

H-ZBaF50 658509	$n_d = 1.65844$	$v_d = 50.85$	$n_F - n_C = 0.012948$
	$n_e = 1.66152$	$v_e = 50.57$	$n_{F'} - n_{C'} = 0.013082$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.62814
n_{1970}	1970.09	1.63271
n_{1530}	1529.58	1.63788
n_{1129}	1128.64	1.64287
n_{1064}	1064.00	1.64384
n_t	1013.98	1.64466
n_s	852.11	1.64791
$n_{A'}$	768.19	1.65021
n_r	706.52	1.65237
n_C	656.27	1.65455
$n_{C'}$	643.85	1.65517
n_{He-Ne}	632.80	1.65575
n_D	589.29	1.65833
n_d	587.56	1.65844
n_e	546.07	1.66152
n_F	486.13	1.66750
$n_{F'}$	479.99	1.66825
n_g	435.84	1.67472
n_h	404.66	1.68081
n_i	365.01	1.69138

Constants of Dispersion Formula	
A_0	2.69513820E+00
A_1	-8.84212838E-03
A_2	1.89677206E-02
A_3	4.17388089E-04
A_4	-9.33466805E-06
A_5	1.53699645E-06

Density	
ρ (g/cm ³)	3.90

Solarization	
$\Delta\lambda$ (%)	-0.7

Relative Partial Dispersion	
$P_{d,C}$	0.3004
$P_{e,d}$	0.2379
$P_{g,F}$	0.5576
$P'_{d,c'}$	0.2500
$P'_{e,d}$	0.2354
$P'_{g,F'}$	0.4946

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0003
$\Delta P_{g,F}$	-0.0015
$\Delta P_{C,t}$	-0.0227
$\Delta P_{C,s}$	-0.0096

Thermal Properties	
T _g (°C)	650
T _s (°C)	695
T ₁₀ ^{14.5} (°C)	572
T ₁₀ ¹³ (°C)	630
$\alpha_{50/80^\circ C}$ (10 ⁻⁷ /K)	74
$\alpha_{100/300^\circ C}$ (10 ⁻⁷ /K)	86
λ (W/(m·K))	0.69

Mechanical Properties	
HK (10 ⁷ Pa)	520
F _A	132
E (GPa)	93.4
G (GPa)	37.3
μ	0.253
σ_b (MPa)	60.3
B (10 ⁻¹² /Pa)	1.84

Chemical Properties (grade)	
RC (S)	1
RA (S)	3
D _W	1
D _A	3
R _{OH} (S)	2
RP (S)	2

Expansion Coefficient α (×10 ⁻⁷ /K)	
°C	α
-50/-40	66
-40/-30	68
-30/-20	70
-20/-10	71
-10/0	72
0/10	73
10/20	74
20/30	75
30/40	76
40/50	77
50/60	77
60/70	78
70/80	78
80/90	79
90/100	80
100/110	81
110/120	82
120/130	83
130/140	83
140/150	84
150/160	85

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.937	0.880
2200	0.971	0.946
2000	0.993	0.982
1800	0.995	0.992
1600	0.999	0.998
1400	0.999	0.998
1200	0.999	0.998
1060	0.999	0.998
1000	0.999	0.998
950	0.999	0.998
900	0.999	0.998
850	0.999	0.998
800	0.999	0.998
750	0.999	0.998
700	0.999	0.998
650	0.999	0.998
600	0.999	0.998
550	0.999	0.998
500	0.999	0.998
480	0.999	0.998
460	0.998	0.996
440	0.997	0.994
420	0.996	0.992
400	0.991	0.983
390	0.983	0.970
380	0.969	0.946
370	0.937	0.893
360	0.876	0.787
350	0.752	0.585
340	0.521	0.275
330	0.203	0.037
320		
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	380/335
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	360/330

Range of Temperature (°C)	Temperature Coefficients of Refractive Index									
	dn/dt relative (×10 ⁻⁶ / °C)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	2.4	2.7	3.0	3.0	3.0	3.2	3.4	3.7	3.8	4.5
-40 ~ -20	2.4	2.8	3.0	3.0	3.0	3.2	3.4	3.8	3.9	4.5
-20 ~ 0	2.4	2.7	3.0	3.0	3.0	3.2	3.4	3.9	4.0	4.5
0 ~ 20	2.4	2.7	3.0	3.1	3.1	3.2	3.4	3.9	4.0	4.5
20 ~ 40	2.4	2.7	3.0	3.0	3.0	3.2	3.4	4.0	4.1	4.6
40 ~ 60	2.3	2.9	3.2	3.2	3.2	3.3	3.5	4.2	4.3	4.7
60 ~ 80	2.5	3.0	3.2	3.3	3.3	3.4	3.6	4.3	4.4	4.9
80 ~ 100	2.6	3.1	3.3	3.4	3.4	3.6	3.8	4.5	4.6	5.0
100 ~ 120	2.7	3.2	3.4	3.5	3.5	3.7	3.9	4.6	4.7	5.2
120 ~ 140	2.7	3.3	3.5	3.6	3.6	3.8	4.0	4.7	4.8	5.3
140 ~ 160	2.7	3.3	3.6	3.6	3.7	3.9	4.1	4.9	5.0	5.5

Constants of dn/dt		
D ₀	D ₁	D ₂
1.19E-06	1.20E-08	-1.58E-11
E ₀	E ₁	λ_{TK}
6.13E-07	5.48E-10	2.23E-01