H-ZLaF51 805396

$n_d = 1.80450$	$\upsilon_d = 39.64$	$n_F - n_C = 0.020298$
$n_e = 1.80932$	$\upsilon_e = 39.39$	$n_{F'} - n_{C'} = 0.020549$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.75651
n_{1970}	1970.09	1.76414
n_{1530}	1529.58	1.77262
n_{1129}	1128.64	1.78054
n_{1064}	1064.00	1.78205
n_t	1013.98	1.78330
n_s	852.11	1.78830
$n_{A'}$	768.19	1.79183
n_r	706.52	1.79513
n_C	656.27	1.79849
$n_{C'}$	643.85	1.79943
n_{He-Ne}	632.80	1.80032
n_D	589.29	1.80432
n_d	587.56	1.80450
n_e	546.07	1.80932
n_F	486.13	1.81879
$n_{F'}$	479.99	1.81998
n_g	435.84	1.83042
n_h	404.66	1.84042
n_i	365.01	1.85838

Constants of Dispersion Formula	
A_0	3.16743537E+00
A_1	-1.61763813E-02
A_2	2.88108896E-02
A_3	1.51509661E-03
A_4	-1.00494023E-04
A_5	9.19692892E-06

Density	
ρ (g/cm³)	4.26

Solarization	
△λ (%)	-0.6

Relative Partial Dispersion	
$P_{d,C}$	0.2961
$P_{e,d}$	0.2375
$P_{g,F}$	0.5730
$P'_{d,c'}$	0.2467
$P'_{e,d}$	0.2346
$P'_{g,F'}$	0.5081

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0018
$\Delta P_{g,F}$	-0.0048
$\Delta P_{C,t}$	0.0162
$\Delta P_{C,s}$	0.0065

Thermal Properties	
Tg (℃)	597
Ts (℃)	630
$T_{10}^{14.5}$ (℃)	533
T_{10}^{13} (℃)	568
$\alpha_{-50/80℃}$ (10^{-7}/K)	55
$\alpha_{100/300℃}$ (10^{-7}/K)	70
λ (W/(m·K))	0.92

Mechanical Properties	
HK (10^7Pa)	664
F_A	76
E (GPa)	121.8
G (GPa)	45.7
μ	0.332
σ_b (MPa)	68.8
B (10^{-12}/Pa)	1.99

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

Expansion Coefficient α ($\times 10^{-7}$/K)	
℃	α
-50/-40	48
-40/-30	51
-30/-20	52
-20/-10	54
-10/0	54
0/10	55
10/20	56
20/30	57
30/40	57
40/50	58
50/60	58
60/70	58
70/80	59
80/90	59
90/100	60
100/110	61
110/120	62
120/130	63
130/140	64
140/150	66
150/160	67

Internal Transmittance		
λ (nm)	τ5mm	τ10mm
2400	0.825	0.681
2200	0.950	0.903
2000	0.990	0.980
1800	0.999	0.998
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	0.997	0.993
480	0.995	0.989
460	0.992	0.984
440	0.988	0.977
420	0.981	0.963
400	0.966	0.933
390	0.948	0.899
380	0.913	0.833
370	0.838	0.702
360	0.668	0.446
350	0.358	0.128
340		
330		
320		
310		
300		
290		
280		

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	5.7	6.2	6.5	6.6	6.6	6.8	7.0	7.7	7.8	8.5
-40 ~ -20	6.1	6.5	6.8	6.9	6.9	7.1	7.5	8.3	8.4	9.1
-20 ~ 0	6.5	6.9	7.1	7.2	7.2	7.5	7.9	8.9	9.0	10.0
0 ~ 20	6.9	7.3	7.5	7.5	7.6	8.0	8.3	9.4	9.5	10.5
20 ~ 40	7.0	7.5	7.9	7.9	7.9	8.3	8.7	9.6	9.7	10.6
40 ~ 60	7.2	7.9	8.2	8.2	8.2	8.6	9.1	9.9	10.0	11.0
60 ~ 80	7.5	8.2	8.5	8.5	8.5	9.0	9.4	10.2	10.3	11.5
80 ~ 100	7.7	8.5	8.8	8.8	8.8	9.2	9.8	10.6	10.7	11.7
100 ~ 120	7.9	8.7	9.0	9.0	9.1	9.4	10.0	10.9	11.0	12.0
120 ~ 140	8.2	8.9	9.3	9.3	9.4	9.7	10.3	11.2	11.3	12.4
140 ~ 160	8.4	9.1	9.6	9.6	9.7	10.0	10.6	11.6	11.7	12.7

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	410/350
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	378/347

Constants of dn/dt		
D_0	D_1	D_2
7.94E-06	2.19E-08	-3.80E-11
E_0	E_1	λ_{TK}
6.45E-07	6.29E-10	2.72E-01