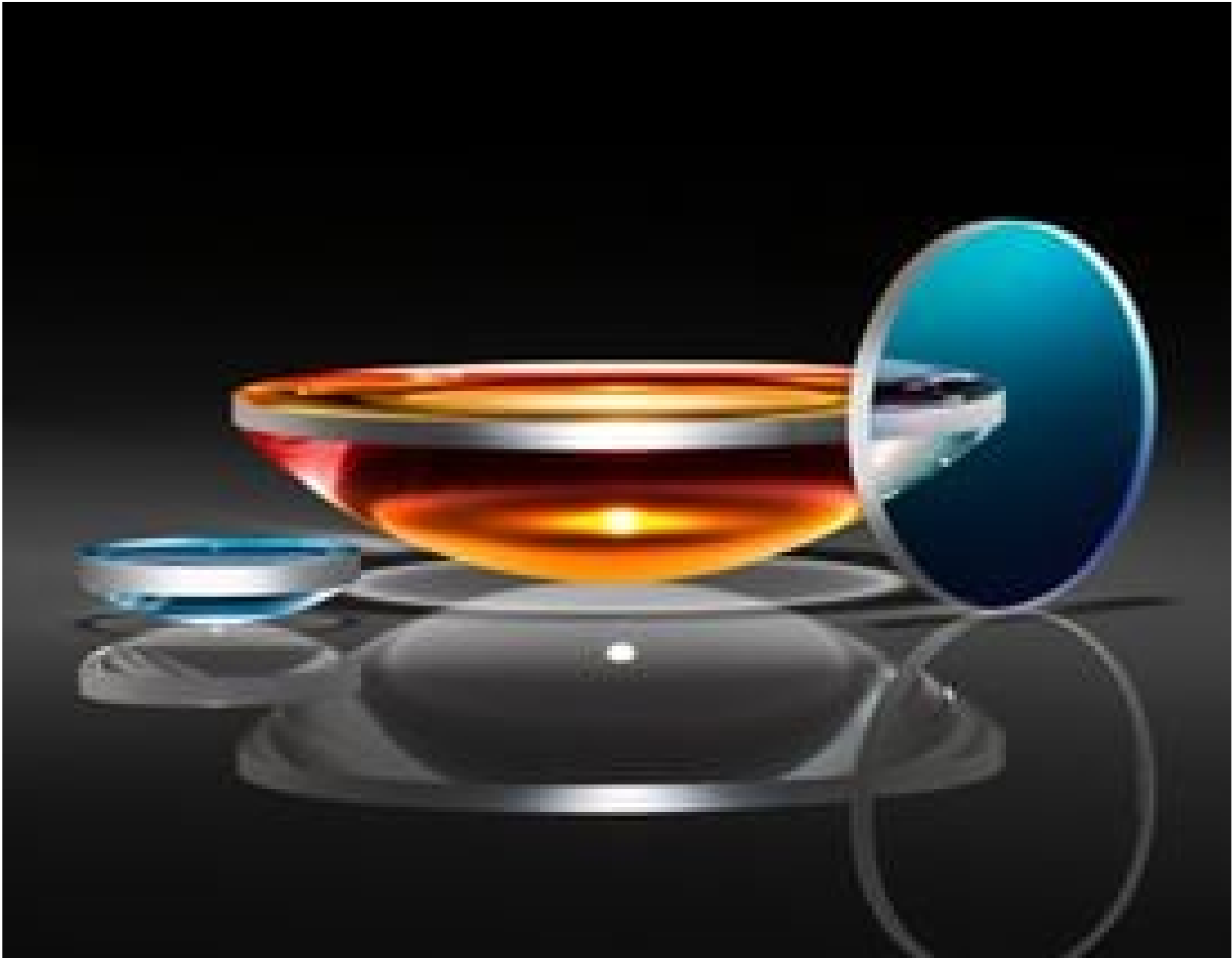
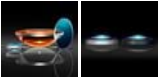


TECHSPEC[®] 50mm Dia. x 200mm FL, YAG-BBAR Coated, Plano-Convex Lens



UV Fused Silica Plano-Convex (PCX) Lenses



Stock **#18-198** 1 In Stock

-

1

+

A\$540^{.80}

ADD TO CART

Volume Pricing	
Qty 1-5	A\$540.80 each
Qty 6-25	A\$432.00 each
Qty 26-49	A\$406.40 each
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SPECIFICATIONS

General

Type:

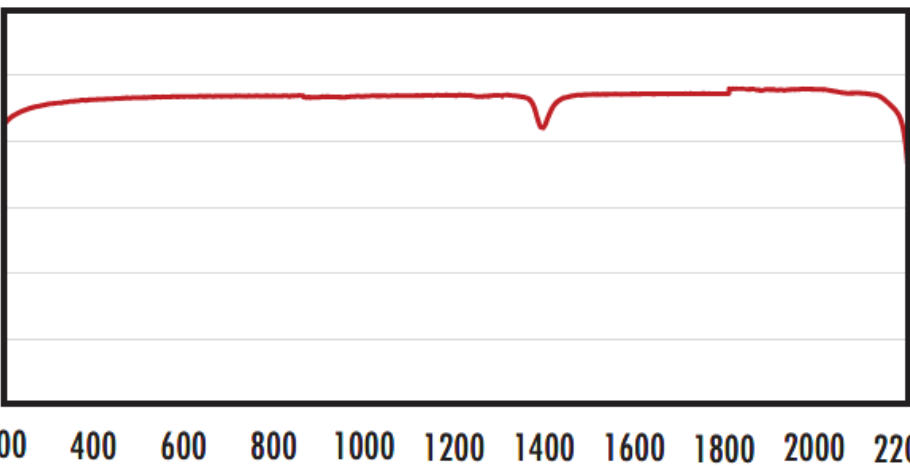
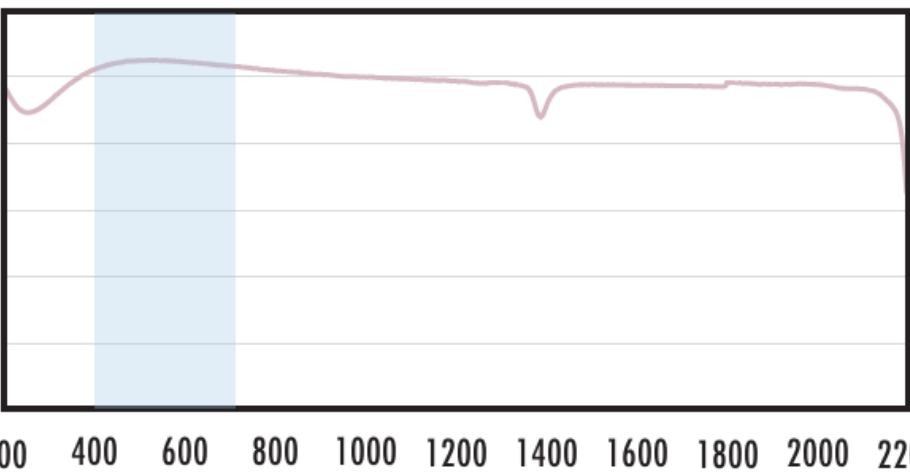
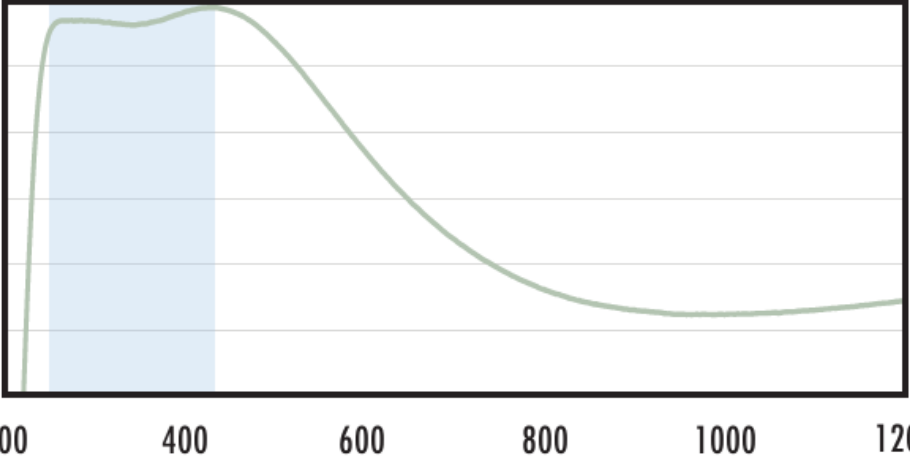
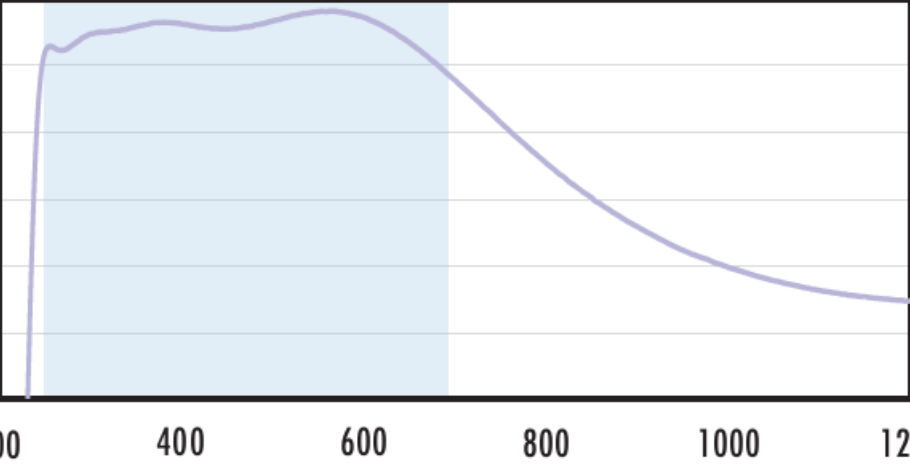
Plano-Convex Lens	
Physical & Mechanical Properties	
50.00 -0.025	Diameter (mm):
<1	Centering (arcmin):
7.00 ±0.10	Center Thickness CT (mm):
3.53	Edge Thickness ET (mm):
49	Clear Aperture CA (mm):
Protective as needed	Bevel:
Optical Properties	
200.00 @ 587.6nm	Effective Focal Length EFL (mm):
195.19	Back Focal Length BFL (mm):
YAG-BBAR (500-1100nm)	Coating:
R _{abs} <0.25% @ 532nm R _{abs} <0.25% @ 1064nm R _{avg} <1.0% @ 500 - 1100nm	Coating Specification:
Fused Silica (Corning 7980)	Substrate: ☐
40-20	Surface Quality:
3 Rings	Power (P-V) @ 632.8nm:
0.5 Rings	Irregularity (P-V) @ 632.8nm:
±1	Focal Length Tolerance (%):
91.69	Radius R ₁ (mm):
4	f/#:
0.13	Numerical Aperture NA:
500 - 1100	Wavelength Range (nm):
5 J/cm² @ 532nm, 10ns	Damage Threshold, By Design: ☐
Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:

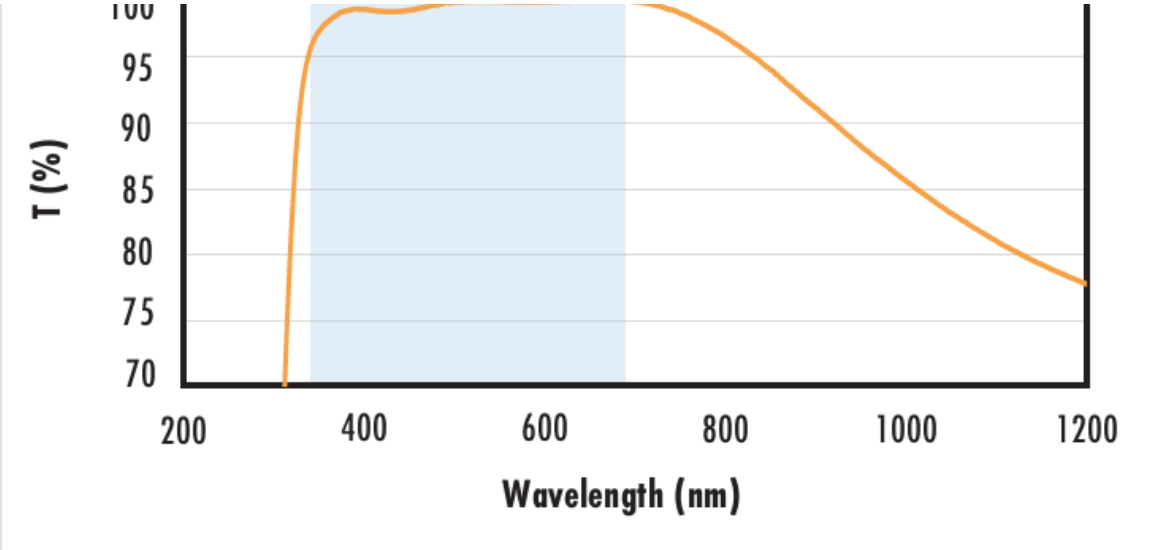
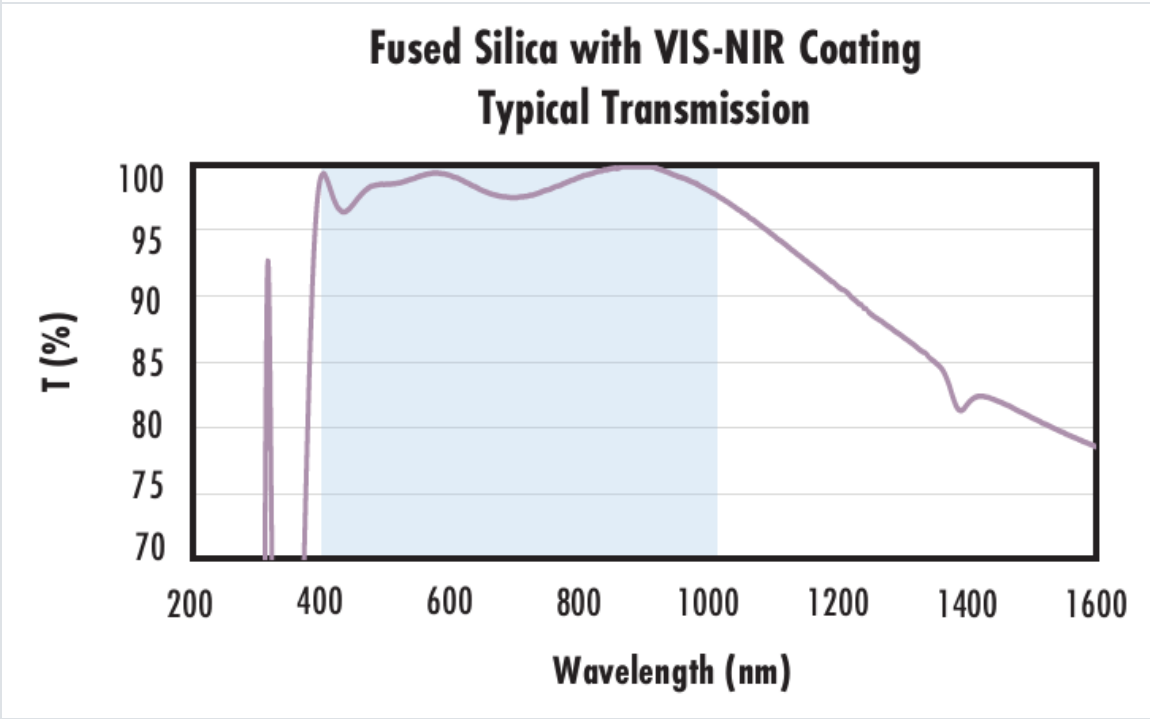
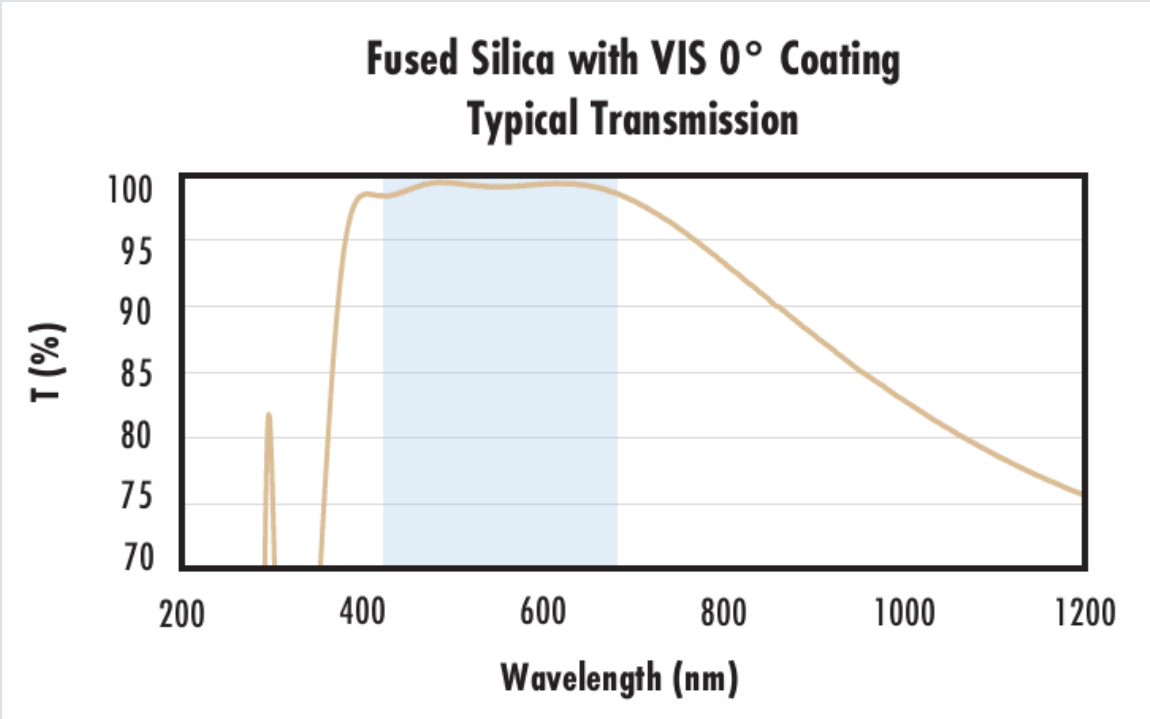
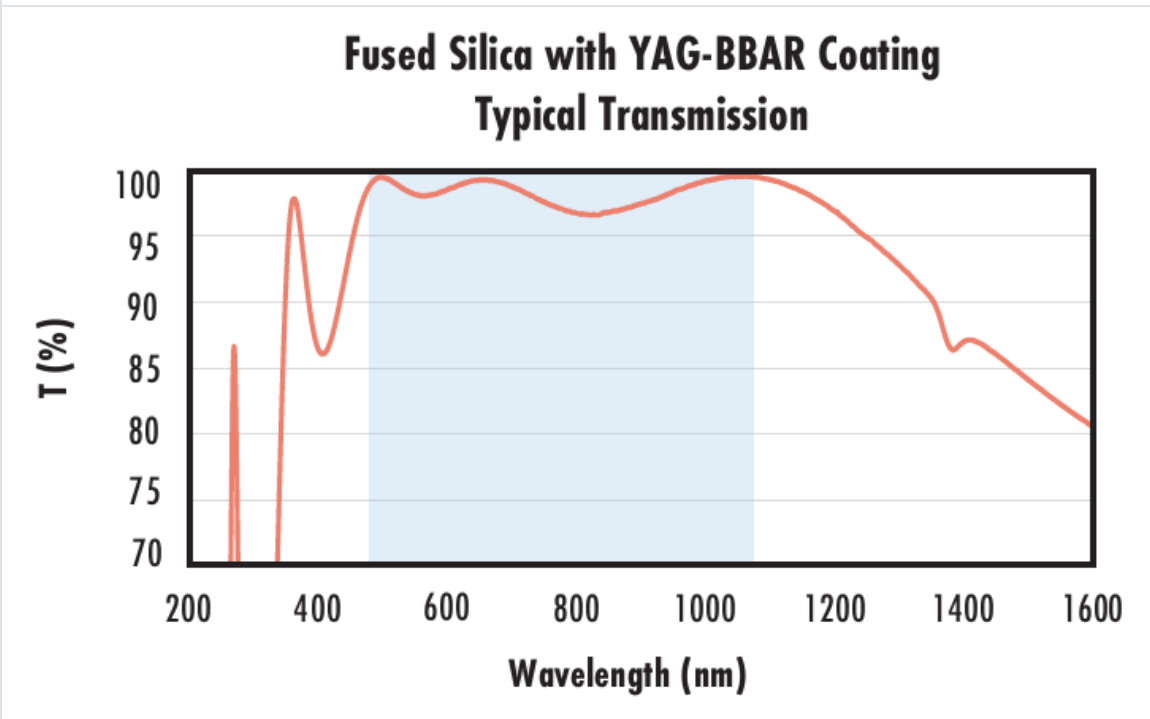
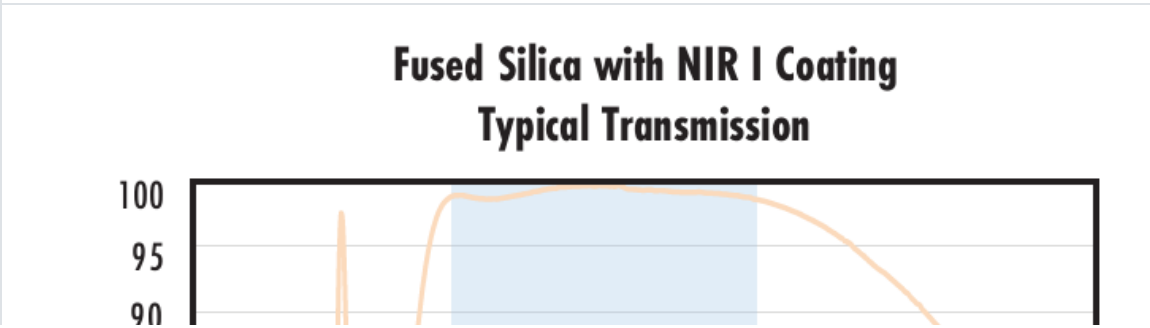
PRODUCT DETAILS

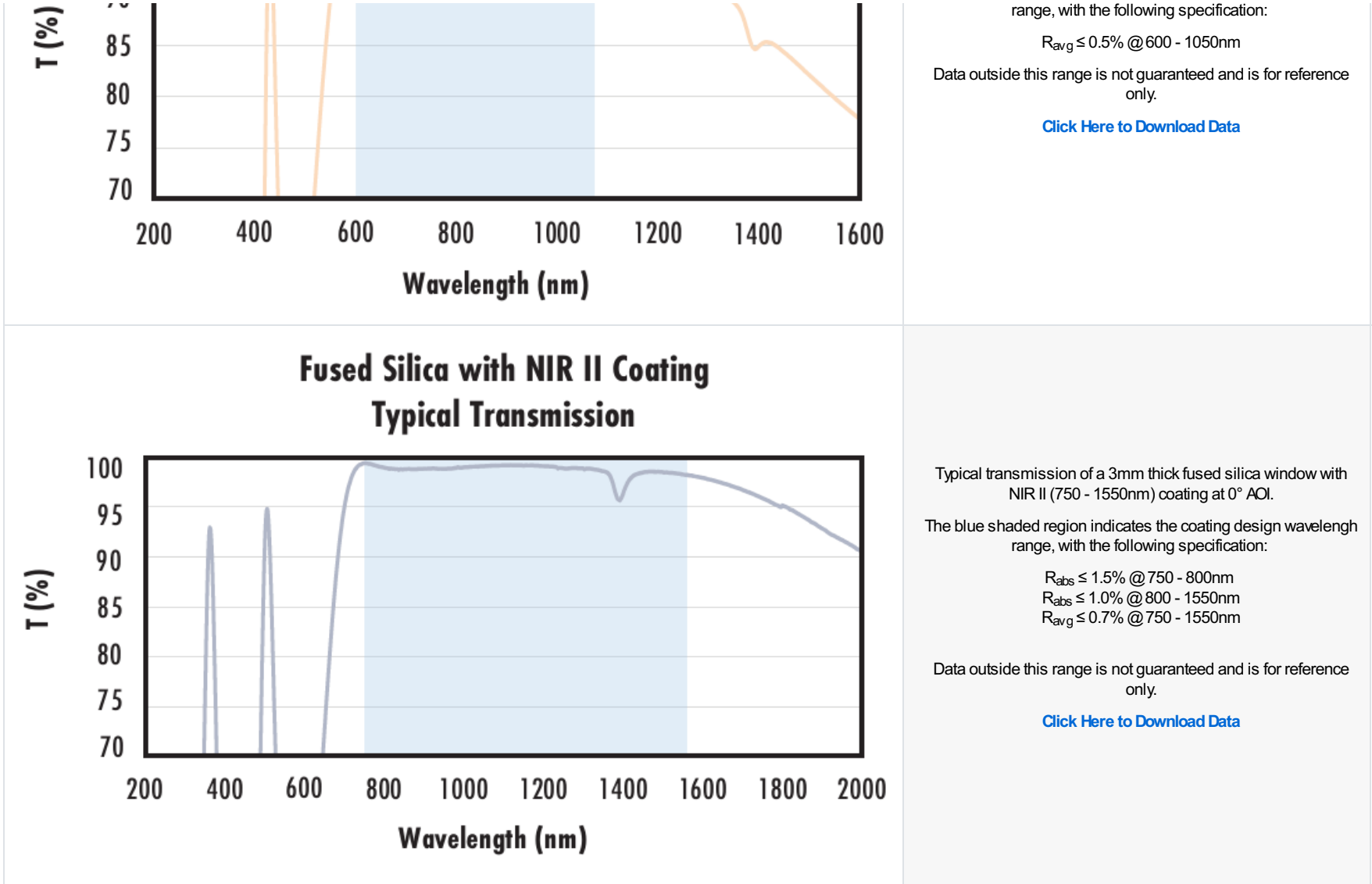
- AR Coated to Provide <1.0% Reflection per Surface for 500 - 1100nm
 - Precision Fused Silica Substrate
 - Various Coating Options: [Uncoated](#), [MgF₂](#), [UV-AR](#), [UV-VIS](#), [VIS-EXT](#), [VIS-NIR](#), [VIS 0°](#), [NIR I](#), and [NIR II](#)
- TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses YAG-BBAR Coated feature precision specifications and a [variety of coating options](#) on a broadband substrate. Fused Silica is commonly used in applications from the Ultraviolet (UV) through the Near-Infrared (NIR). Its low index of refraction, low coefficient of thermal expansion, and low inclusion content make it ideal for laser applications and harsh environmental conditions. TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses YAG-BBAR Coated feature industry leading diameter and centration specifications, making them ideal for integration into demanding imaging and targeting applications. These lenses are YAG-BBAR coated and feature less than 0.25% reflection at common Nd:YAG laser wavelengths of 532nm and 1064nm.

TECHNICAL INFORMATION

FUSED SILICA	
Uncoated Fused Silica	

Uncoated Fused Silica Typical Transmission <table border="1"><caption>Approximate data for Uncoated Fused Silica</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>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	93	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	93																								
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Fused Silica with MgF₂ Coating Typical Transmission <table border="1"><caption>Approximate data for MgF₂ Coated Fused Silica</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>94</td></tr><tr><td>400</td><td>97</td></tr><tr><td>600</td><td>97</td></tr><tr><td>800</td><td>96</td></tr><tr><td>1000</td><td>96</td></tr><tr><td>1200</td><td>96</td></tr><tr><td>1400</td><td>93</td></tr><tr><td>1600</td><td>96</td></tr><tr><td>1800</td><td>96</td></tr><tr><td>2000</td><td>96</td></tr><tr><td>2200</td><td>90</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	94	400	97	600	97	800	96	1000	96	1200	96	1400	93	1600	96	1800	96	2000	96	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: $R_{avg} \leq 1.75\% @ 400 - 700\text{nm (N-BK7)}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Wavelength (nm)	Transmission T (%)																								
200	94																								
400	97																								
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Fused Silica with UV-AR Coating Typical Transmission <table border="1"><caption>Approximate data for UV-AR Coated Fused Silica</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>70</td></tr><tr><td>250</td><td>100</td></tr><tr><td>400</td><td>100</td></tr><tr><td>600</td><td>90</td></tr><tr><td>800</td><td>78</td></tr><tr><td>1000</td><td>76</td></tr><tr><td>1200</td><td>76</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	70	250	100	400	100	600	90	800	78	1000	76	1200	76	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								
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Wavelength (nm)	Transmission T (%)																								
200	70																								
250	100																								
400	100																								
600	100																								
800	85																								
1000	78																								
1200	77																								
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: $R_{avg} \leq 0.5\% @ 350 - 700nm$ 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: $R_{abs} \leq 0.25\% @ 880nm$ $R_{avg} \leq 1.25\% @ 400 - 870nm$ $R_{avg} \leq 1.25\% @ 890 - 1000nm$ 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



CUSTOM

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