Data Sheet

SCHOTT

KG5

Reflection factor	
P_d	0.92

Reference thickness	
d [mm]	2

Spectral values guaranteed		
τi (365 nm)	≥	0.80
τi (500 nm)	≥	0.86
τi (600 nm)	≥	0.80
τi (700 nm)	≤	0.43
τi (800 nm)	≤	0.09
τi (900 nm)	≤	0.008
τi (1060 nm)	≤	1 · 10-4 ·
τi (2200 nm)	≤	0.001

Refractive index n		
λ [nm]	Element	n
365	Hg	1.53
587.6	He	1.51

Density	
ρ [g/cm^3]	2.53

Bubble content	
Bubble class	3

Chemical resistance	
FR class	0
SR class	3.0
AR class	4.0

Transformation temperature	
Tg [°C]	565

Thermal expansion	
$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.4
$\alpha_{20/300°C}$ [10^{-6}/K]	6.2
$\alpha_{20/200°C}$ [10^{-6}/K]	

Temperature coefficient	
T_K [nm/°C]	

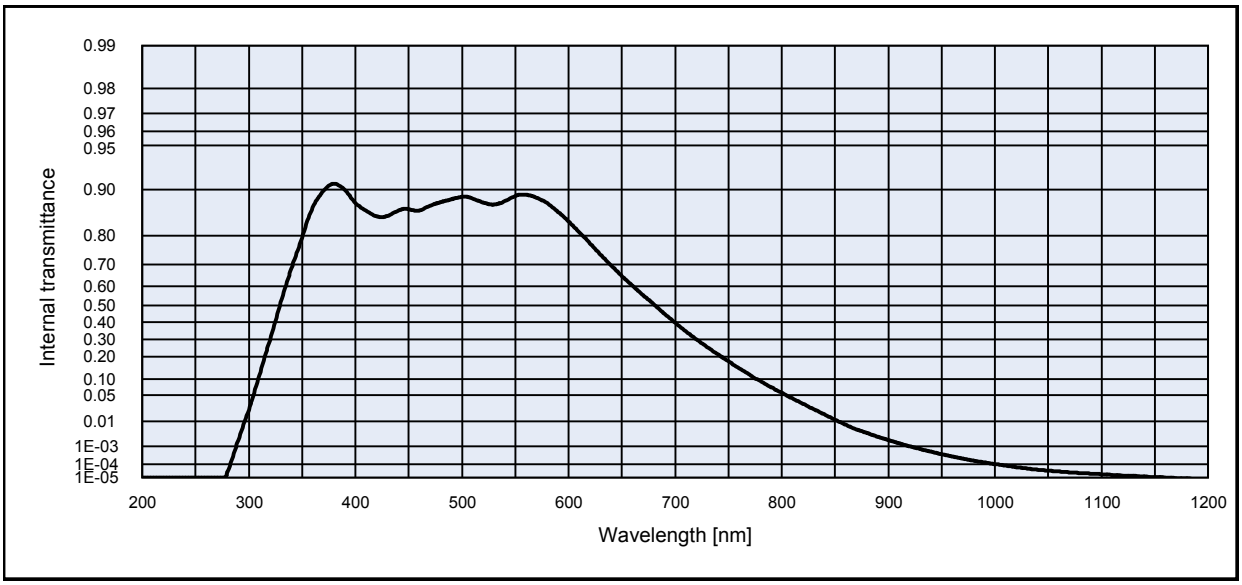
Notes
Ionically colored glass
Short pass filter
Heat protection filter
[!]
Long-term changes in the polished
surface are possible under some
circumstances
V
Transmission changes are possible
under the action of intense
ultraviolet radiation
All data without tolerances are to be
understood to be reference values.
Guaranteed values are only those
values listed in the section
"Spectral values guaranteed".

Colorimetric evaluation

Illuminant	A (Planck T = 2856 K)		
d [mm]	1	2	3
x	0.440	0.434	0.427
y	0.411	0.415	0.418
Y	85	78	72
λ_d [nm]	504	505	505
P_e	0.02	0.03	0.05

Illuminant	Planck T = 3200 K		
d [mm]	1	2	3
x	0.416	0.410	0.404
y	0.402	0.406	0.409
Y	85	78	72
λ_d [nm]	503	503	503
P_e	0.02	0.03	0.05

Illuminant	D65 (T_c = 6504 K)		
d [mm]	1	2	3
x	0.308	0.304	0.300
y	0.331	0.332	0.334
Y	85	79	74
λ_d [nm]	496	496	496
P_e	0.02	0.03	0.04



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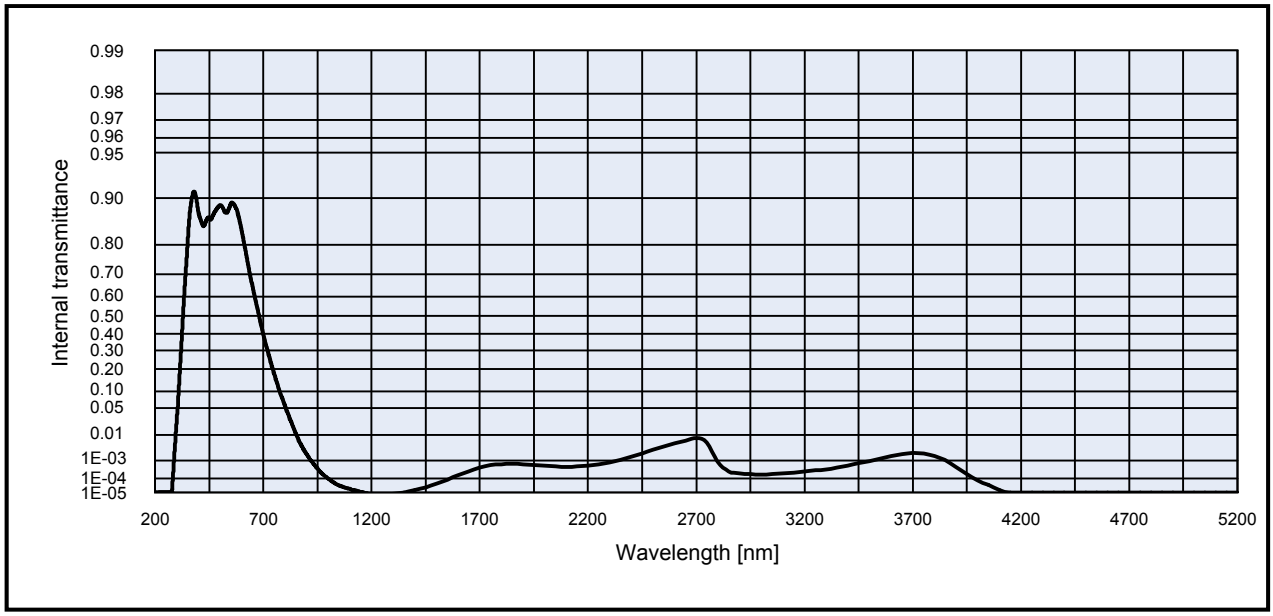

Internal transmittance τ_i at reference thickness d [mm] = 2
The internal transmittance values, tabulated and graphically represented, are reference values only

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	8.9E-01	800	5.6E-02	1100	1.9E-05	2200	5.4E-04	3700	2.2E-03
210	< 1.0E-05	510	8.9E-01	810	4.2E-02	1110	1.7E-05	2250	6.5E-04	3750	2.0E-03
220	< 1.0E-05	520	8.8E-01	820	3.2E-02	1120	1.5E-05	2300	8.3E-04	3800	1.6E-03
230	< 1.0E-05	530	8.7E-01	830	2.3E-02	1130	1.4E-05	2350	1.1E-03	3850	1.0E-03
240	< 1.0E-05	540	8.8E-01	840	1.6E-02	1140	1.2E-05	2400	1.5E-03	3900	4.6E-04
250	< 1.0E-05	550	8.9E-01	850	1.1E-02	1150	1.1E-05	2450	2.1E-03	3950	1.9E-04
260	< 1.0E-05	560	8.9E-01	860	7.7E-03	1160	1.0E-05	2500	2.9E-03	4000	7.4E-05
270	< 1.0E-05	570	8.9E-01	870	5.3E-03	1170	< 1.0E-05	2550	4.1E-03	4050	3.7E-05
280	2.8E-05	580	8.8E-01	880	3.8E-03	1180	< 1.0E-05	2600	5.3E-03	4100	1.6E-05
290	1.9E-03	590	8.6E-01	890	2.7E-03	1190	< 1.0E-05	2650	6.6E-03	4150	< 1.0E-05
300	2.2E-02	600	8.4E-01	900	2.0E-03	1200	< 1.0E-05	2700	7.9E-03	4200	< 1.0E-05
310	1.1E-01	610	8.1E-01	910	1.4E-03	1250	< 1.0E-05	2750	5.6E-03	4250	< 1.0E-05
320	3.0E-01	620	7.8E-01	920	1.0E-03	1300	< 1.0E-05	2800	8.9E-04	4300	< 1.0E-05
330	5.2E-01	630	7.4E-01	930	7.3E-04	1350	1.0E-05	2850	2.8E-04	4350	< 1.0E-05
340	6.8E-01	640	7.0E-01	940	5.3E-04	1400	1.5E-05	2900	2.0E-04	4400	< 1.0E-05
350	8.0E-01	650	6.5E-01	950	3.9E-04	1450	2.6E-05	2950	1.9E-04	4450	< 1.0E-05
360	8.7E-01	660	6.0E-01	960	2.9E-04	1500	4.5E-05	3000	1.8E-04	4500	< 1.0E-05
370	9.0E-01	670	5.6E-01	970	2.2E-04	1550	8.5E-05	3050	1.9E-04	4550	< 1.0E-05
380	9.1E-01	680	5.1E-01	980	1.6E-04	1600	1.5E-04	3100	2.1E-04	4600	< 1.0E-05
390	9.0E-01	690	4.5E-01	990	1.3E-04	1650	2.7E-04	3150	2.3E-04	4650	< 1.0E-05
400	8.8E-01	700	4.0E-01	1000	9.9E-05	1700	4.4E-04	3200	2.7E-04	4700	< 1.0E-05
410	8.6E-01	710	3.5E-01	1010	7.8E-05	1750	5.8E-04	3250	3.1E-04	4750	< 1.0E-05
420	8.5E-01	720	3.0E-01	1020	6.2E-05	1800	6.6E-04	3300	3.6E-04	4800	< 1.0E-05
430	8.5E-01	730	2.6E-01	1030	4.9E-05	1850	6.9E-04	3350	4.3E-04	4850	< 1.0E-05
440	8.6E-01	740	2.1E-01	1040	4.1E-05	1900	6.5E-04	3400	5.6E-04	4900	< 1.0E-05
450	8.7E-01	750	1.8E-01	1050	3.5E-05	1950	6.0E-04	3450	7.3E-04	4950	< 1.0E-05
460	8.6E-01	760	1.5E-01	1060	3.0E-05	2000	5.6E-04	3500	9.3E-04	5000	< 1.0E-05
470	8.7E-01	770	1.2E-01	1070	2.6E-05	2050	5.1E-04	3550	1.2E-03	5050	< 1.0E-05
480	8.8E-01	780	9.2E-02	1080	2.3E-05	2100	4.9E-04	3600	1.6E-03	5100	< 1.0E-05
490	8.8E-01	790	7.2E-02	1090	2.1E-05	2150	4.9E-04	3650	2.0E-03	5150	< 1.0E-05