H-ZLaF77A 954323

$n_d = 1.95375$	$\upsilon_d = 32.32$	$n_F - n_C = 0.029506$
$n_e = 1.96073$	$\upsilon_e = 32.09$	$n_{F'} - n_{C'} = 0.029940$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.89738
n_{1970}	1970.09	1.90433
n_{1530}	1529.58	1.91250
n_{1129}	1128.64	1.92116
n_{1064}	1064.00	1.92298
n_t	1013.98	1.92453
n_s	852.11	1.93102
$n_{A'}$	768.19	1.93582
n_r	706.52	1.94042
n_C	656.27	1.94514
$n_{C'}$	643.85	1.94649
n_{He-Ne}	632.80	1.94775
n_D	589.29	1.95349
n_d	587.56	1.95375
n_e	546.07	1.96073
n_F	486.13	1.97465
$n_{F'}$	479.99	1.97643
n_g	435.84	1.99207
n_h	404.66	2.00732
n_i	365.01	2.03539

Relative Partial Dispersion	
$P_{d,C}$	0.2918
$P_{e,d}$	0.2366
$P_{g,F}$	0.5904
$P'_{d,c'}$	0.2425
$P'_{e,d}$	0.2331
$P'_{g,F'}$	0.5224

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0006
$\Delta P_{g,F}$	0.0005
$\Delta P_{C,t}$	0.0018
$\Delta P_{C,s}$	0.0006

Thermal Properties	
Tg (℃)	723
Ts (℃)	763
$T_{10}^{14.5}$ (℃)	680
T_{10}^{13} (℃)	716
$\alpha_{-50/80℃}$ (10^{-7}/K)	70
$\alpha_{100/300℃}$ (10^{-7}/K)	87
λ (W/(m·K))	1.01
β_d	131

Mechanical Properties	
HK (10^7Pa)	730
F_A	61
E (GPa)	128.5
G (GPa)	49.5
μ	0.297
σ_b (MPa)	60.6
B (10^{-12}/Pa)	0.79

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

Expansion Coefficient α ($\times 10^{-7}$/K)	
℃	α
-50/-40	61
-40/-30	64
-30/-20	65
-20/-10	67
-10/0	69
0/10	70
10/20	71
20/30	72
30/40	73
40/50	74
50/60	74
60/70	75
70/80	75
80/90	76
90/100	76
100/110	77
110/120	78
120/130	80
130/140	81
140/150	82
150/160	83

Internal Transmittance		
λ (nm)	τ5mm	τ10mm
2400	0.917	0.840
2200	0.976	0.952
2000	0.989	0.979
1800	0.996	0.993
1600	0.999	0.998
1400	0.999	0.999
1200	0.999	0.999
1060	0.999	0.999
1000	0.999	0.999
950	0.999	0.999
900	0.999	0.999
850	0.999	0.999
800	0.999	0.999
750	0.999	0.999
700	0.999	0.999
650	0.999	0.998
600	0.999	0.998
550	0.998	0.996
500	0.993	0.986
480	0.989	0.978
460	0.983	0.967
440	0.976	0.953
420	0.963	0.927
400	0.927	0.860
390	0.894	0.800
380	0.825	0.680
370	0.686	0.470
360	0.424	0.180
350	0.141	0.020
340		
330		
320		
310		
300		
290		
280		

Constants of Dispersion Formula	
A_0	3.67292754E+00
A_1	-1.50437161E-02
A_2	4.55746485E-02
A_3	2.28731957E-03
A_4	-1.21744297E-04
A_5	1.65263211E-05

Density	
ρ (g/cm^3)	4.94

Solarization	
△λ (%)	-1.3

Range of Temperature (℃)	Temperature Coefficients of Refractive Index dn/dt relative ($\times 10^{-6}$ / ℃)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	3.1	3.8	4.2	4.3	4.4	4.9	5.2	6.1	6.2	7.4
-40 ~ -20	3.2	3.9	4.4	4.5	4.6	5.0	5.4	6.4	6.5	7.6
-20 ~ 0	3.4	3.9	4.4	4.5	4.7	5.1	5.6	6.7	6.8	7.9
0 ~ 20	3.4	3.9	4.5	4.6	4.7	5.2	5.7	6.8	6.9	8.2
20 ~ 40	3.4	4.0	4.6	4.7	4.8	5.3	5.9	7.0	7.1	8.6
40 ~ 60	3.5	4.1	4.7	4.8	4.9	5.4	6.1	7.2	7.3	8.8
60 ~ 80	3.6	4.3	4.9	5.0	5.1	5.6	6.3	7.5	7.6	9.2
80 ~ 100	3.7	4.4	5.0	5.1	5.2	5.7	6.6	7.7	7.8	9.5
100 ~ 120	3.7	4.5	5.1	5.2	5.3	5.9	6.8	7.9	8.0	9.7
120 ~ 140	3.9	4.6	5.2	5.3	5.4	6.1	7.0	8.1	8.2	9.9
140 ~ 160	4.0	4.7	5.3	5.4	5.5	6.3	7.2	8.3	8.4	10.1

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	(405)/355
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	390/352

Constants of dn/dt		
D_0	D_1	D_2
1.46E-06	1.08E-08	-2.27E-11
E_0	E_1	λ_{TK}
9.17E-07	1.02E-09	2.53E-01