

Data Sheet

RG715

Density	
ρ [g/cm ³]	2.76

Notes

Reflection factor	
P_d	0.91

Bubble content	
Bubble class	3

Colloidally colored glass

Long pass filter

Reference thickness	
d [mm]	3

Chemical resistance	
FR class	0
SR class	1.0
AR class	1.0

Spectral values guaranteed	
λ_c ($\tau_i = 0.50$) [nm]	= 715 ± 9
λ_s ($\tau_{is} = 1 \cdot 10^{-5}$) [nm]	= 620
λ_p ($\tau_{ip} = 0.96$) [nm]	= 810

Transformation temperature	
T_g [°C]	532

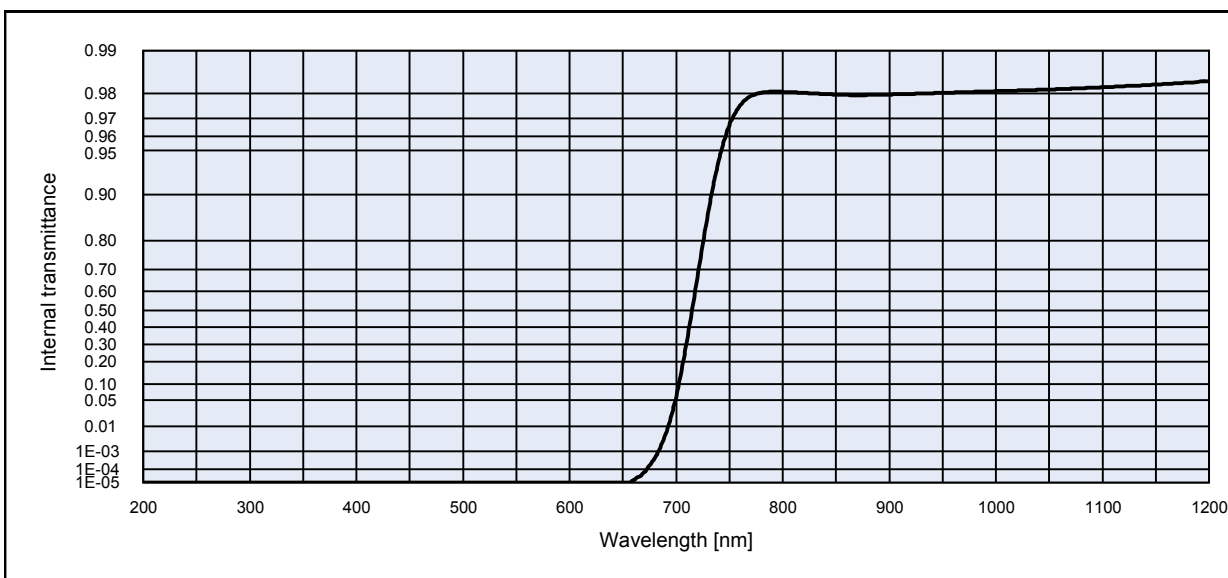
Thermal expansion	
$\alpha_{-30/+70^\circ\text{C}}$ [10 ⁻⁶ /K]	8.1
$\alpha_{20/300^\circ\text{C}}$ [10 ⁻⁶ /K]	9.4
$\alpha_{20/200^\circ\text{C}}$ [10 ⁻⁶ /K]	

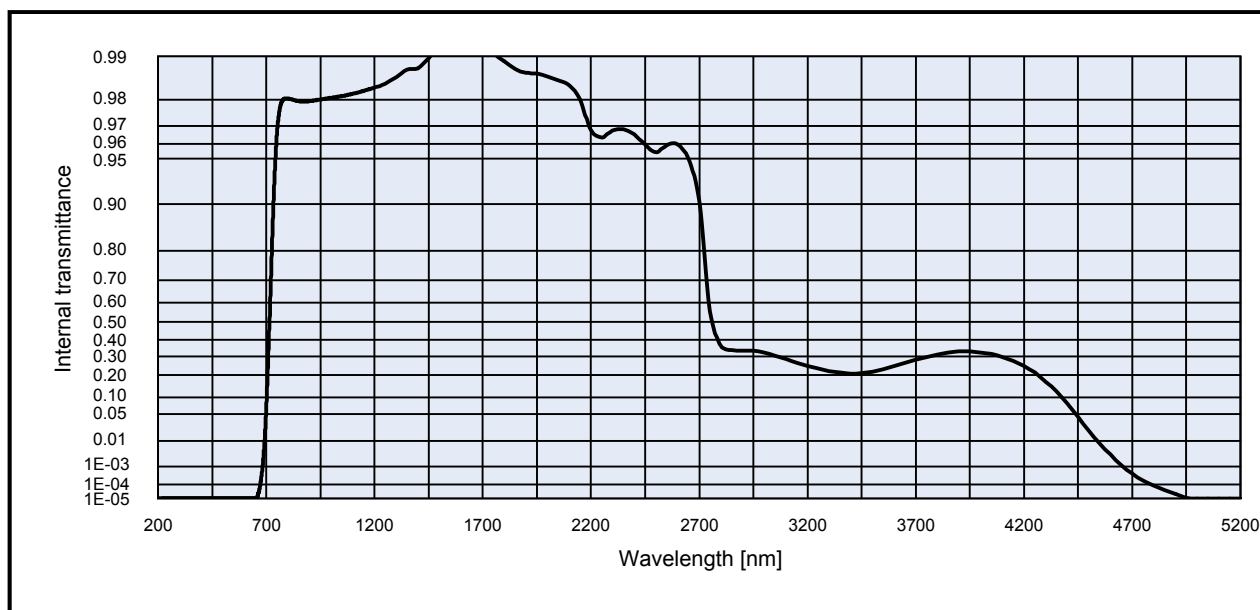
Refractive index n		
λ [nm]	Element	n
587.6	He	1.53
852.1	Cs	1.53
1014	Hg	1.52

Temperature coefficient	
T_k [nm/°C]	0.18

All data without tolerances are to be understood to be reference values. Guaranteed values are only those values listed in the section "Spectral values guaranteed".

Colorimetric evaluation											
Illuminant A (Planck T = 2856 K)				Illuminant Planck T = 3200 K				Illuminant D65 ($T_c = 6504$ K)			
d [mm]	1	2	3	d [mm]	1	2	3	d [mm]	1	2	3
x				x				x			
y				y				y			
Y				Y				Y			
λ_d [nm]				λ_d [nm]				λ_d [nm]			
P_e				P_e				P_e			





Internal transmittance τ_i at reference thickness d [mm] = 3
The internal transmittance values, tabulated and graphically represented, are reference values only

λ [nm]	τ_i	λ [nm]	τ_i	λ [nm]	τ_i	λ [nm]	τ_i	λ [nm]	τ_i	λ [nm]	τ_i
200	< 1.0E-05	500	< 1.0E-05	800	9.8E-01	1100	9.8E-01	2200	9.7E-01	3700	2.8E-01
210	< 1.0E-05	510	< 1.0E-05	810	9.8E-01	1110	9.8E-01	2250	9.6E-01	3750	3.0E-01
220	< 1.0E-05	520	< 1.0E-05	820	9.8E-01	1120	9.8E-01	2300	9.7E-01	3800	3.1E-01
230	< 1.0E-05	530	< 1.0E-05	830	9.8E-01	1130	9.8E-01	2350	9.7E-01	3850	3.2E-01
240	< 1.0E-05	540	< 1.0E-05	840	9.8E-01	1140	9.8E-01	2400	9.7E-01	3900	3.3E-01
250	< 1.0E-05	550	< 1.0E-05	850	9.8E-01	1150	9.8E-01	2450	9.6E-01	3950	3.3E-01
260	< 1.0E-05	560	< 1.0E-05	860	9.8E-01	1160	9.8E-01	2500	9.5E-01	4000	3.3E-01
270	< 1.0E-05	570	< 1.0E-05	870	9.8E-01	1170	9.8E-01	2550	9.6E-01	4050	3.2E-01
280	< 1.0E-05	580	< 1.0E-05	880	9.8E-01	1180	9.8E-01	2600	9.6E-01	4100	3.0E-01
290	< 1.0E-05	590	< 1.0E-05	890	9.8E-01	1190	9.8E-01	2650	9.5E-01	4150	2.8E-01
300	< 1.0E-05	600	< 1.0E-05	900	9.8E-01	1200	9.8E-01	2700	9.0E-01	4200	2.5E-01
310	< 1.0E-05	610	< 1.0E-05	910	9.8E-01	1250	9.8E-01	2750	5.6E-01	4250	2.1E-01
320	< 1.0E-05	620	< 1.0E-05	920	9.8E-01	1300	9.9E-01	2800	3.7E-01	4300	1.7E-01
330	< 1.0E-05	630	< 1.0E-05	930	9.8E-01	1350	9.9E-01	2850	3.4E-01	4350	1.2E-01
340	< 1.0E-05	640	< 1.0E-05	940	9.8E-01	1400	9.9E-01	2900	3.4E-01	4400	8.0E-02
350	< 1.0E-05	650	< 1.0E-05	950	9.8E-01	1450	9.9E-01	2950	3.3E-01	4450	4.4E-02
360	< 1.0E-05	660	1.6E-05	960	9.8E-01	1500	9.9E-01	3000	3.2E-01	4500	2.0E-02
370	< 1.0E-05	670	6.3E-05	970	9.8E-01	1550	9.9E-01	3050	3.1E-01	4550	8.4E-03
380	< 1.0E-05	680	4.5E-04	980	9.8E-01	1600	9.9E-01	3100	2.9E-01	4600	3.3E-03
390	< 1.0E-05	690	5.4E-03	990	9.8E-01	1650	9.9E-01	3150	2.7E-01	4650	1.1E-03
400	< 1.0E-05	700	5.9E-02	1000	9.8E-01	1700	9.9E-01	3200	2.5E-01	4700	4.4E-04
410	< 1.0E-05	710	3.1E-01	1010	9.8E-01	1750	9.9E-01	3250	2.3E-01	4750	1.8E-04
420	< 1.0E-05	720	6.7E-01	1020	9.8E-01	1800	9.9E-01	3300	2.2E-01	4800	8.3E-05
430	< 1.0E-05	730	8.7E-01	1030	9.8E-01	1850	9.9E-01	3350	2.1E-01	4850	4.2E-05
440	< 1.0E-05	740	9.4E-01	1040	9.8E-01	1900	9.9E-01	3400	2.1E-01	4900	2.2E-05
450	< 1.0E-05	750	9.7E-01	1050	9.8E-01	1950	9.9E-01	3450	2.1E-01	4950	1.1E-05
460	< 1.0E-05	760	9.8E-01	1060	9.8E-01	2000	9.9E-01	3500	2.2E-01	5000	< 1.0E-05
470	< 1.0E-05	770	9.8E-01	1070	9.8E-01	2050	9.9E-01	3550	2.3E-01	5050	< 1.0E-05
480	< 1.0E-05	780	9.8E-01	1080	9.8E-01	2100	9.8E-01	3600	2.5E-01	5100	< 1.0E-05
490	< 1.0E-05	790	9.8E-01	1090	9.8E-01	2150	9.8E-01	3650	2.6E-01	5150	< 1.0E-05