichtungen (BBAR) verfügbar, um Reflexionsverluste zu minimieren und die Transmission zu erhöhen. TECHSPEC® λ/4-Fenster aus UV-Quarzglas werden in optischen Bildgebungsanwendungen, in Laseranwendungen mit geringer oder mittlerer Leistung und als Schutzfenster für Anwendungen, die eine hohe UV-Transmission erfordern, eingesetzt.

Technische Informationen



FUSED SILICA																															
Uncoated Fused Silica Typical Transmission <table border="1"><caption>Approximate data 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>92</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	92	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						
Wavelength (nm)	Transmission T (%)																														
200	92																														
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600	94																														
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1200	94																														
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1600	94																														
1800	94																														
2000	94																														
2200	90																														
Fused Silica with MgF₂ Coating Typical Transmission <table border="1"><caption>Approximate data for MgF2 Coated Fused Silica Transmission</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>93</td></tr><tr><td>400</td><td>96</td></tr><tr><td>600</td><td>97</td></tr><tr><td>800</td><td>96</td></tr><tr><td>1000</td><td>95</td></tr><tr><td>1200</td><td>95</td></tr><tr><td>1400</td><td>93</td></tr><tr><td>1600</td><td>95</td></tr><tr><td>1800</td><td>95</td></tr><tr><td>2000</td><td>95</td></tr><tr><td>2200</td><td>90</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	93	400	96	600	97	800	96	1000	95	1200	95	1400	93	1600	95	1800	95	2000	95	2200	90	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 - 700nm (N-BK7) Data outside this range is not guaranteed and is for reference only. Click Here to Download Data						
Wavelength (nm)	Transmission T (%)																														
200	93																														
400	96																														
600	97																														
800	96																														
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2200	90																														
Fused Silica with UV-AR Coating Typical Transmission <table border="1"><caption>Approximate data for UV-AR Coated Fused Silica Transmission</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>73</td></tr><tr><td>250</td><td>98</td></tr><tr><td>300</td><td>99</td></tr><tr><td>400</td><td>99</td></tr><tr><td>500</td><td>99</td></tr><tr><td>600</td><td>98</td></tr><tr><td>800</td><td>95</td></tr><tr><td>1000</td><td>85</td></tr><tr><td>1200</td><td>78</td></tr><tr><td>1400</td><td>76</td></tr><tr><td>1600</td><td>75</td></tr><tr><td>1800</td><td>75</td></tr><tr><td>2000</td><td>76</td></tr><tr><td>2200</td><td>77</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	73	250	98	300	99	400	99	500	99	600	98	800	95	1000	85	1200	78	1400	76	1600	75	1800	75	2000	76	2200	77	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 - 425nm $R_{avg} \leq 0.75\%$ @ 250 - 425nm $R_{avg} \leq 0.5\%$ @ 370 - 420nm Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Wavelength (nm)	Transmission T (%)																														
200	73																														
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1800	75																														
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2200	77																														

	
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

Wavelength (nm) Fused Silica with YAG-BBAR Coating Typical Transmission <table border="1"><caption>Approximate data for Fused Silica with YAG-BBAR Coating</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>70</td></tr><tr><td>300</td><td>87</td></tr><tr><td>400</td><td>98</td></tr><tr><td>500</td><td>100</td></tr><tr><td>600</td><td>99</td></tr><tr><td>800</td><td>98</td></tr><tr><td>1000</td><td>100</td></tr><tr><td>1100</td><td>100</td></tr><tr><td>1200</td><td>98</td></tr><tr><td>1400</td><td>88</td></tr><tr><td>1600</td><td>80</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	70	300	87	400	98	500	100	600	99	800	98	1000	100	1100	100	1200	98	1400	88	1600	80	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: $R_{\text{abs}} \leq 0.25\% \text{ @ } 532\text{nm}$ $R_{\text{abs}} \leq 0.25\% \text{ @ } 1064\text{nm}$ $R_{\text{avg}} \leq 1.0\% \text{ @ } 500 - 1100\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Wavelength (nm)	Transmission T (%)																								
200	70																								
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Wavelength (nm) Fused Silica with NIR I Coating Typical Transmission <table border="1"><caption>Approximate data for Fused Silica with NIR I Coating</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>70</td></tr><tr><td>400</td><td>98</td></tr><tr><td>500</td><td>100</td></tr><tr><td>600</td><td>100</td></tr><tr><td>800</td><td>100</td></tr><tr><td>1000</td><td>100</td></tr><tr><td>1050</td><td>100</td></tr><tr><td>1200</td><td>98</td></tr><tr><td>1400</td><td>85</td></tr><tr><td>1600</td><td>78</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	70	400	98	500	100	600	100	800	100	1000	100	1050	100	1200	98	1400	85	1600	78	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: $R_{\text{avg}} \leq 0.5\% \text{ @ } 600 - 1050\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data		
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800	100																								
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1600	78																								
Wavelength (nm) Fused Silica with NIR II Coating Typical Transmission <table border="1"><caption>Approximate data for Fused Silica with NIR II Coating</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>70</td></tr><tr><td>400</td><td>93</td></tr><tr><td>500</td><td>95</td></tr><tr><td>600</td><td>100</td></tr><tr><td>750</td><td>100</td></tr><tr><td>1000</td><td>100</td></tr><tr><td>1200</td><td>100</td></tr><tr><td>1400</td><td>98</td></tr><tr><td>1550</td><td>100</td></tr><tr><td>1800</td><td>95</td></tr><tr><td>2000</td><td>90</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	70	400	93	500	95	600	100	750	100	1000	100	1200	100	1400	98	1550	100	1800	95	2000	90	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: $R_{\text{abs}} \leq 1.5\% \text{ @ } 750 - 800\text{nm}$ $R_{\text{abs}} \leq 1.0\% \text{ @ } 800 - 1550\text{nm}$ $R_{\text{avg}} \leq 0.7\% \text{ @ } 750 - 1550\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Wavelength (nm)	Transmission T (%)																								
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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.

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