Data Sheet

SCHOTT

OG550

Reflection factor	
P_d	0.921

Reference thickness	
d [mm]	3

Spectral values guaranteed		
λ_c (τ_i = 0.5) [nm]	=	550 ± 6
λ_s ($\tau_{i,U}$ = 10^{-5}) [nm]	=	480
λ_p ($\tau_{i,L}$ = 0.93) [nm]	=	620

Refractive Index n
n_e (546.1 nm) = 1.510
n_d (587.6 nm) = 1.510
n_s (852.1 nm) = 1.510
n_t (1014.0 nm) = 1.500

Density	
ρ [g/cm^3]	2.56

Bubble content	
Bubble class	3

Chemical Resistance	
FR class	0
SR class	1.0
AR class	1.0

Transformation temperature	
Tg [°C]	507

Thermal expansion	
$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.9
$\alpha_{20/300°C}$ [10^{-6}/K]	9.0
$\alpha_{20/200°C}$ [10^{-6}/K]	

Temperature coefficient	
T_K [nm/°C]	0.12

Notes
Colloidally colored glass
Longpass filter

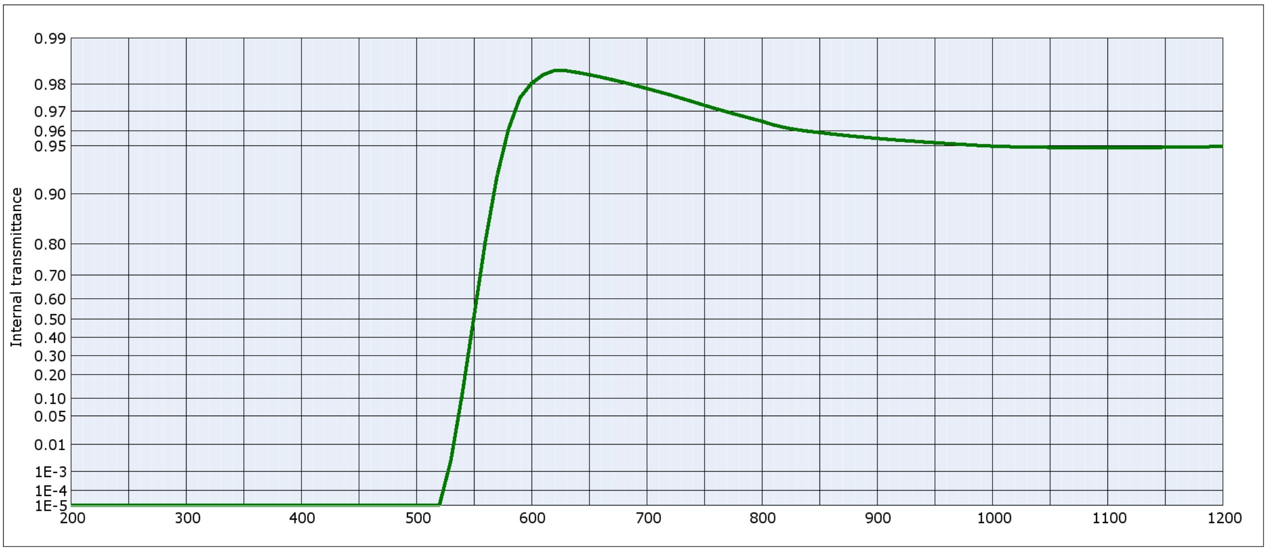
All data wihout tolerances are to be understood to be reference values. Guaranteed values are only those values listed in the section "Spectral values guaranteed".

Colorimetric evaluation

Illuminant	A (Planck T = 2856 K)		
d [mm]	1	2	3
x	0.565	0.580	0.587
y	0.429	0.419	0.412
Y	70	65	62
λ_d [nm]	589	591	592
P_e	0.96	1.00	1.00

Illuminant	Planck T = 3200 K		
d [mm]	1	2	3
x	0.558	0.574	0.581
y	0.435	0.425	0.418
Y	68	63	59
λ_d [nm]	588	590	591
P_e	0.96	1.00	1.00

Illuminant	D65 (T_C = 6504 K)		
d [mm]	1	2	3
x	0.521	0.547	0.557
y	0.459	0.451	0.441
Y	58	52	49
λ_d [nm]	583	586	587
P_e	0.95	1.00	1.00



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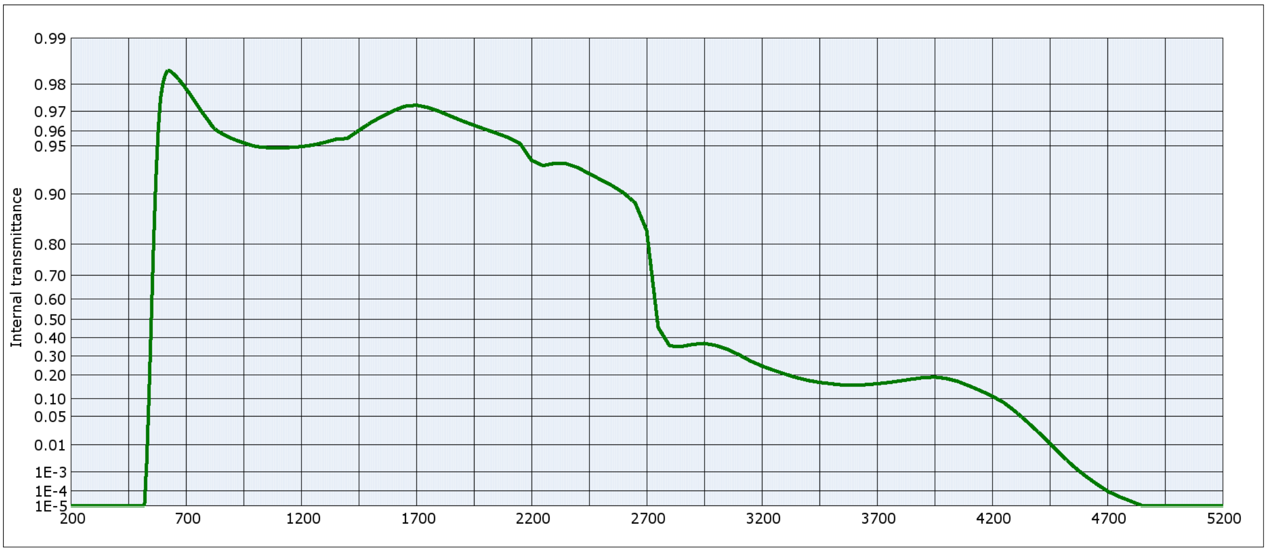
Further explanations see 'Optical Filters 2013' catalogue

25mm diameter SCHOTT OG550 Orange LONGPASS FILTER 3mm thick
https://www.galvoptics.co.uk/optical-components/optical-filters/schott-longpass-filters/
Please CLICK above link to buy ONLINE

OG550

SCHOTT



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	0.965	1100	0.949	2200	0.938	3700	0.160
210	$< 10^{-5}$	510	$< 10^{-5}$	810	0.963	1110	0.949	2250	0.934	3750	0.165
220	$< 10^{-5}$	520	$< 10^{-5}$	820	0.962	1120	0.949	2300	0.936	3800	0.173
230	$< 10^{-5}$	530	$2.8 \cdot 10^{-3}$	830	0.961	1130	0.949	2350	0.935	3850	0.181
240	$< 10^{-5}$	540	0.119	840	0.960	1140	0.949	2400	0.932	3900	0.188
250	$< 10^{-5}$	550	0.508	850	0.959	1150	0.949	2450	0.925	3950	0.190
260	$< 10^{-5}$	560	0.806	860	0.958	1160	0.949	2500	0.919	4000	0.184
270	$< 10^{-5}$	570	0.922	870	0.957	1170	0.949	2550	0.911	4050	0.171
280	$< 10^{-5}$	580	0.961	880	0.957	1180	0.949	2600	0.901	4100	0.151
290	$< 10^{-5}$	590	0.975	890	0.956	1190	0.949	2650	0.886	4150	0.131
300	$< 10^{-5}$	600	0.980	900	0.955	1200	0.950	2700	0.833	4200	0.110
310	$< 10^{-5}$	610	0.983	910	0.955	1250	0.951	2750	0.456	4250	$8.8 \cdot 10^{-2}$
320	$< 10^{-5}$	620	0.984	920	0.954	1300	0.953	2800	0.354	4300	$6.2 \cdot 10^{-2}$
330	$< 10^{-5}$	630	0.984	930	0.953	1350	0.955	2850	0.351	4350	$3.9 \cdot 10^{-2}$
340	$< 10^{-5}$	640	0.983	940	0.953	1400	0.955	2900	0.363	4400	$2.3 \cdot 10^{-2}$
350	$< 10^{-5}$	650	0.983	950	0.952	1450	0.960	2950	0.368	4450	$1.1 \cdot 10^{-2}$
360	$< 10^{-5}$	660	0.982	960	0.952	1500	0.964	3000	0.357	4500	$4.7 \cdot 10^{-3}$
370	$< 10^{-5}$	670	0.981	970	0.951	1550	0.968	3050	0.336	4550	$1.8 \cdot 10^{-3}$
380	$< 10^{-5}$	680	0.980	980	0.951	1600	0.970	3100	0.307	4600	$7.0 \cdot 10^{-4}$
390	$< 10^{-5}$	690	0.980	990	0.950	1650	0.972	3150	0.273	4650	$2.7 \cdot 10^{-4}$
400	$< 10^{-5}$	700	0.979	1000	0.950	1700	0.973	3200	0.246	4700	$1.0 \cdot 10^{-4}$
410	$< 10^{-5}$	710	0.978	1010	0.950	1750	0.972	3250	0.224	4750	$4.5 \cdot 10^{-5}$
420	$< 10^{-5}$	720	0.977	1020	0.949	1800	0.970	3300	0.206	4800	$2.3 \cdot 10^{-5}$
430	$< 10^{-5}$	730	0.975	1030	0.949	1850	0.968	3350	0.188	4850	$1.1 \cdot 10^{-5}$
440	$< 10^{-5}$	740	0.974	1040	0.949	1900	0.965	3400	0.175	4900	$< 10^{-5}$
450	$< 10^{-5}$	750	0.973	1050	0.949	1950	0.963	3450	0.166	4950	$< 10^{-5}$
460	$< 10^{-5}$	760	0.971	1060	0.949	2000	0.961	3500	0.160	5000	$< 10^{-5}$
470	$< 10^{-5}$	770	0.970	1070	0.949	2050	0.959	3550	0.155	5050	$< 10^{-5}$
480	$< 10^{-5}$	780	0.968	1080	0.949	2100	0.956	3600	0.153	5100	$< 10^{-5}$
490	$< 10^{-5}$	790	0.967	1090	0.949	2150	0.952	3650	0.156	5150	$< 10^{-5}$

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