Title: Colour Glass Filter (Bandpass)
Material / Specification: Schott UG5 - 320nm
Range / Description: 320FCS

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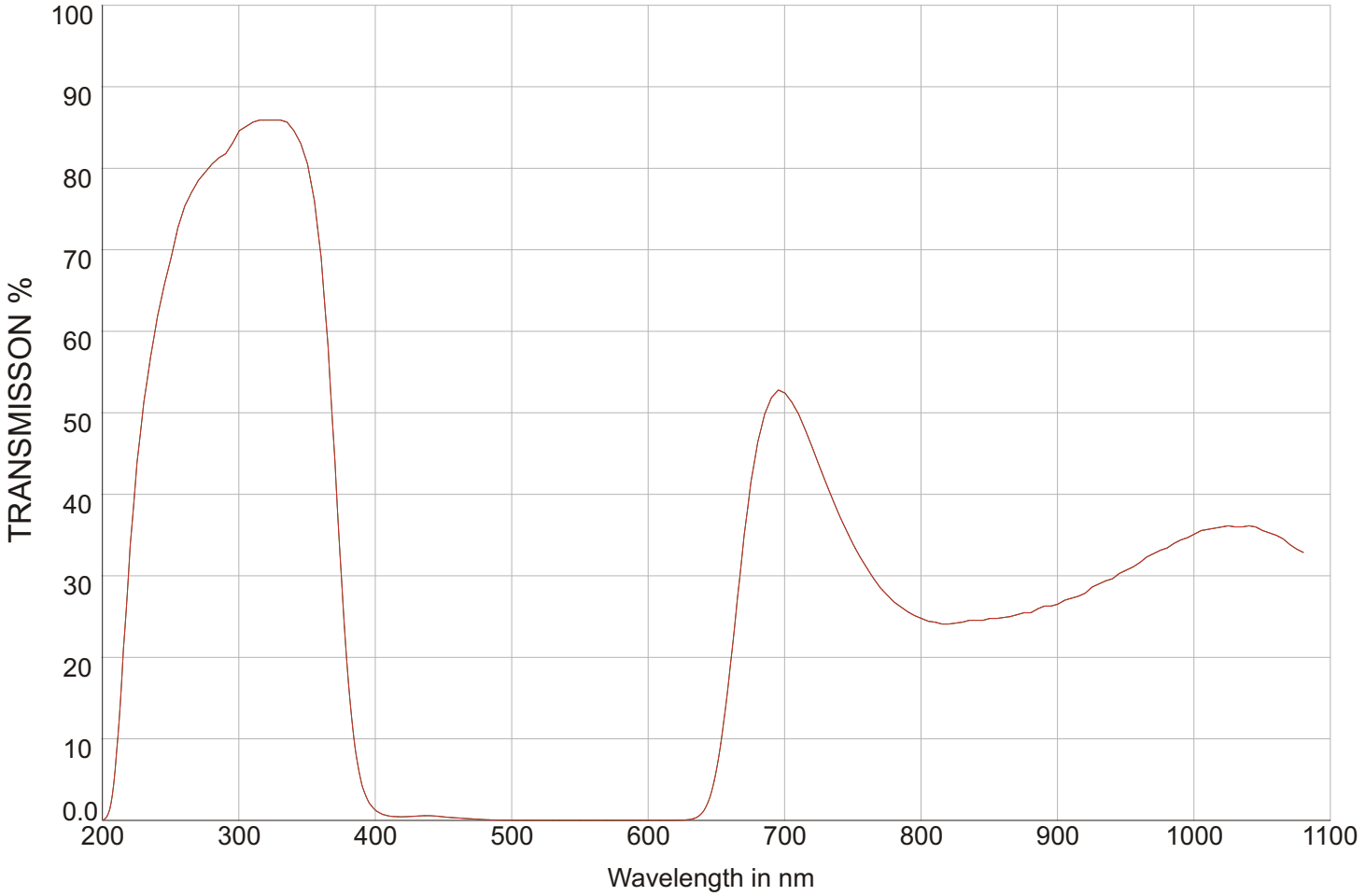

INTERNAL TRANSMITTANCE FOR 3MM THICK

Title: Colour Glass Filter (Bandpass)
Material / Specification: Schott UG5 - 320nm
Range / Description: 320FCS

SCHOTT
glass made of ideas

Reflection factor
P_d 0.91
Bubble content
Bubble class 2
Chemical resistance
FR class 0
SR class 3.0
AR class 2.0

Density
ρ [g/cm^3] 2.85
Transformation temperature
Tg [°C] 462
Thermal expansion
$\alpha_{-30/+70°C}$ [10^{-6}/K] 8.1
$\alpha_{20/300°C}$ [10^{-6}/K] 9.4
Temperature coefficient
T_k [nm/°C]

Per DIN 58191 **BP 318/173**
Per DIN 58191

Ionically colored glass

Limit values of τ_i
for thickness d = 1 mm

Wave-length [nm]	Limits	Value from catalog curve
254	≥0.80	0.85
308	≥0.94	0.96
405	≤0.50	0.46
546	≤0.05	0.03
633	≤0.05	0.03
725	≤0.85	0.83

Refractive index n

λ [nm]	Element	n
253.7	Hg	1.60
365	Hg	1.56
587.6	He	1.54
1014	Hg	1.53

Tristimulus values

	d [mm]	x	y	Y	λ_d [nm]	P_e
A	1					
2856	2					
K	3					
	5					
	1					
3200	2					
K	3					
	5					
	1					
D_{65}	2					
	3					
	5					

Application notes
Band pass filter

[!!]
Long-term changes in the polished surface are possible

V
Transmission changes are possible under the action of intense ultraviolet radiation

Transmittance τ and internal transmittance τ_i = 1 mm

λ [nm]	τ	τ_i	λ [nm]	τ	τ_i
200	$<1\cdot10^{-5}$	$<1\cdot10^{-5}$	700	0.73	0.80
210	$2\cdot10^{-5}$	$2\cdot10^{-5}$	710	0.75	0.83
220	0.06	0.07	720	0.76	0.83
230	0.41	0.45	730	0.74	0.82
240	0.65	0.72	740	0.72	0.80
250	0.75	0.83	750	0.70	0.77
260	0.80	0.88	760	0.68	0.74
270	0.83	0.91	770	0.65	0.72
280	0.85	0.94	780	0.64	0.70
290	0.87	0.95	790	0.62	0.68
300	0.87	0.96	800	0.61	0.67
310	0.88	0.97	850	0.59	0.64
320	0.89	0.98	900	0.60	0.65
330	0.89	0.98	950	0.62	0.68
340	0.89	0.98	1000	0.65	0.72
350	0.89	0.98	1060	0.67	0.74
360	0.89	0.98	1100	0.65	0.71
370	0.87	0.96	1200	0.51	0.56
380	0.83	0.91	1300	0.40	0.44
390	0.72	0.79	1400	0.40	0.44
400	0.52	0.57	1500	0.39	0.43
410	0.33	0.36	1600	0.41	0.45
420	0.21	0.24	1700	0.45	0.49
430	0.16	0.18	1800	0.46	0.50
440	0.15	0.17	1900	0.47	0.52
450	0.16	0.18	2000	0.52	0.57
460	0.17	0.18	2100	0.55	0.60
470	0.15	0.17	2200	0.56	0.61
480	0.13	0.15	2300	0.55	0.60
490	0.11	0.13	2400	0.55	0.60
500	0.09	0.10	2500	0.54	0.59
510	0.06	0.07	2600	0.47	0.52
520	0.04	0.05	2700	0.40	0.44
530	0.03	0.03	2800	0.11	0.12
540	0.03	0.03	2900	0.009	0.01
550	0.03	0.03	3000	0.004	0.004
560	0.02	0.02	3200	$4\cdot10^{-4}$	$4\cdot10^{-4}$
570	0.01	0.01	3400	$2\cdot10^{-4}$	$2\cdot10^{-4}$
580	0.007	0.008	3600	$3\cdot10^{-4}$	$3\cdot10^{-4}$
590	0.008	0.009	3800	$4\cdot10^{-4}$	$4\cdot10^{-4}$
600	0.01	0.01	4000	$2\cdot10^{-4}$	$2\cdot10^{-4}$
610	0.01	0.02	4200	$3\cdot10^{-5}$	$3\cdot10^{-5}$
620	0.02	0.02	4400	$9\cdot10^{-5}$	$1\cdot10^{-4}$
630	0.02	0.02	4600	$3\cdot10^{-4}$	$3\cdot10^{-4}$
640	0.04	0.04	4800	$5\cdot10^{-4}$	$5\cdot10^{-4}$
650	0.09	0.10	5000	$5\cdot10^{-4}$	$5\cdot10^{-4}$
660	0.21	0.23	5200	$9\cdot10^{-5}$	$1\cdot10^{-4}$
670	0.38	0.41			
680	0.54	0.60			
690	0.66	0.73			

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