

<b>H-ZLaF2</b>	<b>803468</b>	$n_d = 1.80279$	$v_d = 46.76$	$n_F - n_C = 0.017168$
		$n_e = 1.80687$	$v_e = 46.52$	$n_{F'} - n_{C'} = 0.017345$

Refractive Indices		
	$\lambda$ (nm)	$n_\lambda$
$n_{2325}$	2325.42	1.75864
$n_{1970}$	1970.09	1.76610
$n_{1530}$	1529.58	1.77430
$n_{1129}$	1128.64	1.78174
$n_{1064}$	1064.00	1.78312
$n_t$	1013.98	1.78426
$n_s$	852.11	1.78874
$n_{A'}$	768.19	1.79184
$n_r$	706.52	1.79473
$n_C$	656.27	1.79763
$n_{C'}$	643.85	1.79845
$n_{He-Ne}$	632.80	1.79921
$n_D$	589.29	1.80264
$n_d$	587.56	1.80279
$n_e$	546.07	1.80687
$n_F$	486.13	1.81480
$n_{F'}$	479.99	1.81579
$n_g$	435.84	1.82438
$n_h$	404.66	1.83241
$n_i$	365.01	1.84644

Constants of Dispersion Formula	
$A_0$	3.17454812E+00
$A_1$	-1.59776958E-02
$A_2$	2.51277775E-02
$A_3$	1.18617161E-03
$A_4$	-8.90435226E-05
$A_5$	6.03380469E-06

Density	
$\rho$ (g/cm <sup>3</sup> )	4.68

Solarization	
$\Delta\lambda$ (%)	-1.1

Relative Partial Dispersion	
$P_{d,C}$	0.3006
$P_{e,d}$	0.2377
$P_{g,F}$	0.5580
$P'_{d,c'}$	0.2502
$P'_{e,d}$	0.2352
$P'_{g,F'}$	0.4952

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0025
$\Delta P_{g,F}$	-0.0079
$\Delta P_{C,t}$	0.0121
$\Delta P_{C,s}$	0.0052

Thermal Properties	
T <sub>g</sub> (°C)	690
T <sub>s</sub> (°C)	708
T <sub>10</sub> <sup>14.5</sup> (°C)	612
T <sub>10</sub> <sup>13</sup> (°C)	648
$\alpha_{50/80^\circ C}$ (10 <sup>-7</sup> /K)	59
$\alpha_{100/300^\circ C}$ (10 <sup>-7</sup> /K)	74
$\lambda$ (W/(m·K))	0.96

Mechanical Properties	
HK (10 <sup>7</sup> Pa)	702
F <sub>A</sub>	68
E (GPa)	123.6
G (GPa)	47.8
$\mu$	0.292
$\sigma_b$ (MPa)	95.2
B (10 <sup>-12</sup> /Pa)	1.36

Chemical Properties (grade)	
RC (S)	1
RA (S)	1
D <sub>W</sub>	1
D <sub>A</sub>	3
R <sub>OH</sub> (S)	1
RP (S)	1

Expansion Coefficient $\alpha$ (×10 <sup>-7</sup> /K)	
°C	$\alpha$
-50/-40	53
-40/-30	55
-30/-20	57
-20/-10	58
-10/0	59
0/10	60
10/20	60
20/30	61
30/40	61
40/50	62
50/60	62
60/70	63
70/80	63
80/90	64
90/100	65
100/110	66
110/120	67
120/130	68
130/140	69
140/150	70
150/160	71

Internal Transmittance		
$\lambda$ (nm)	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.826	0.682
2200	0.959	0.920
2000	0.993	0.986
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	0.998	0.997
550	0.998	0.996
500	0.997	0.995
480	0.996	0.993
460	0.994	0.989
440	0.994	0.988
420	0.993	0.986
400	0.988	0.976
390	0.983	0.973
380	0.975	0.956
370	0.959	0.925
360	0.929	0.870
350	0.881	0.781
340	0.791	0.629
330	0.620	0.383
320	0.322	0.103
310	0.043	0.007
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	380/320
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	350/316

Range of Temperature (°C)	Temperature Coefficients of Refractive Index									
	dn/dt relative (×10 <sup>-6</sup> / °C)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	3.6	4.0	4.3	4.3	4.4	4.5	4.7	5.3	5.4	5.9
-40 ~ -20	3.7	4.0	4.3	4.3	4.4	4.5	4.8	5.3	5.3	5.9
-20 ~ 0	3.6	4.0	4.3	4.3	4.4	4.6	4.8	5.3	5.3	6.0
0 ~ 20	3.8	4.0	4.3	4.4	4.4	4.6	4.8	5.4	5.4	5.9
20 ~ 40	3.9	4.0	4.4	4.5	4.5	4.7	5.0	5.6	5.6	6.2
40 ~ 60	4.0	4.1	4.5	4.6	4.7	4.9	5.1	5.8	5.9	6.4
60 ~ 80	4.0	4.2	4.6	4.7	4.8	5.1	5.4	6.0	6.1	6.6
80 ~ 100	4.1	4.3	4.7	4.8	4.9	5.3	5.6	6.2	6.3	6.9
100 ~ 120	4.2	4.4	4.9	5.0	5.0	5.5	5.7	6.5	6.6	6.9
120 ~ 140	4.3	4.5	5.1	5.1	5.1	5.6	5.9	6.8	6.9	7.2
140 ~ 160	4.4	4.6	5.2	5.2	5.3	5.8	6.1	7.0	7.1	7.4

Constants of dn/dt		
D <sub>0</sub>	D <sub>1</sub>	D <sub>2</sub>
2.69E-06	1.08E-08	-1.22E-11
E <sub>0</sub>	E <sub>1</sub>	$\lambda_{TK}$
6.81E-07	9.88E-10	1.72E-01