

<b>H-ZLaF68L</b>	<b>883392</b>	$n_d = 1.88300$	$v_d = 39.22$	$n_F - n_C = 0.022515$
		$n_e = 1.88835$	$v_e = 38.97$	$n_{F'} - n_{C'} = 0.022798$

Refractive Indices		
	$\lambda$ (nm)	$n_\lambda$
$n_{2325}$	2325.42	
$n_{1970}$	1970.09	
$n_{1530}$	1529.58	1.84942
$n_{1129}$	1128.64	1.85707
$n_{1064}$	1064.00	1.85859
$n_t$	1013.98	1.85990
$n_s$	852.11	1.86519
$n_{A'}$	768.19	1.86902
$n_f$	706.52	1.87265
$n_C$	656.27	1.87635
$n_{C'}$	643.85	1.87740
$n_{He-Ne}$	632.80	1.87837
$n_D$	589.29	1.88281
$n_d$	587.56	1.88300
$n_e$	546.07	1.88835
$n_F$	486.13	1.89887
$n_{F'}$	479.99	1.90019
$n_g$	435.84	1.91170
$n_h$	404.66	1.92270
$n_i$	365.01	1.94220

Relative Partial Dispersion	
$P_{d,C}$	0.2954
$P_{e,d}$	0.2376
$P_{g,F}$	0.5698
$P'_{d,c'}$	0.2456
$P'_{e,d}$	0.2347
$P'_{g,F'}$	0.5049

Chemical Properties (grade)	
RC (S)	1
RA (S)	1
D <sub>w</sub>	1
D <sub>A</sub>	2
R <sub>OH</sub> (S)	1
RP (S)	1
CR	

Internal Transmittance		
$\lambda$ (nm)	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.898	0.807
2200	0.970	0.940
2000	0.988	0.976
1800	0.995	0.991
1600	0.998	0.996
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	0.998	0.996
500	0.995	0.990
480	0.991	0.983
460	0.987	0.975
440	0.982	0.964
420	0.974	0.949
400	0.957	0.915
390	0.939	0.881
380	0.910	0.828
370	0.861	0.741
360	0.771	0.594
350	0.605	0.366
340	0.333	0.111
330		
320		
310		
300		
290		
280		

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0013
$\Delta P_{g,F}$	-0.0086
$\Delta P_{C,t}$	0.0005
$\Delta P_{C,s}$	0.0011

Expansion Coefficient $\alpha$ ( $\times 10^{-7}/K$ )	
$^{\circ}C$	$\alpha$
-50/-40	63
-40/-30	65
-30/-20	67
-20/-10	68
-10/0	69
0/10	70
10/20	71
20/30	72
30/40	73
40/50	73
50/60	74
60/70	75
70/80	76
80/90	77
90/100	78
100/110	79
110/120	80
120/130	81
130/140	82
140/150	84
150/160	85

Thermal Properties	
T <sub>g</sub> ( $^{\circ}C$ )	720
T <sub>s</sub> ( $^{\circ}C$ )	748
T <sub>10</sub> <sup>14.5</sup> ( $^{\circ}C$ )	673
T <sub>10</sub> <sup>13</sup> ( $^{\circ}C$ )	703
$\alpha_{-50/80^{\circ}C}$ ( $10^{-7}/K$ )	71
$\alpha_{100/300^{\circ}C}$ ( $10^{-7}/K$ )	83
$\lambda$ (W/(m K))	0.78

Constants of Dispersion Formula	
A <sub>0</sub>	3.43867274E+00
A <sub>1</sub>	-1.43248055E-02
A <sub>2</sub>	3.49115425E-02
A <sub>3</sub>	1.45301670E-03
A <sub>4</sub>	-7.62581625E-05
A <sub>5</sub>	7.47668790E-06

Mechanical Properties	
HK ( $10^7$ Pa)	700
F <sub>A</sub>	74
E (GPa)	124.4
G (GPa)	46.7
$\mu$	0.333
$\sigma_b$ (MPa)	125
B ( $10^{-12}$ /Pa)	0.93

Density	Solarization
$\rho$ (g/cm <sup>3</sup> )	$\Delta\lambda$ (%)
5.12	-0.5

Range of Temperature ( $^{\circ}C$ )	Temperature Coefficients of Refractive Index									
	dn/dt relative ( $\times 10^{-6} / ^{\circ}C$ )									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	0.9	1.4	1.9	2.0	2.2	2.5	3.2	3.4	3.7	4.9
-40 ~ -20	0.9	1.6	2.0	2.0	2.3	2.7	3.3	3.6	3.9	5.0
-20 ~ 0	1.0	1.6	2.1	2.2	2.5	2.7	3.5	3.6	4.0	5.1
0 ~ 20	1.2	1.7	2.3	2.4	2.6	2.8	3.7	3.8	4.2	5.3
20 ~ 40	1.3	1.7	2.4	2.4	2.6	2.9	3.8	4.1	4.3	5.4
40 ~ 60	1.5	1.9	2.4	2.6	2.8	3.0	3.9	4.1	4.4	5.5
60 ~ 80	1.6	2.1	2.6	2.8	2.9	3.3	4.1	4.3	4.5	5.6
80 ~ 100	1.6	2.3	2.8	2.9	3.0	3.5	4.2	4.5	4.6	5.7
100 ~ 120	1.8	2.3	2.9	3.0	3.2	3.5	4.4	4.6	4.7	5.9
120 ~ 140	1.9	2.4	3.0	3.1	3.3	3.7	4.4	4.7	4.8	6.1
140 ~ 160	1.9	2.6	3.1	3.2	3.4	3.9	4.6	4.9	5.1	6.4

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	(380)/340
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	377/338

Constants of dn/dt		
D <sub>0</sub>	D <sub>1</sub>	D <sub>2</sub>
-1.77E-06	1.42E-08	-2.29E-11
E <sub>0</sub>	E <sub>1</sub>	$\lambda_{TK}$
1.13E-06	1.17E-10	1.38E-01