

## BG3

Reflection factor	
$P_d$	0.92

Reference thickness	
d [mm]	1

Spectral values guaranteed	
$\tau_i$ (365 nm)	$\geq 0.94$
$\tau_i$ (633 nm)	$\leq 5 \cdot 10^{-5}$

Refractive index n		
$\lambda$ [nm]	Element	n
302.1	Hg	1.55
435.8	Hg	1.52
587.6	He	1.51
1014	Hg	1.50

Density	
$\rho$ [g/cm <sup>3</sup> ]	2.56

Bubble content	
Bubble class	1

Chemical resistance	
FR class	0
SR class	1.0
AR class	1.0

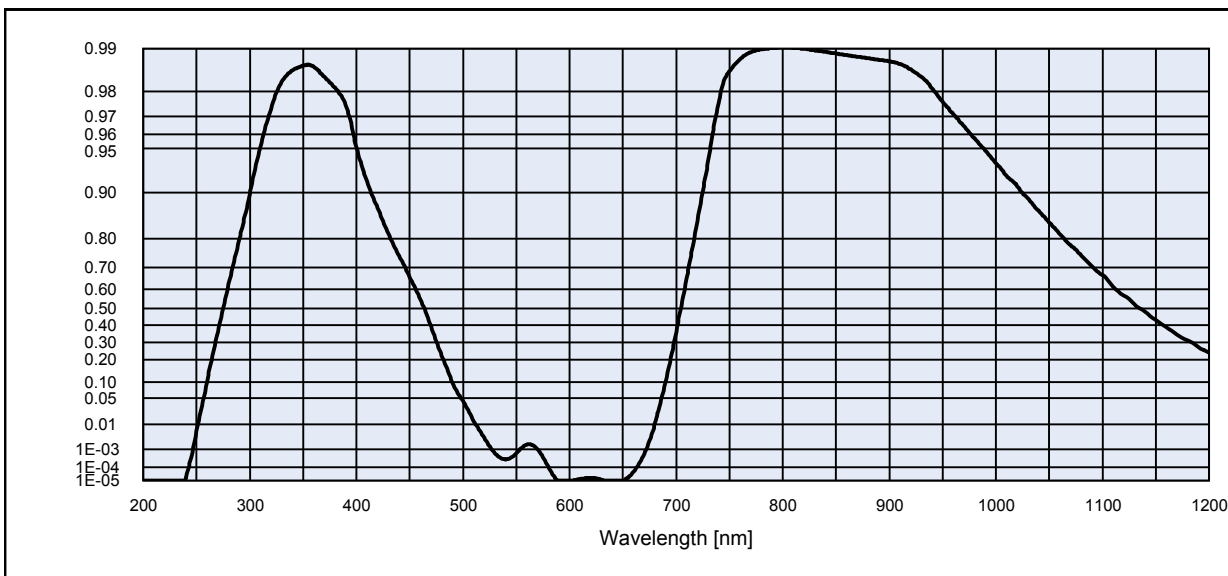
Transformation temperature	
$T_g$ [°C]	478

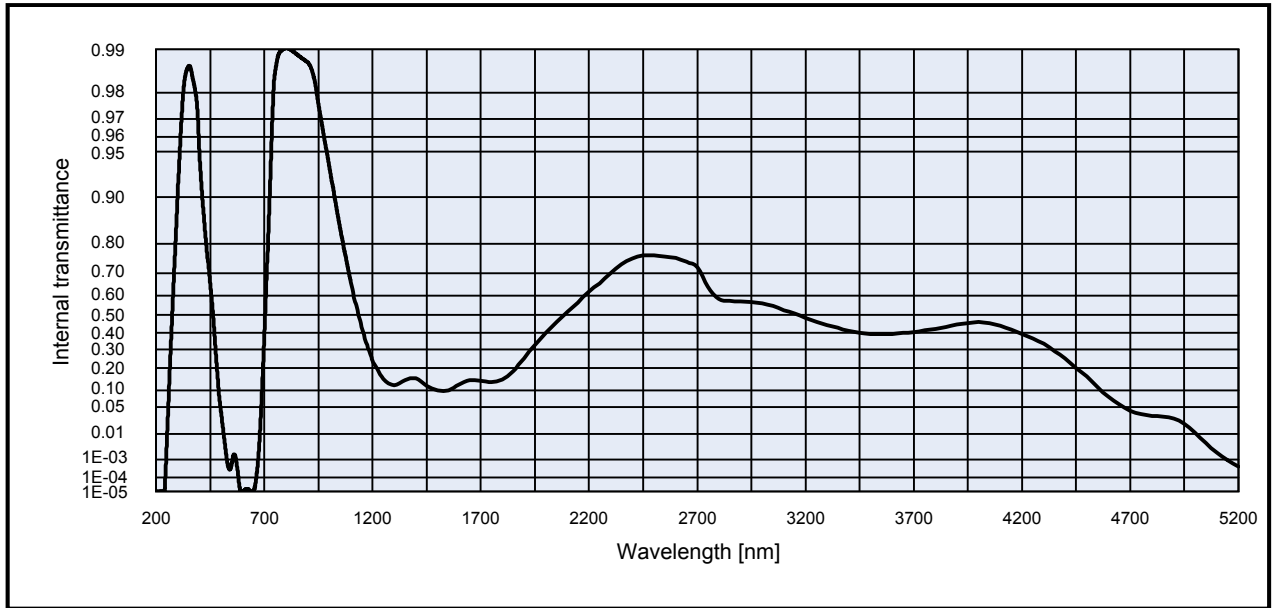
Thermal expansion	
$\alpha_{-30/+70^\circ\text{C}}$ [10 <sup>-6</sup> /K]	8.8
$\alpha_{20/300^\circ\text{C}}$ [10 <sup>-6</sup> /K]	10.2
$\alpha_{20/200^\circ\text{C}}$ [10 <sup>-6</sup> /K]	

Temperature coefficient	
$T_k$ [nm/°C]	

Notes
Ionically colored glass
Band pass filter
V
Transmission changes are possible under the action of intense ultraviolet radiation
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 <sub>c</sub> = 6504 K )			
d [mm]	1	2	3	d [mm]	1	2	3	d [mm]	1	2	3
x	0.160	0.166	0.170	x	0.157	0.163	0.167	x	0.154	0.160	0.163
y	0.042	0.024	0.020	y	0.038	0.022	0.018	y	0.029	0.018	0.014
Y	1	0	0	Y	1	0	0	Y	2	1	0
$\lambda_d$ [nm]	458	447	440	$\lambda_d$ [nm]	457	447	442	$\lambda_d$ [nm]	455	448	444
$P_e$	0.96	0.98	0.98	$P_e$	0.97	0.98	0.99	$P_e$	0.98	0.99	1.00





**Internal transmittance  $\tau_i$  at reference thickness  $d$  [mm] = 1**  
**The internal transmittance values, tabulated and graphically represented, are reference values only**

$\lambda$ [nm]	$\tau_i$	$\lambda$ [nm]	$\tau_i$	$\lambda$ [nm]	$\tau_i$	$\lambda$ [nm]	$\tau_i$	$\lambda$ [nm]	$\tau_i$	$\lambda$ [nm]	$\tau_i$
200	< 1.0E-05	500	4.3E-02	800	9.9E-01	1100	6.7E-01	2200	6.2E-01	3700	4.0E-01
210	< 1.0E-05	510	1.3E-02	810	9.9E-01	1110	6.2E-01	2250	6.6E-01	3750	4.1E-01
220	< 1.0E-05	520	3.2E-03	820	9.9E-01	1120	5.7E-01	2300	7.0E-01	3800	4.2E-01
230	< 1.0E-05	530	6.4E-04	830	9.9E-01	1130	5.2E-01	2350	7.3E-01	3850	4.3E-01
240	1.9E-05	540	3.0E-04	840	9.9E-01	1140	4.8E-01	2400	7.5E-01	3900	4.5E-01
250	6.1E-03	550	6.2E-04	850	9.9E-01	1150	4.3E-01	2450	7.6E-01	3950	4.6E-01
260	1.0E-01	560	1.7E-03	860	9.9E-01	1160	3.9E-01	2500	7.7E-01	4000	4.6E-01
270	3.6E-01	570	1.0E-03	870	9.9E-01	1170	3.4E-01	2550	7.6E-01	4050	4.6E-01
280	6.3E-01	580	1.1E-04	880	9.9E-01	1180	3.1E-01	2600	7.6E-01	4100	4.4E-01
290	8.0E-01	590	< 1.0E-05	890	9.9E-01	1190	2.7E-01	2650	7.4E-01	4150	4.2E-01
300	9.0E-01	600	< 1.0E-05	900	9.9E-01	1200	2.4E-01	2700	7.2E-01	4200	3.9E-01
310	9.5E-01	610	1.3E-05	910	9.9E-01	1250	1.5E-01	2750	6.4E-01	4250	3.7E-01
320	9.7E-01	620	1.6E-05	920	9.9E-01	1300	1.2E-01	2800	5.9E-01	4300	3.4E-01
330	9.8E-01	630	1.2E-05	930	9.8E-01	1350	1.4E-01	2850	5.8E-01	4350	2.9E-01
340	9.9E-01	640	< 1.0E-05	940	9.8E-01	1400	1.5E-01	2900	5.7E-01	4400	2.5E-01
350	9.9E-01	650	< 1.0E-05	950	9.8E-01	1450	1.2E-01	2950	5.7E-01	4450	2.0E-01
360	9.9E-01	660	4.7E-05	960	9.7E-01	1500	1.0E-01	3000	5.6E-01	4500	1.6E-01
370	9.8E-01	670	5.9E-04	970	9.7E-01	1550	1.0E-01	3050	5.5E-01	4550	1.1E-01
380	9.8E-01	680	1.0E-02	980	9.6E-01	1600	1.2E-01	3100	5.3E-01	4600	7.8E-02
390	9.8E-01	690	1.0E-01	990	9.5E-01	1650	1.4E-01	3150	5.1E-01	4650	5.6E-02
400	9.5E-01	700	3.6E-01	1000	9.4E-01	1700	1.4E-01	3200	4.8E-01	4700	4.2E-02
410	9.2E-01	710	6.6E-01	1010	9.2E-01	1750	1.3E-01	3250	4.6E-01	4750	3.5E-02
420	8.7E-01	720	8.5E-01	1020	9.1E-01	1800	1.4E-01	3300	4.4E-01	4800	3.2E-02
430	8.2E-01	730	9.4E-01	1030	8.9E-01	1850	1.8E-01	3350	4.3E-01	4850	3.1E-02
440	7.5E-01	740	9.8E-01	1040	8.7E-01	1900	2.5E-01	3400	4.1E-01	4900	2.7E-02
450	6.6E-01	750	9.9E-01	1050	8.4E-01	1950	3.3E-01	3450	4.0E-01	4950	2.0E-02
460	5.5E-01	760	9.9E-01	1060	8.1E-01	2000	4.0E-01	3500	3.9E-01	5000	1.1E-02
470	3.9E-01	770	9.9E-01	1070	7.8E-01	2050	4.6E-01	3550	3.9E-01	5050	5.1E-03
480	2.2E-01	780	9.9E-01	1080	7.5E-01	2100	5.2E-01	3600	3.9E-01	5100	2.0E-03
490	9.7E-02	790	9.9E-01	1090	7.1E-01	2150	5.7E-01	3650	4.0E-01	5150	9.1E-04