H-ZLaF54A	816466

$n_d = 1.81600$	$\upsilon_d = 46.55$	$n_F - n_C = 0.017528$
$n_e = 1.82017$	$\upsilon_e = 46.33$	$n_{F'} - n_{C'} = 0.017704$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	
n_{1970}	1970.09	
n_{1530}	1529.58	
n_{1129}	1128.64	1.79487
n_{1064}	1064.00	1.79619
n_t	1013.98	1.79731
n_s	852.11	1.80175
$n_{A'}$	768.19	1.80488
n_r	706.52	1.80779
n_C	656.27	1.81074
$n_{C'}$	643.85	1.81158
n_{He-Ne}	632.80	1.81235
n_D	589.29	1.81585
n_d	587.56	1.81600
n_e	546.07	1.82017
n_F	486.13	1.82827
$n_{F'}$	479.99	1.82929
n_g	435.84	1.83804
n_h	404.66	1.84625
n_i	365.01	1.86049

Relative Partial Dispersion	
$P_{d,C}$	0.3001
$P_{e,d}$	0.2379
$P_{g,F}$	0.5574
$P'_{d,c'}$	0.2497
$P'_{e,d}$	0.2355
$P'_{g,F'}$	0.4942

Deviation of Relative Partial Dispersions	
$\triangle P_{F,e}$	-0.0024
$\triangle P_{g,F}$	-0.0089
$\triangle P_{C,t}$	0.0005
$\triangle P_{C,s}$	0.0008

Thermal Properties	
Tg (℃)	718
Ts (℃)	744
$T_{10}^{14.5}$ (℃)	646
T_{10}^{13} (℃)	666
$\alpha_{-50/80℃}$ (10^{-7}/K)	61
$\alpha_{100/300℃}$ (10^{-7}/K)	76
λ (W/(m·K))	0.83

Mechanical Properties	
HK (10^7Pa)	693
F_A	71
E (GPa)	123.0
G (GPa)	47.4
μ	0.298
σ_b (MPa)	
B (10^{-12}/Pa)	1.12

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

Expansion Coefficient α (×10^{-7}/K)	
℃	α
-50/-40	57
-40/-30	58
-30/-20	60
-20/-10	61
-10/0	62
0/10	63
10/20	63
20/30	63
30/40	63
40/50	64
50/60	64
60/70	67
70/80	67
80/90	69
90/100	69
100/110	69
110/120	70
120/130	70
130/140	73
140/150	74
150/160	75

Internal Transmittance		
λ (nm)	τ5mm	τ10mm
2400	0.867	0.751
2200	0.965	0.931
2000	0.986	0.972
1800	0.996	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	0.998	0.997
480	0.997	0.995
460	0.996	0.992
440	0.994	0.988
420	0.991	0.982
400	0.985	0.971
390	0.980	0.961
380	0.971	0.942
370	0.953	0.908
360	0.920	0.846
350	0.847	0.718
340	0.701	0.491
330	0.432	0.186
320	0.137	0.019
310		
300		
290		
280		

Constants of Dispersion Formula	
A_0	3.21683817E+00
A_1	-1.36724876E-02
A_2	2.76347913E-02
A_3	7.16568289E-04
A_4	-1.97668563E-05
A_5	2.19878744E-06

Density	
ρ (g/cm^3)	4.99

Solarization	
△λ (%)	-0.3

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	385/325
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	355/322

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	2.1	2.4	2.8	3.0	3.1	3.3	3.6	3.9	4.0	4.5
-40 ~ -20	2.2	2.4	2.8	3.1	3.2	3.5	3.8	4.0	4.1	4.7
-20 ~ 0	2.2	2.4	2.9	3.1	3.3	3.6	3.9	4.1	4.2	5.0
0 ~ 20	2.3	2.5	3.0	3.2	3.4	3.8	4.1	4.2	4.4	5.1
20 ~ 40	2.3	2.6	3.1	3.3	3.5	4.0	4.2	4.4	4.6	5.3
40 ~ 60	2.4	2.8	3.3	3.5	3.7	4.2	4.4	4.6	4.7	5.6
60 ~ 80	2.4	2.9	3.4	3.6	3.9	4.4	4.6	4.8	4.9	5.8
80 ~ 100	2.4	3.0	3.6	3.8	4.1	4.6	4.7	5.0	5.1	6.0
100 ~ 120	2.6	3.2	3.8	4.0	4.2	4.8	4.9	5.2	5.3	6.3
120 ~ 140	2.8	3.3	4.1	4.2	4.4	5.0	5.1	5.4	5.5	6.6
140 ~ 160	2.9	3.4	4.3	4.4	4.5	5.1	5.3	5.5	5.7	6.8

Constants of dn/dt		
D_0	D_1	D_2
1.25E-07	1.24E-08	-1.76E-11
E_0	E_1	λ_{TK}
9.91E-07	1.10E-09	6.42E-09