Data Sheet

SCHOTT

VG9

Density	
ρ [g/cm³]	2.87

Reflection factor	
P_d	0.91

Bubble content	
Bubble class	1

Reference thickness	
d [mm]	1

Chemical resistance	
FR class	0
SR class	1.0
AR class	1.0

Spectral values guaranteed		
τi (450 nm)	≤	0.21
τi (514 nm)	≥	0.67
τi (633 nm)	≤	0.15
τi (725 nm)	≤	0.07
τi (1060 nm)	≤	0.18

Transformation temperature	
Tg [°C]	462

Thermal expansion	
$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.2
$\alpha_{20/300°C}$ [10^{-6}/K]	10.6
$\alpha_{20/200°C}$ [10^{-6}/K]	

Refractive index n		
λ [nm]	Element	n
480	Cd	1.56
587.6	He	1.55

Temperature coefficient	
T_K [nm/°C]	

Notes

Ionically colored glass

Band pass filter

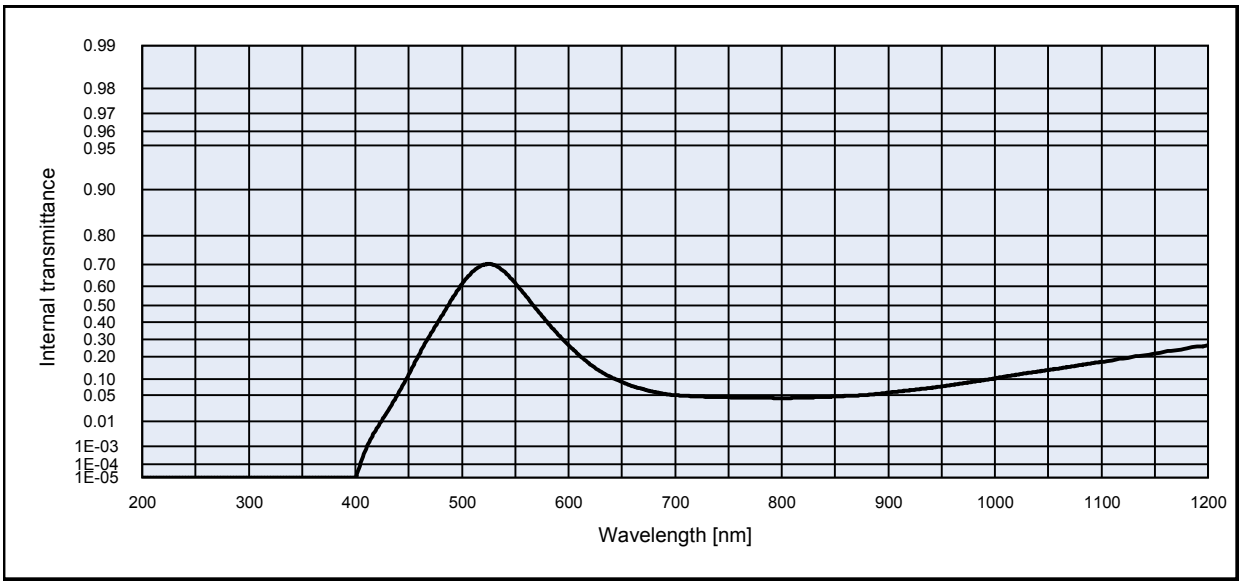
All data without tolerances are to be understood to be reference values. Guaranteed values are only those values listed in the section "Spectral values guaranteed".

Colorimetric evaluation

Illuminant	A (Planck T = 2856 K)		
d [mm]	1	2	3
x	0.370	0.306	0.265
y	0.522	0.596	0.645
Y	40	21	12
λ_d [nm]	535	529	527
P_e	0.31	0.47	0.58

Illuminant	Planck T = 3200 K		
d [mm]	1	2	3
x	0.354	0.295	0.256
y	0.521	0.596	0.645
Y	41	22	13
λ_d [nm]	538	531	528
P_e	0.33	0.49	0.59

Illuminant	D65 (T_c = 6504 K)		
d [mm]	1	2	3
x	0.284	0.246	0.220
y	0.493	0.582	0.637
Y	45	25	15
λ_d [nm]	541	535	532
P_e	0.39	0.56	0.66



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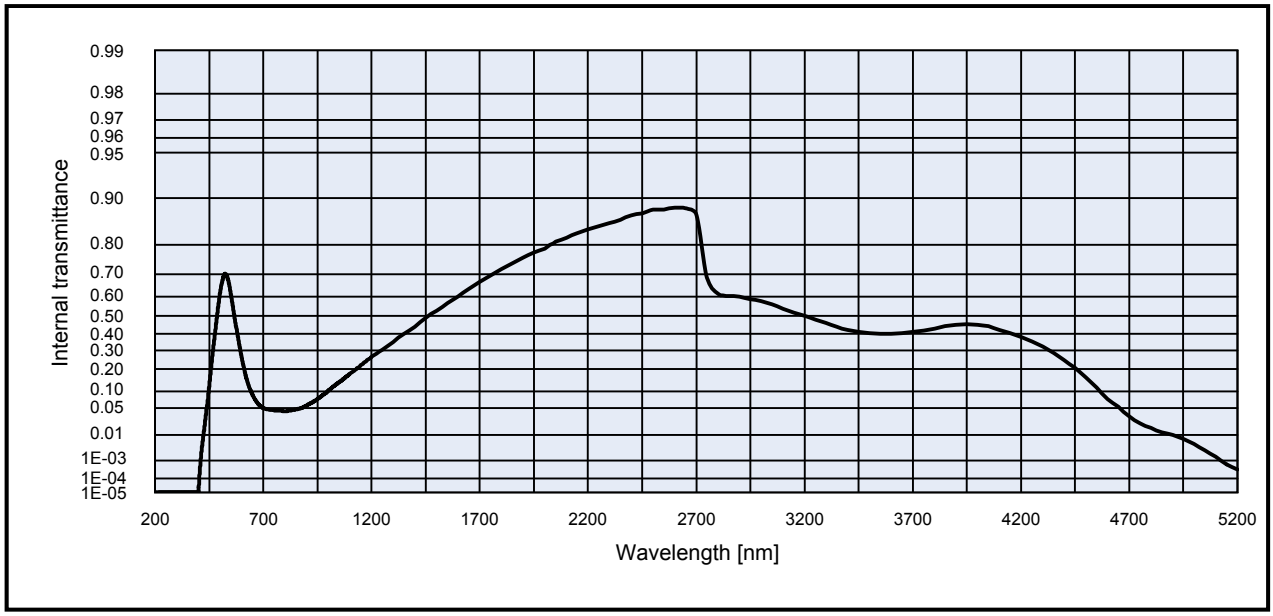

Internal transmittance τ_i at reference thickness d [mm] = 1
The internal transmittance values, tabulated and graphically represented, are reference values only

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	6.1E-01	800	4.3E-02	1100	1.7E-01	2200	8.4E-01	3700	4.1E-01
210	< 1.0E-05	510	6.7E-01	810	4.3E-02	1110	1.8E-01	2250	8.5E-01	3750	4.2E-01
220	< 1.0E-05	520	7.0E-01	820	4.4E-02	1120	1.9E-01	2300	8.5E-01	3800	4.3E-01
230	< 1.0E-05	530	7.0E-01	830	4.5E-02	1130	2.0E-01	2350	8.6E-01	3850	4.4E-01
240	< 1.0E-05	540	6.7E-01	840	4.5E-02	1140	2.1E-01	2400	8.7E-01	3900	4.5E-01
250	< 1.0E-05	550	6.2E-01	850	4.7E-02	1150	2.2E-01	2450	8.7E-01	3950	4.5E-01
260	< 1.0E-05	560	5.5E-01	860	4.8E-02	1160	2.3E-01	2500	8.8E-01	4000	4.5E-01
270	< 1.0E-05	570	4.8E-01	870	4.9E-02	1170	2.4E-01	2550	8.8E-01	4050	4.4E-01
280	< 1.0E-05	580	4.0E-01	880	5.0E-02	1180	2.5E-01	2600	8.8E-01	4100	4.2E-01
290	< 1.0E-05	590	3.3E-01	890	5.3E-02	1190	2.6E-01	2650	8.8E-01	4150	4.0E-01
300	< 1.0E-05	600	2.7E-01	900	5.6E-02	1200	2.6E-01	2700	8.7E-01	4200	3.8E-01
310	< 1.0E-05	610	2.1E-01	910	5.9E-02	1250	3.0E-01	2750	6.9E-01	4250	3.5E-01
320	< 1.0E-05	620	1.6E-01	920	6.3E-02	1300	3.5E-01	2800	6.2E-01	4300	3.2E-01
330	< 1.0E-05	630	1.3E-01	930	6.6E-02	1350	4.0E-01	2850	6.1E-01	4350	2.9E-01
340	< 1.0E-05	640	1.1E-01	940	7.0E-02	1400	4.4E-01	2900	6.0E-01	4400	2.5E-01
350	< 1.0E-05	650	8.9E-02	950	7.4E-02	1450	4.9E-01	2950	5.9E-01	4450	2.1E-01
360	< 1.0E-05	660	7.5E-02	960	7.9E-02	1500	5.3E-01	3000	5.8E-01	4500	1.6E-01
370	< 1.0E-05	670	6.6E-02	970	8.4E-02	1550	5.7E-01	3050	5.6E-01	4550	1.1E-01
380	< 1.0E-05	680	5.8E-02	980	9.0E-02	1600	6.0E-01	3100	5.4E-01	4600	7.5E-02
390	< 1.0E-05	690	5.3E-02	990	9.5E-02	1650	6.4E-01	3150	5.2E-01	4650	5.2E-02
400	< 1.0E-05	700	5.0E-02	1000	1.0E-01	1700	6.7E-01	3200	5.0E-01	4700	3.3E-02
410	7.6E-04	710	4.8E-02	1010	1.1E-01	1750	7.0E-01	3250	4.8E-01	4750	2.2E-02
420	5.7E-03	720	4.7E-02	1020	1.2E-01	1800	7.2E-01	3300	4.6E-01	4800	1.6E-02
430	2.0E-02	730	4.6E-02	1030	1.2E-01	1850	7.4E-01	3350	4.4E-01	4850	1.2E-02
440	5.3E-02	740	4.5E-02	1040	1.3E-01	1900	7.6E-01	3400	4.2E-01	4900	1.0E-02
450	1.2E-01	750	4.5E-02	1050	1.4E-01	1950	7.8E-01	3450	4.1E-01	4950	7.5E-03
460	2.2E-01	760	4.4E-02	1060	1.4E-01	2000	7.9E-01	3500	4.0E-01	5000	5.0E-03
470	3.3E-01	770	4.4E-02	1070	1.5E-01	2050	8.1E-01	3550	4.0E-01	5050	2.8E-03
480	4.3E-01	780	4.4E-02	1080	1.6E-01	2100	8.2E-01	3600	4.0E-01	5100	1.5E-03
490	5.3E-01	790	4.3E-02	1090	1.7E-01	2150	8.3E-01	3650	4.0E-01	5150	6.6E-04