H-ZBaF5 671473

n_d = 1.67103	υ_d = 47.29	$n_F - n_C$ = 0.014190
n_e = 1.67440	υ_e = 46.99	$n_{F'} - n_{C'}$ = 0.014353

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.63768
n_{1970}	1970.09	1.64279
n_{1530}	1529.58	1.64857
n_{1129}	1128.64	1.65410
n_{1064}	1064.00	1.65517
n_t	1013.98	1.65606
n_s	852.11	1.65961
$n_{A'}$	768.19	1.66211
n_r	706.52	1.66444
n_C	656.27	1.66680
$n_{C'}$	643.85	1.66746
n_{He-Ne}	632.80	1.66809
n_D	589.29	1.67091
n_d	587.56	1.67103
n_e	546.07	1.67440
n_F	486.13	1.68099
$n_{F'}$	479.99	1.68182
n_g	435.84	1.68902
n_h	404.66	1.69578
n_i	365.01	1.70732

Relative Partial Dispersion	
$P_{d,C}$	0.2981
$P_{e,d}$	0.2375
$P_{g,F}$	0.5659
$P'_{d,c'}$	0.2487
$P'_{e,d}$	0.2348
$P'_{g,F'}$	0.5016

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0003
$\Delta P_{g,F}$	0.0008
$\Delta P_{C,t}$	-0.0124
$\Delta P_{C,s}$	-0.0072

Thermal Properties	
Tg (℃)	583
Ts (℃)	652
$T_{10}^{14.5}$ (℃)	540
T_{10}^{13} (℃)	580
$\alpha_{-50/80℃}$ (10^{-7}/K)	78
$\alpha_{100/300℃}$ (10^{-7}/K)	94
λ (W/(m·K))	0.70

Mechanical Properties	
HK (10^7Pa)	626
F_A	140
E (GPa)	97.0
G (GPa)	38.1
μ	0.273
σ_b (MPa)	
B (10^{-12}/Pa)	1.74

Chemical Properties (grade)	
RC (S)	1
RA (S)	3
D_W	1
D_A	2
R_{OH} (S)	2
RP (S)	2

Expansion Coefficient α (×10^{-7}/K)	
℃	α
-50/-40	69
-40/-30	71
-30/-20	74
-20/-10	75
-10/0	77
0/10	78
10/20	79
20/30	80
30/40	81
40/50	82
50/60	82
60/70	83
70/80	85
80/90	86
90/100	87
100/110	88
110/120	89
120/130	90
130/140	91
140/150	92
150/160	93

Internal Transmittance		
λ (nm)	τ5mm	τ10mm
2400	0.943	0.889
2200	0.971	0.942
2000	0.986	0.972
1800	0.992	0.984
1600	0.998	0.997
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	0.998	0.997
850	0.998	0.996
800	0.995	0.991
750	0.995	0.991
700	0.995	0.990
650	0.995	0.990
600	0.994	0.989
550	0.994	0.989
500	0.992	0.985
480	0.991	0.983
460	0.990	0.980
440	0.988	0.976
420	0.985	0.971
400	0.976	0.953
390	0.964	0.930
380	0.941	0.886
370	0.890	0.800
360	0.790	0.630
350	0.580	0.340
340	0.230	0.060
330		
320		
310		
300		
290		
280		

Constants of Dispersion Formula	
A_0	2.73214288E+00
A_1	-9.99573110E-03
A_2	2.10627506E-02
A_3	9.14104150E-05
A_4	9.31355399E-05
A_5	-5.82600014E-06

Density	
ρ (g/cm^3)	3.58

Solarization	
△λ (%)	-0.4

Range of Temperature (℃)	Temperature Coefficients of Refractive Index dn/dt relative (×10^{-6} / ℃)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	2.4	2.8	3.0	3.1	3.2	3.4	3.9	4.5	4.6	5.0
-40 ~ -20	2.5	2.9	3.2	3.3	3.4	3.5	4.0	4.6	4.8	5.2
-20 ~ 0	2.7	3.1	3.4	3.5	3.6	3.7	4.1	4.7	4.8	5.3
0 ~ 20	2.7	3.2	3.7	3.8	3.9	4.0	4.2	4.8	4.9	5.4
20 ~ 40	2.8	3.3	3.9	4.0	4.1	4.2	4.3	4.9	5.0	5.5
40 ~ 60	3.0	3.4	4.1	4.2	4.3	4.4	4.5	5.0	5.1	5.6
60 ~ 80	3.1	3.6	4.3	4.4	4.4	4.5	4.6	5.1	5.2	5.8
80 ~ 100	3.2	3.7	4.4	4.5	4.5	4.6	4.7	5.2	5.3	5.9
100 ~ 120	3.3	3.9	4.6	4.7	4.7	4.8	4.9	5.3	5.4	6.1
120 ~ 140	3.3	4.0	4.7	4.8	4.8	4.9	5.0	5.4	5.5	6.2
140 ~ 160	3.4	4.0	4.8	4.9	4.9	5.0	5.2	5.6	5.6	6.3

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	380/340
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	370/340

Constants of dn/dt		
D_0	D_1	D_2
1.66E-06	1.91E-08	-3.14E-11
E_0	E_1	λ_{TK}
1.03E-06	-3.69E-10	7.88E-09