

BG39

Reflection factor	
P_d	0.91

Reference thickness	
d [mm]	1

Spectral values guaranteed		
τ_i (350 nm)	\geq	0.60
τ_i (405 nm)	\geq	0.85
τ_i (514 nm)	\geq	0.93
τ_i (633 nm)	\leq	0.30
τ_i (694 nm)	\leq	0.03
τ_i (1060 nm)	\leq	0.001

Refractive index n		
λ [nm]	Element	n
404.7	Hg	1.55
587.6	He	1.54

Density	
ρ [g/cm ³]	2.74

Bubble content	
Bubble class	2

Chemical resistance	
FR class	0
SR class	5.1
AR class	3.0

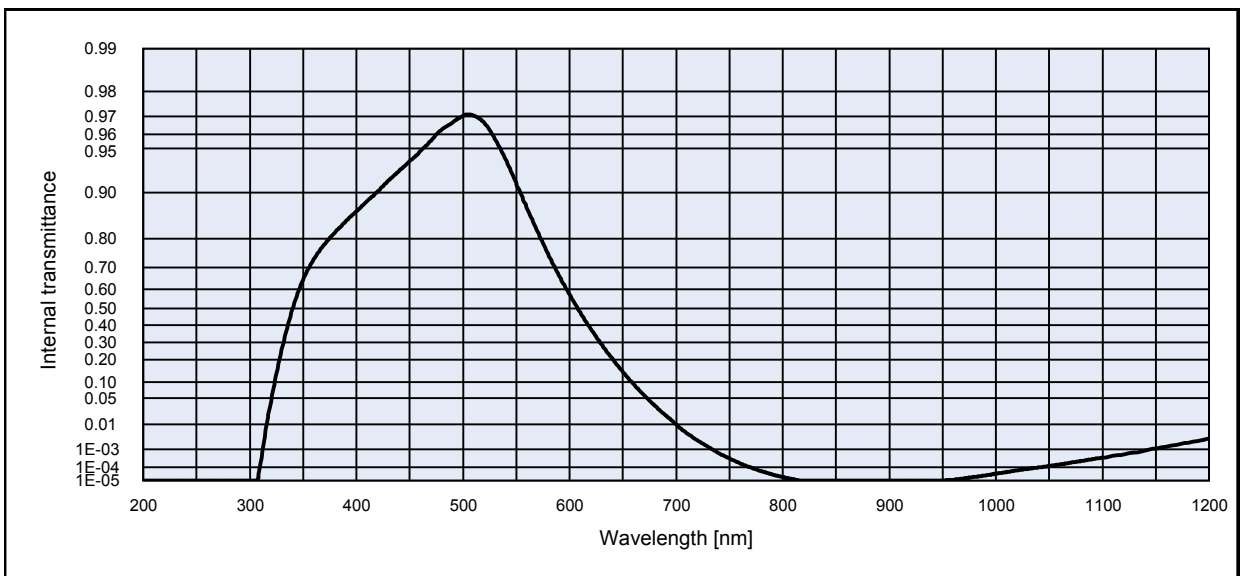
Transformation temperature	
T_g [°C]	322

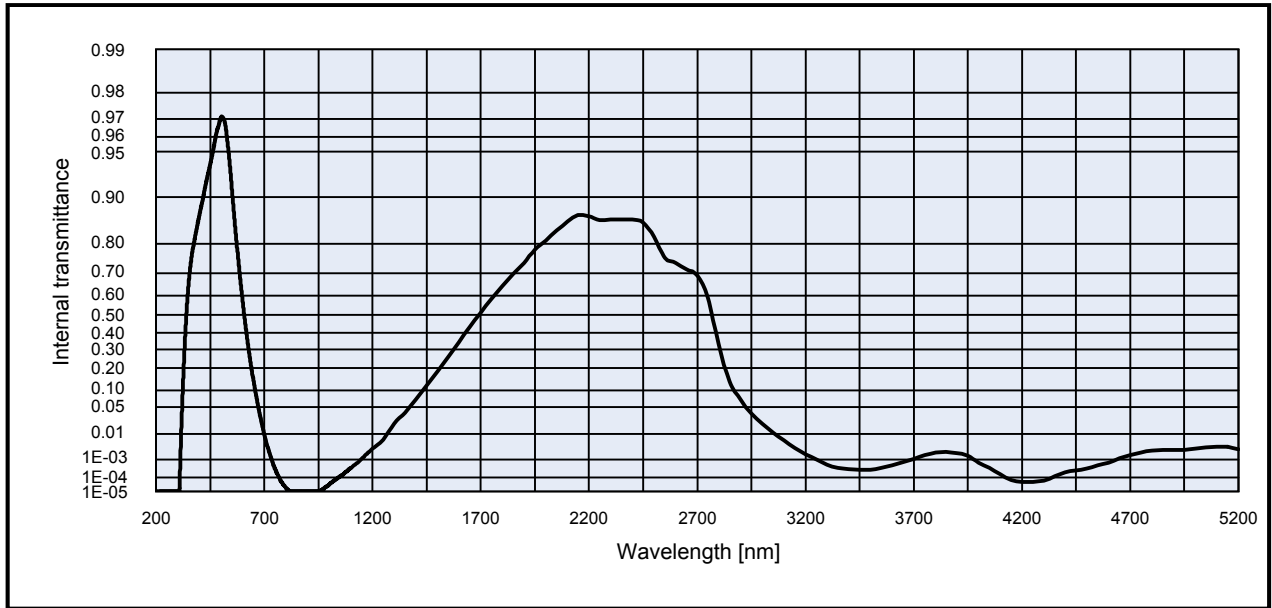
Thermal expansion	
$\alpha_{-30/+70^\circ\text{C}}$ [10 ⁻⁶ /K]	11.6
$\alpha_{20/300^\circ\text{C}}$ [10 ⁻⁶ /K]	
$\alpha_{20/200^\circ\text{C}}$ [10 ⁻⁶ /K]	13.1

Temperature coefficient	
T_k [nm/°C]	

Notes
Ionically colored glass
Band pass filter / short pass filter
!!!
Long-term changes in the polished surface are possible
All data without 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)			Illuminant	Planck T = 3200 K			Illuminant	D65 (T _c = 6504 K)		
	d [mm]	1	2		3	d [mm]	1		2	3	d [mm]
x	0.365	0.314	0.279	x	0.344	0.296	0.264	x	0.257	0.226	0.207
y	0.434	0.445	0.450	y	0.419	0.425	0.427	y	0.326	0.322	0.318
Y	66	53	45	Y	67	55	47	Y	73	62	55
λ_d [nm]	500	500	499	λ_d [nm]	498	498	497	λ_d [nm]	491	490	490
P_e	0.19	0.31	0.39	P_e	0.19	0.31	0.39	P_e	0.21	0.32	0.39





Internal transmittance τ_i at reference thickness d [mm] = 1
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	< 1.0E-05	500	9.7E-01	800	1.9E-05	1100	3.7E-04	2200	8.7E-01	3700	1.1E-03
210	< 1.0E-05	510	9.7E-01	810	1.3E-05	1110	4.6E-04	2250	8.6E-01	3750	1.6E-03
220	< 1.0E-05	520	9.7E-01	820	< 1.0E-05	1120	5.5E-04	2300	8.6E-01	3800	2.1E-03
230	< 1.0E-05	530	9.6E-01	830	< 1.0E-05	1130	7.0E-04	2350	8.6E-01	3850	2.2E-03
240	< 1.0E-05	540	9.4E-01	840	< 1.0E-05	1140	8.8E-04	2400	8.6E-01	3900	1.9E-03
250	< 1.0E-05	550	9.1E-01	850	< 1.0E-05	1150	1.1E-03	2450	8.5E-01	3950	1.5E-03
260	< 1.0E-05	560	8.7E-01	860	< 1.0E-05	1160	1.3E-03	2500	8.2E-01	4000	7.0E-04
270	< 1.0E-05	570	8.2E-01	870	< 1.0E-05	1170	1.7E-03	2550	7.6E-01	4050	3.8E-04
280	< 1.0E-05	580	7.5E-01	880	< 1.0E-05	1180	2.0E-03	2600	7.4E-01	4100	1.7E-04
290	< 1.0E-05	590	6.7E-01	890	< 1.0E-05	1190	2.4E-03	2650	7.1E-01	4150	7.0E-05
300	< 1.0E-05	600	5.8E-01	900	< 1.0E-05	1200	3.1E-03	2700	6.9E-01	4200	5.2E-05
310	1.5E-04	610	4.8E-01	910	< 1.0E-05	1250	6.6E-03	2750	5.9E-01	4250	5.0E-05
320	4.2E-02	620	3.8E-01	920	< 1.0E-05	1300	2.0E-02	2800	3.3E-01	4300	6.0E-05
330	2.6E-01	630	2.9E-01	930	< 1.0E-05	1350	3.8E-02	2850	1.4E-01	4350	1.2E-04
340	4.9E-01	640	2.1E-01	940	< 1.0E-05	1400	7.0E-02	2900	7.0E-02	4400	2.0E-04
350	6.5E-01	650	1.4E-01	950	1.0E-05	1450	1.2E-01	2950	3.6E-02	4450	2.8E-04
360	7.3E-01	660	9.2E-02	960	1.2E-05	1500	1.8E-01	3000	2.0E-02	4500	3.4E-04
370	7.8E-01	670	5.7E-02	970	1.5E-05	1550	2.6E-01	3050	1.1E-02	4550	5.0E-04
380	8.2E-01	680	3.4E-02	980	1.9E-05	1600	3.4E-01	3100	6.0E-03	4600	7.0E-04
390	8.5E-01	690	1.9E-02	990	2.6E-05	1650	4.3E-01	3150	3.1E-03	4650	1.1E-03
400	8.7E-01	700	1.0E-02	1000	3.4E-05	1700	5.1E-01	3200	1.7E-03	4700	1.6E-03
410	8.9E-01	710	5.0E-03	1010	4.5E-05	1750	5.9E-01	3250	9.6E-04	4750	2.0E-03
420	9.0E-01	720	2.6E-03	1020	5.9E-05	1800	6.5E-01	3300	5.6E-04	4800	2.5E-03
430	9.2E-01	730	1.3E-03	1030	7.5E-05	1850	7.0E-01	3350	3.9E-04	4850	2.6E-03
440	9.3E-01	740	6.5E-04	1040	9.2E-05	1900	7.4E-01	3400	3.1E-04	4900	2.6E-03
450	9.4E-01	750	3.3E-04	1050	1.2E-04	1950	7.8E-01	3450	2.9E-04	4950	2.6E-03
460	9.5E-01	760	1.7E-04	1060	1.5E-04	2000	8.1E-01	3500	3.0E-04	5000	3.0E-03
470	9.6E-01	770	9.3E-05	1070	1.8E-04	2050	8.4E-01	3550	3.6E-04	5050	3.3E-03
480	9.6E-01	780	5.1E-05	1080	2.3E-04	2100	8.6E-01	3600	5.1E-04	5100	3.6E-03
490	9.7E-01	790	3.0E-05	1090	3.0E-04	2150	8.7E-01	3650	7.4E-04	5150	3.5E-03