

H-ZLaF3	855366	$n_d = 1.85544$	$v_d = 36.59$	$n_F - n_C = 0.023381$
		$n_e = 1.86099$	$v_e = 36.35$	$n_{F'} - n_{C'} = 0.023687$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.80540
n_{1970}	1970.09	1.81252
n_{1530}	1529.58	1.82064
n_{1129}	1128.64	1.82866
n_{1064}	1064.00	1.83025
n_t	1013.98	1.83159
n_s	852.11	1.83706
$n_{A'}$	768.19	1.84100
n_r	706.52	1.84474
n_C	656.27	1.84856
$n_{C'}$	643.85	1.84964
n_{He-Ne}	632.80	1.85065
n_D	589.29	1.85524
n_d	587.56	1.85544
n_e	546.07	1.86099
n_F	486.13	1.87194
$n_{F'}$	479.99	1.87333
n_g	435.84	1.88549
n_h	404.66	1.89719
n_i	365.01	1.91828

Constants of Dispersion Formula	
A_0	3.33508086E+00
A_1	-1.51809916E-02
A_2	3.47880996E-02
A_3	1.57445974E-03
A_4	-7.28030297E-05
A_5	8.73416251E-06

Density		Solarization	
ρ (g/cm ³)	4.59	$\Delta\lambda$ (%)	-0.4

Relative Partial Dispersion	
$P_{d,C}$	0.2943
$P_{e,d}$	0.2374
$P_{g,F}$	0.5795
$P'_{d,c'}$	0.2449
$P'_{e,d}$	0.2343
$P'_{g,F'}$	0.5134

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0017
$\Delta P_{g,F}$	-0.0033
$\Delta P_{C,t}$	0.0084
$\Delta P_{C,s}$	0.0036

Thermal Properties	
T _g (°C)	625
T _s (°C)	653
T ₁₀ ^{14.5} (°C)	557
T ₁₀ ¹³ (°C)	591
$\alpha_{50/80^\circ C}$ (10 ⁻⁷ /K)	60
$\alpha_{100/300^\circ C}$ (10 ⁻⁷ /K)	75
λ (W/(m·K))	0.98

Mechanical Properties	
HK (10 ⁷ Pa)	622
F _A	77
E (GPa)	114.3
G (GPa)	43.7
μ	0.308
σ_b (MPa)	57.9
B (10 ⁻¹² /Pa)	1.90

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 (×10 ⁻⁷ /K)	
°C	α
-50/-40	53
-40/-30	56
-30/-20	57
-20/-10	58
-10/0	59
0/10	60
10/20	61
20/30	61
30/40	62
40/50	62
50/60	63
60/70	63
70/80	64
80/90	65
90/100	66
100/110	67
110/120	68
120/130	69
130/140	70
140/150	71
150/160	72

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.885	0.782
2200	0.970	0.940
2000	0.991	0.981
1800	0.998	0.996
1600	0.998	0.996
1400	0.998	0.996
1200	0.998	0.996
1060	0.998	0.996
1000	0.998	0.996
950	0.998	0.996
900	0.998	0.996
850	0.998	0.996
800	0.998	0.996
750	0.998	0.996
700	0.998	0.996
650	0.998	0.996
600	0.998	0.996
550	0.998	0.996
500	0.998	0.996
480	0.994	0.989
460	0.988	0.976
440	0.982	0.964
420	0.975	0.948
400	0.959	0.911
390	0.940	0.871
380	0.904	0.803
370	0.832	0.680
360	0.680	0.449
350	0.376	0.136
340		
330		
320		
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	(390)/350
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	378/345

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	4.6	5.2	5.6	5.6	5.7	5.9	6.4	7.1	7.1	7.9
-40 ~ -20	4.9	5.5	5.8	5.9	5.9	6.3	6.7	7.6	7.6	8.5
-20 ~ 0	5.4	5.9	6.2	6.3	6.4	6.6	7.1	8.0	8.0	9.1
0 ~ 20	5.6	6.1	6.5	6.6	6.7	7.0	7.4	8.4	8.4	9.5
20 ~ 40	5.8	6.4	6.8	6.8	6.9	7.3	7.7	8.6	8.6	9.9
40 ~ 60	5.9	6.6	7.0	7.0	7.1	7.5	7.8	8.9	8.9	10.1
60 ~ 80	6.1	6.7	7.2	7.2	7.3	7.6	8.2	9.3	9.3	10.4
80 ~ 100	6.4	6.9	7.3	7.3	7.4	7.9	8.4	9.5	9.5	10.7
100 ~ 120	6.6	7.1	7.5	7.5	7.6	8.1	8.6	9.7	9.7	10.9
120 ~ 140	6.8	7.3	7.7	7.7	7.8	8.3	8.8	9.9	9.9	11.2
140 ~ 160	6.9	7.4	7.8	7.9	8.0	8.5	9.0	10.1	10.1	11.4

Constants of dn/dt		
D ₀	D ₁	D ₂
5.56E-06	1.86E-08	-3.98E-11
E ₀	E ₁	λ_{TK}
7.03E-07	5.83E-10	2.68E-01