Data Sheet

SCHOTT

KG2

Reflection factor	
P_d	0.921

Reference thickness	
d [mm]	2

Spectral values guaranteed		
τ_i (365nm)	≥	0.93
τ_i (500nm)	≥	0.94
τ_i (600nm)	≥	0.92
τ_i (700nm)	≤	0.83
τ_i (800nm)	≤	0.55
τ_i (900nm)	≤	0.28
τ_i (1060nm)	≤	0.12
τ_i (2200nm)	≤	0.2

Refractive Index n
n_i (365.0 nm) = 1.530
n_d (587.6 nm) = 1.510

Density	
ρ [g/cm^3]	2.52

Bubble content	
Bubble class	3

Chemical Resistance	
FR class	0
SR class	2.0
AR class	3.0

Transformation temperature	
Tg [°C]	605

Thermal expansion	
$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.4
$\alpha_{20/300°C}$ [10^{-6}/K]	6.3
$\alpha_{20/200°C}$ [10^{-6}/K]	

Temperature coefficient	
T_K [nm/°C]	

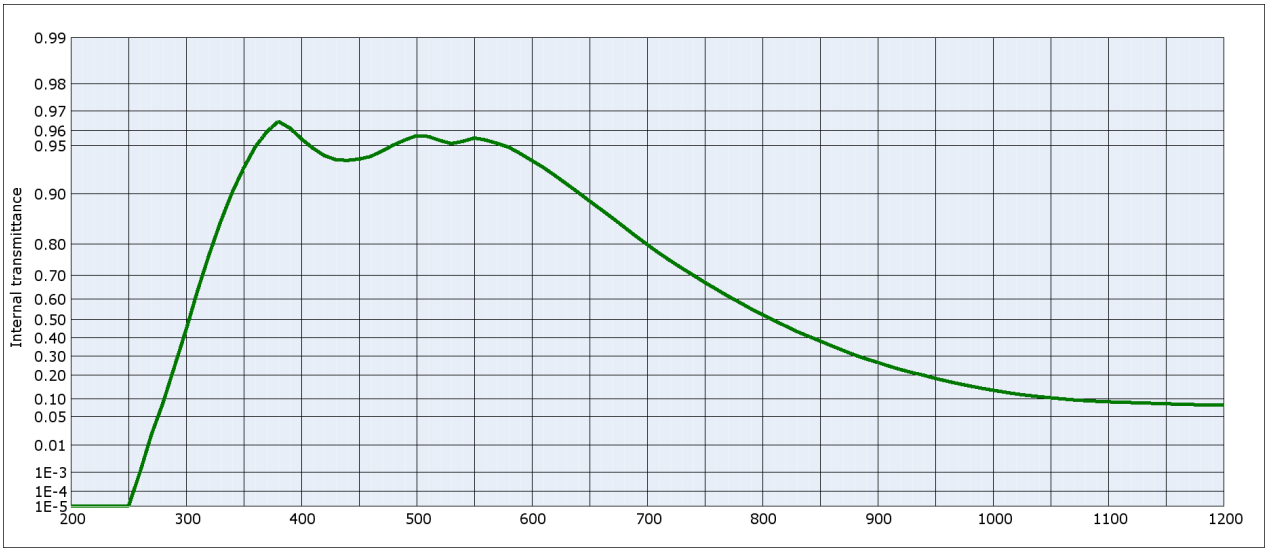
Notes
Ionically colored glass
Shortpass filter
Heat protection filter
Long-term changes in the polished
surface are possible under some
circumstances.
Transmission changes are possible
under the action of intense
ultraviolet radiation.
All data wihout tolerances are to be
understood to be reference values.
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	0.446	0.444	0.442
y	0.409	0.410	0.411
Y	89	87	84
λ_d [nm]	506	507	507
P_e	0.00	0.01	0.01

Illuminant	Planck T = 3200 K		
d [mm]	1	2	3
x	0.422	0.420	0.419
y	0.400	0.401	0.402
Y	89	87	84
λ_d [nm]	505	505	506
P_e	0.00	0.01	0.01

Illuminant	D65 (T_C = 6504 K)		
d [mm]	1	2	3
x	0.312	0.311	0.310
y	0.330	0.331	0.331
Y	90	87	85
λ_d [nm]	501	501	501
P_e	0.00	0.01	0.01



STATUS: 01.12.2014

Further explanations see 'Optical Filters 2013' catalogue

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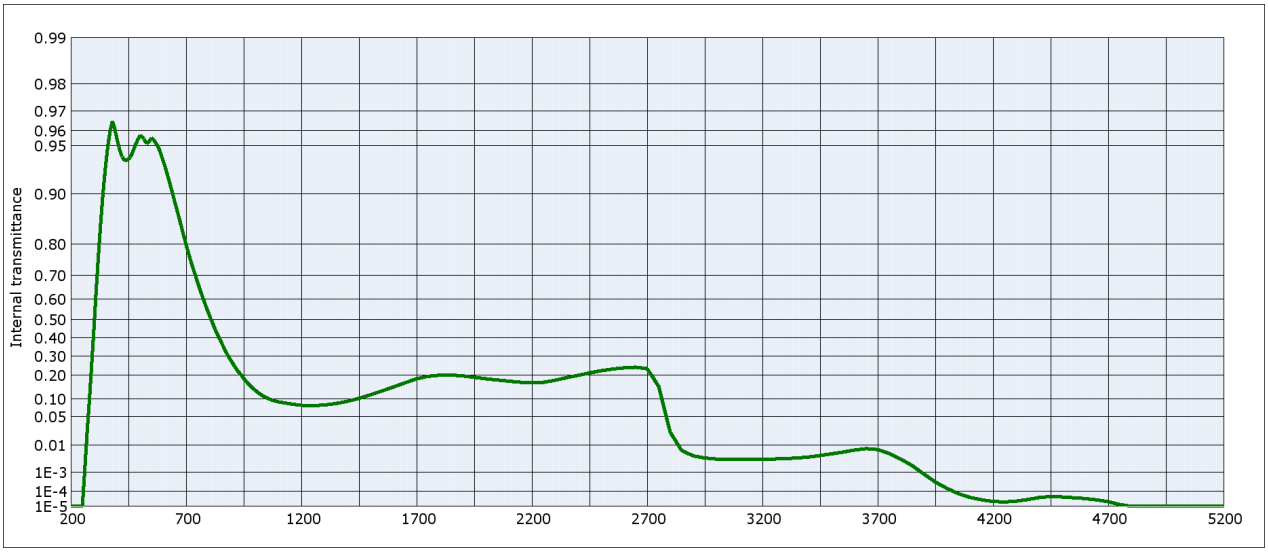

Internal transmittance τ_i at reference thickness d = 2 mm
The internal transmittance values, tabulated and graphically represented, are reference values only

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	$< 10^{-5}$	500	0.957	800	0.524	1100	$9.1 \cdot 10^{-2}$	2200	0.165	3700	$7.4 \cdot 10^{-3}$
210	$< 10^{-5}$	510	0.956	810	0.494	1110	$9.0 \cdot 10^{-2}$	2250	0.167	3750	$5.5 \cdot 10^{-3}$
220	$< 10^{-5}$	520	0.954	820	0.464	1120	$8.8 \cdot 10^{-2}$	2300	0.176	3800	$3.5 \cdot 10^{-3}$
230	$< 10^{-5}$	530	0.952	830	0.434	1130	$8.7 \cdot 10^{-2}$	2350	0.189	3850	$1.9 \cdot 10^{-3}$
240	$< 10^{-5}$	540	0.953	840	0.408	1140	$8.6 \cdot 10^{-2}$	2400	0.200	3900	$8.4 \cdot 10^{-4}$
250	$< 10^{-5}$	550	0.955	850	0.382	1150	$8.5 \cdot 10^{-2}$	2450	0.211	3950	$3.4 \cdot 10^{-4}$
260	$1.0 \cdot 10^{-3}$	560	0.954	860	0.356	1160	$8.4 \cdot 10^{-2}$	2500	0.223	4000	$1.5 \cdot 10^{-4}$
270	$2.0 \cdot 10^{-2}$	570	0.952	870	0.330	1170	$8.3 \cdot 10^{-2}$	2550	0.231	4050	$7.3 \cdot 10^{-5}$
280	$8.8 \cdot 10^{-2}$	580	0.949	880	0.305	1180	$8.2 \cdot 10^{-2}$	2600	0.237	4100	$4.2 \cdot 10^{-5}$
290	0.245	590	0.944	890	0.284	1190	$8.1 \cdot 10^{-2}$	2650	0.240	4150	$2.9 \cdot 10^{-5}$
300	0.444	600	0.938	900	0.265	1200	$8.0 \cdot 10^{-2}$	2700	0.233	4200	$2.2 \cdot 10^{-5}$
310	0.637	610	0.931	910	0.246	1250	$7.9 \cdot 10^{-2}$	2750	0.149	4250	$2.1 \cdot 10^{-5}$
320	0.769	620	0.923	920	0.228	1300	$8.1 \cdot 10^{-2}$	2800	$2.3 \cdot 10^{-2}$	4300	$2.3 \cdot 10^{-5}$
330	0.852	630	0.913	930	0.213	1350	$8.5 \cdot 10^{-2}$	2850	$6.8 \cdot 10^{-3}$	4350	$3.0 \cdot 10^{-5}$
340	0.902	640	0.902	940	0.200	1400	$9.3 \cdot 10^{-2}$	2900	$4.5 \cdot 10^{-3}$	4400	$4.2 \cdot 10^{-5}$
350	0.931	650	0.889	950	0.185	1450	0.103	2950	$3.8 \cdot 10^{-3}$	4450	$4.8 \cdot 10^{-5}$
360	0.949	660	0.875	960	0.173	1500	0.116	3000	$3.5 \cdot 10^{-3}$	4500	$4.5 \cdot 10^{-5}$
370	0.959	670	0.859	970	0.161	1550	0.131	3050	$3.4 \cdot 10^{-3}$	4550	$4.0 \cdot 10^{-5}$
380	0.965	680	0.841	980	0.151	1600	0.147	3100	$3.3 \cdot 10^{-3}$	4600	$3.6 \cdot 10^{-5}$
390	0.961	690	0.820	990	0.142	1650	0.165	3150	$3.4 \cdot 10^{-3}$	4650	$2.9 \cdot 10^{-5}$
400	0.955	700	0.798	1000	0.133	1700	0.184	3200	$3.4 \cdot 10^{-3}$	4700	$2.1 \cdot 10^{-5}$
410	0.948	710	0.774	1010	0.126	1750	0.195	3250	$3.5 \cdot 10^{-3}$	4750	$1.3 \cdot 10^{-5}$
420	0.942	720	0.750	1020	0.119	1800	0.201	3300	$3.6 \cdot 10^{-3}$	4800	$< 10^{-5}$
430	0.939	730	0.725	1030	0.113	1850	0.201	3350	$3.8 \cdot 10^{-3}$	4850	$< 10^{-5}$
440	0.938	740	0.699	1040	0.109	1900	0.197	3400	$4.1 \cdot 10^{-3}$	4900	$< 10^{-5}$
450	0.939	750	0.671	1050	0.105	1950	0.190	3450	$4.6 \cdot 10^{-3}$	4950	$< 10^{-5}$
460	0.942	760	0.643	1060	0.101	2000	0.183	3500	$5.3 \cdot 10^{-3}$	5000	$< 10^{-5}$
470	0.946	770	0.613	1070	$9.7 \cdot 10^{-2}$	2050	0.178	3550	$6.1 \cdot 10^{-3}$	5050	$< 10^{-5}$
480	0.951	780	0.584	1080	$9.5 \cdot 10^{-2}$	2100	0.172	3600	$7.1 \cdot 10^{-3}$	5100	$< 10^{-5}$
490	0.954	790	0.553	1090	$9.3 \cdot 10^{-2}$	2150	0.168	3650	$7.9 \cdot 10^{-3}$	5150	$< 10^{-5}$

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