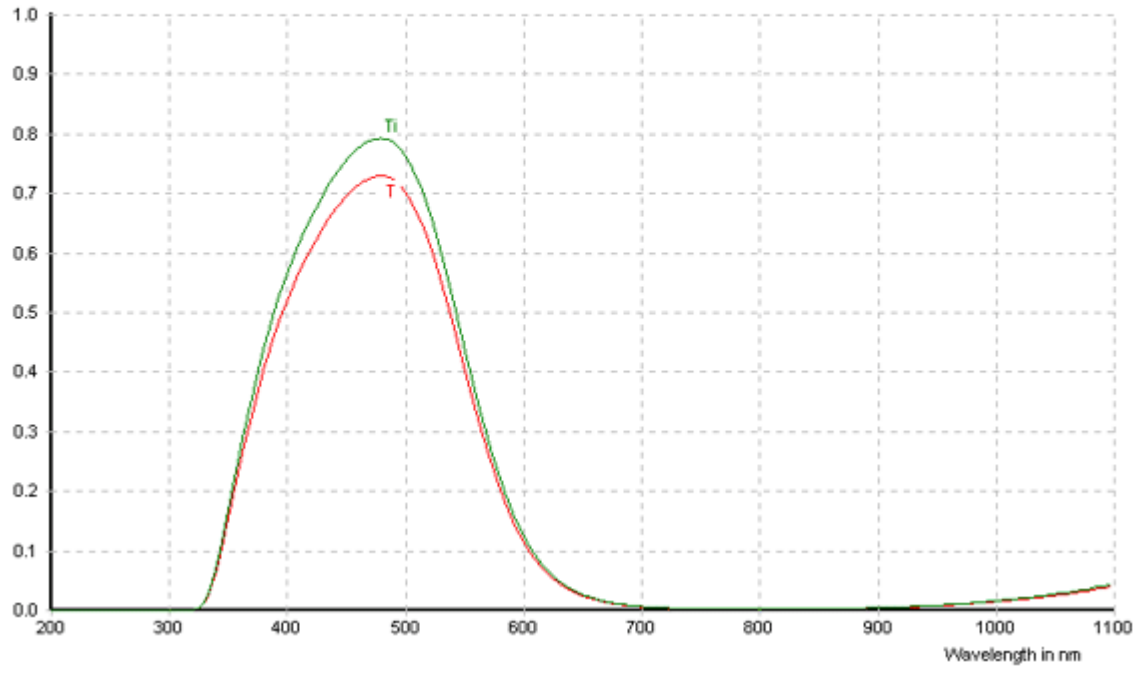


DATA SHEET

SCHOTT BG7

Thickness in mm : 1.0
Wavelength in nm :
Transmittance :
Internal Transmittance :

BG7



Reflection factor	
P_d	0.92
Bubble content	
Bubble class	1
Chemical resistance	
FR class	0
SR class	1.0
AR class	1.0

Density	
ρ [g/cm ³]	2.61
Transformation temperature	
T _g [°C]	468
Thermal expansion	
$\alpha_{30/+70^\circ\text{C}}$ [10 ⁻⁶ /K]	8.5
$\alpha_{20/300^\circ\text{C}}$ [10 ⁻⁶ /K]	9.9
Temperature coefficient	
T _k [nm/°C]	

Per DIN 58191 BP 466/182
Per DIN 58191

Ionically colored glass

Limit values of τ_i for thickness $d^1 = 1$ mm		
Wave-length [nm]	Limits	Value from catalog curve
365	≥ 0.25	0.30
488	≥ 0.78	0.79
633	≤ 0.08	0.05

Refractive index n		
λ [nm]	Element	n
404.7	Hg	1.54
587.6	He	1.52

Tristimulus values						
	d [mm]	x	y	Y	λ_d [nm]	P_e
A	1	0.263	0.406	30	495	0.44
2856	2	0.180	0.361	15	492	0.65
K	3	0.145	0.318	8	490	0.75
	5	0.121	0.259	3	487	0.84
	1	0.246	0.382	32	493	0.45
3200	2	0.172	0.334	16	490	0.66
K	3	0.143	0.292	9	488	0.76
	5	0.122	0.239	4	485	0.84
	1	0.191	0.272	38	486	0.49
D ₆₅	2	0.152	0.229	21	484	0.67
	3	0.138	0.200	13	482	0.76
	5	0.127	0.168	6	480	0.83

Application notes
Band pass filter
- see section 6.7.3

Status June 1997

Transmittance τ and internal transmittance τ_i at $d = 1$ mm					
λ [nm]	τ	τ_i	λ [nm]	τ	τ_i
200	<1·10 ⁻⁶	<1·10 ⁻⁶	700	0.006	0.007
210	<1·10 ⁻⁶	<1·10 ⁻⁶	710	0.005	0.006
220	<1·10 ⁻⁶	<1·10 ⁻⁶	720	0.005	0.005
230	<1·10 ⁻⁶	<1·10 ⁻⁶	730	0.004	0.004
240	<1·10 ⁻⁶	<1·10 ⁻⁶	740	0.004	0.004
250	<1·10 ⁻⁶	<1·10 ⁻⁶	750	0.003	0.003
260	<1·10 ⁻⁶	<1·10 ⁻⁶	760	0.003	0.003
270	<1·10 ⁻⁶	<1·10 ⁻⁶	770	0.003	0.003
280	<1·10 ⁻⁶	<1·10 ⁻⁶	780	0.003	0.003
290	<1·10 ⁻⁶	<1·10 ⁻⁶	790	0.003	0.003
300	<1·10 ⁻⁶	<1·10 ⁻⁶	800	0.003	0.003
310	<1·10 ⁻⁶	<1·10 ⁻⁶	850	0.003	0.003
320	5·10 ⁻⁴	5·10 ⁻⁴	900	0.005	0.005
330	0.01	0.01	950	0.008	0.009
340	0.06	0.07	1000	0.01	0.02
350	0.15	0.16	1060	0.03	0.03
360	0.24	0.26	1100	0.04	0.04
370	0.32	0.35	1200	0.09	0.10
380	0.40	0.44	1300	0.16	0.17
390	0.46	0.50	1400	0.24	0.26
400	0.52	0.56	1500	0.33	0.36
410	0.56	0.61	1600	0.43	0.46
420	0.60	0.66	1700	0.51	0.55
430	0.64	0.70	1800	0.57	0.62
440	0.67	0.73	1900	0.63	0.68
450	0.69	0.75	2000	0.68	0.74
460	0.71	0.78	2100	0.71	0.77
470	0.72	0.79	2200	0.74	0.80
480	0.73	0.79	2300	0.75	0.82
490	0.72	0.79	2400	0.78	0.85
500	0.71	0.77	2500	0.80	0.87
510	0.67	0.73	2600	0.82	0.89
520	0.62	0.68	2700	0.81	0.88
530	0.56	0.61	2800	0.63	0.69
540	0.49	0.54	2900	0.63	0.68
550	0.41	0.45	3000	0.60	0.65
560	0.34	0.37	3200	0.51	0.55
570	0.27	0.30	3400	0.41	0.45
580	0.21	0.23	3600	0.40	0.43
590	0.16	0.17	3800	0.42	0.46
600	0.12	0.13	4000	0.46	0.50
610	0.09	0.10	4200	0.40	0.43
620	0.06	0.07	4400	0.27	0.29
630	0.05	0.05	4600	0.08	0.09
640	0.03	0.04	4800	0.03	0.03
650	0.02	0.03	5000	0.009	0.01
660	0.02	0.02	5200	5·10 ⁻⁴	5·10 ⁻⁴
670	0.01	0.02			
680	0.01	0.01			
690	0.008	0.009			

While every attempt has been made to verify the source of the information, no responsibility is accepted for accuracy of data.



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