Data Sheet

SCHOTT

RG695

Reflection factor	
P_d	0.914

Reference thickness	
d [mm]	3

Spectral values guaranteed		
λ_c (τ_i = 0.5) [nm]	=	695 ± 6
λ_s ($\tau_{i,U}$ = 10^{-5}) [nm]	=	610
λ_p ($\tau_{i,L}$ = 0.96) [nm]	=	780

Refractive Index n
n_d (587.6 nm) = 1.540
n_s (852.1 nm) = 1.530
n_t (1014.0 nm) = 1.520

Density	
ρ [g/cm^3]	2.76

Bubble content	
Bubble class	3

Chemical Resistance	
FR class	0
SR class	1.0
AR class	1.0

Transformation temperature	
Tg [°C]	532

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

Temperature coefficient	
T_K [nm/°C]	0.18

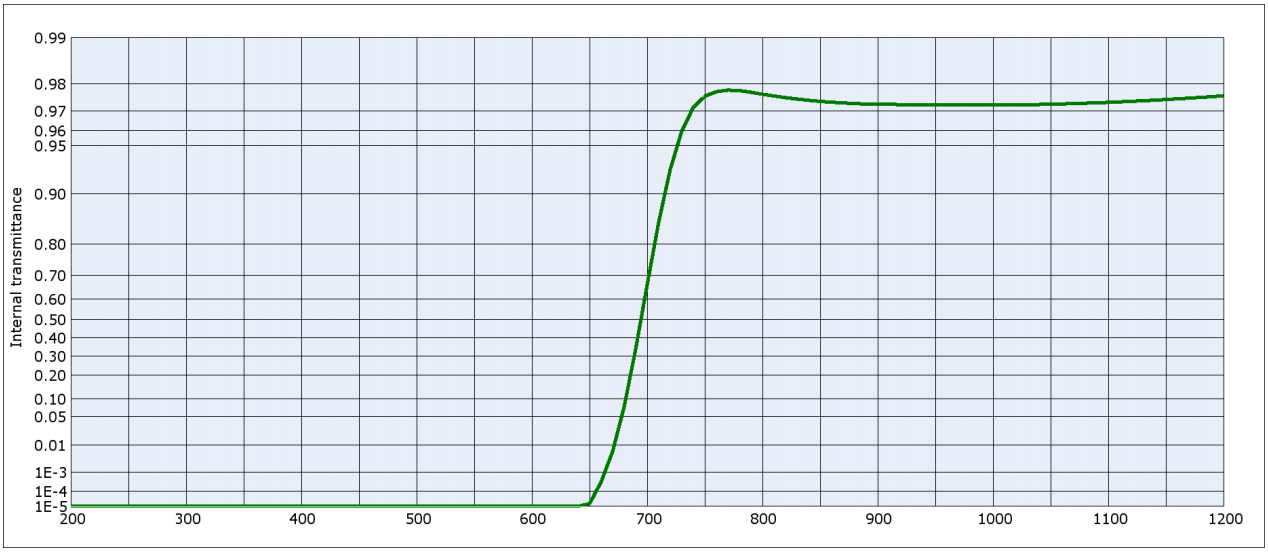
Notes
Colloidally colored glass
Longpass filter
All data wihout tolerances are to be understood to be reference values. Guaranteed values are only those values listed in the section "Spectral values guaranteed".

Colorimetric evaluation

Illuminant	A (Planck T = 2856 K)		
d [mm]	1	2	3
x			
y			
Y			
λ_d [nm]			
P_e			

Illuminant	Planck T = 3200 K		
d [mm]	1	2	3
x			
y			
Y			
λ_d [nm]			
P_e			

Illuminant	D65 (T_C = 6504 K)		
d [mm]	1	2	3
x			
y			
Y			
λ_d [nm]			
P_e			



STATUS: 01.12.2014

Further explanations see 'Optical Filters 2013' catalogue

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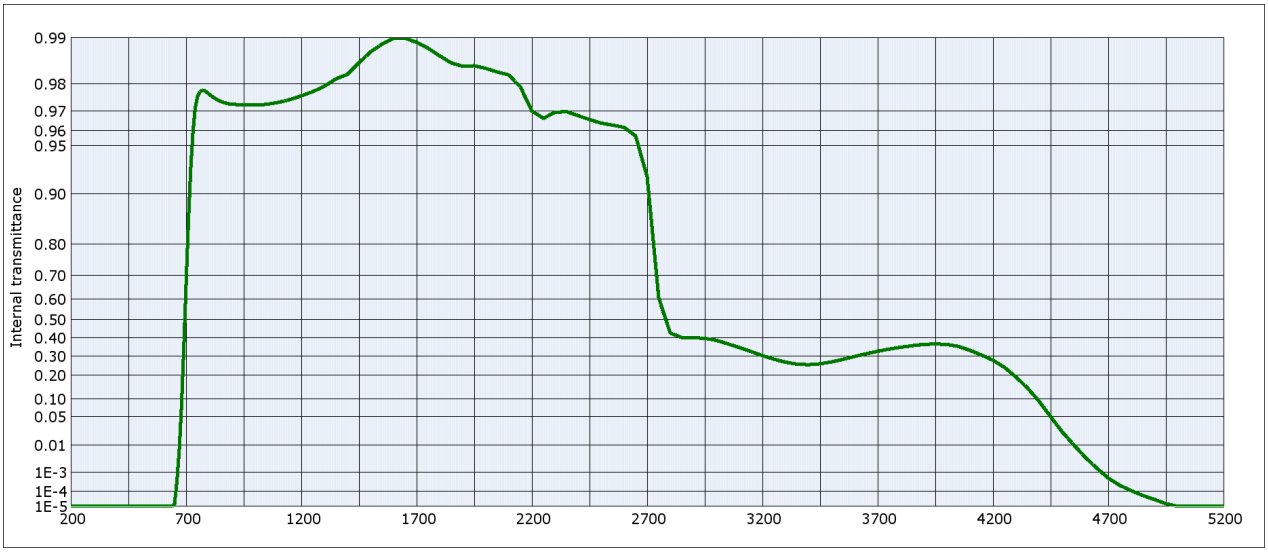

Internal transmittance τ_i at reference thickness d = 3 mm
The internal transmittance values, tabulated and graphically represented, are reference values only

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	$< 10^{-5}$	800	0.977	1100	0.974	2200	0.970	3700	0.326
210	$< 10^{-5}$	510	$< 10^{-5}$	810	0.976	1110	0.974	2250	0.967	3750	0.338
220	$< 10^{-5}$	520	$< 10^{-5}$	820	0.975	1120	0.974	2300	0.969	3800	0.348
230	$< 10^{-5}$	530	$< 10^{-5}$	830	0.975	1130	0.974	2350	0.970	3850	0.356
240	$< 10^{-5}$	540	$< 10^{-5}$	840	0.974	1140	0.974	2400	0.968	3900	0.363
250	$< 10^{-5}$	550	$< 10^{-5}$	850	0.974	1150	0.975	2450	0.966	3950	0.366
260	$< 10^{-5}$	560	$< 10^{-5}$	860	0.974	1160	0.975	2500	0.964	4000	0.363
270	$< 10^{-5}$	570	$< 10^{-5}$	870	0.973	1170	0.975	2550	0.963	4050	0.352
280	$< 10^{-5}$	580	$< 10^{-5}$	880	0.973	1180	0.976	2600	0.962	4100	0.331
290	$< 10^{-5}$	590	$< 10^{-5}$	890	0.973	1190	0.976	2650	0.957	4150	0.305
300	$< 10^{-5}$	600	$< 10^{-5}$	900	0.973	1200	0.976	2700	0.921	4200	0.277
310	$< 10^{-5}$	610	$< 10^{-5}$	910	0.973	1250	0.978	2750	0.606	4250	0.239
320	$< 10^{-5}$	620	$< 10^{-5}$	920	0.973	1300	0.979	2800	0.426	4300	0.191
330	$< 10^{-5}$	630	$< 10^{-5}$	930	0.973	1350	0.981	2850	0.401	4350	0.142
340	$< 10^{-5}$	640	$< 10^{-5}$	940	0.973	1400	0.983	2900	0.400	4400	$9.2 \cdot 10^{-2}$
350	$< 10^{-5}$	650	$1.5 \cdot 10^{-5}$	950	0.973	1450	0.985	2950	0.397	4450	$5.0 \cdot 10^{-2}$
360	$< 10^{-5}$	660	$3.4 \cdot 10^{-4}$	960	0.973	1500	0.988	3000	0.386	4500	$2.3 \cdot 10^{-2}$
370	$< 10^{-5}$	670	$6.3 \cdot 10^{-3}$	970	0.973	1550	0.989	3050	0.367	4550	$1.0 \cdot 10^{-2}$
380	$< 10^{-5}$	680	$7.5 \cdot 10^{-2}$	980	0.973	1600	0.990	3100	0.346	4600	$4.0 \cdot 10^{-3}$
390	$< 10^{-5}$	690	0.337	990	0.973	1650	0.990	3150	0.324	4650	$1.5 \cdot 10^{-3}$
400	$< 10^{-5}$	700	0.661	1000	0.973	1700	0.989	3200	0.302	4700	$5.3 \cdot 10^{-4}$
410	$< 10^{-5}$	710	0.851	1010	0.973	1750	0.988	3250	0.282	4750	$2.2 \cdot 10^{-4}$
420	$< 10^{-5}$	720	0.929	1020	0.973	1800	0.987	3300	0.267	4800	$1.1 \cdot 10^{-4}$
430	$< 10^{-5}$	730	0.960	1030	0.973	1850	0.985	3350	0.256	4850	$5.6 \cdot 10^{-5}$
440	$< 10^{-5}$	740	0.972	1040	0.973	1900	0.985	3400	0.253	4900	$3.1 \cdot 10^{-5}$
450	$< 10^{-5}$	750	0.976	1050	0.973	1950	0.985	3450	0.258	4950	$1.6 \cdot 10^{-5}$
460	$< 10^{-5}$	760	0.978	1060	0.973	2000	0.984	3500	0.268	5000	$< 10^{-5}$
470	$< 10^{-5}$	770	0.978	1070	0.973	2050	0.983	3550	0.282	5050	$< 10^{-5}$
480	$< 10^{-5}$	780	0.978	1080	0.973	2100	0.982	3600	0.297	5100	$< 10^{-5}$
490	$< 10^{-5}$	790	0.977	1090	0.973	2150	0.979	3650	0.312	5150	$< 10^{-5}$

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