

<b>H-ZLaF66A 801350</b>	$n_d = 1.80100$	$v_d = 34.97$	$n_F - n_C = 0.022907$
	$n_e = 1.80642$	$v_e = 34.72$	$n_{F'} - n_{C'} = 0.023227$

Refractive Indices		
	$\lambda$ (nm)	$n_\lambda$
$n_{2325}$	2325.42	1.75440
$n_{1970}$	1970.09	1.76062
$n_{1530}$	1529.58	1.76782
$n_{1129}$	1128.64	1.77518
$n_{1064}$	1064.00	1.77667
$n_t$	1013.98	1.77795
$n_s$	852.11	1.78317
$n_{A'}$	768.19	1.78697
$n_r$	706.52	1.79058
$n_C$	656.27	1.79427
$n_{C'}$	643.85	1.79533
$n_{He-Ne}$	632.80	1.79632
$n_D$	589.29	1.80079
$n_d$	587.56	1.80100
$n_e$	546.07	1.80642
$n_F$	486.13	1.81718
$n_{F'}$	479.99	1.81855
$n_g$	435.84	1.83064
$n_h$	404.66	1.84242
$n_i$	365.01	1.86397

Constants of Dispersion Formula	
$A_0$	3.14021962E+00
$A_1$	-1.26812790E-02
$A_2$	3.37217299E-02
$A_3$	1.19133791E-03
$A_4$	-2.03909360E-05
$A_5$	7.64423823E-06

Density	
$\rho$ (g/cm <sup>3</sup> )	3.76

Solarization	
$\Delta\lambda$ (%)	-1.3

Relative Partial Dispersion	
$P_{d,C}$	0.2938
$P_{e,d}$	0.2366
$P_{g,F}$	0.5876
$P'_{d,c'}$	0.2441
$P'_{e,d}$	0.2333
$P'_{g,F'}$	0.5205

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0012
$\Delta P_{g,F}$	0.0021
$\Delta P_{C,t}$	0.0029
$\Delta P_{C,s}$	0.0002

Thermal Properties	
Tg (°C)	677
Ts (°C)	719
T <sub>10</sub> <sup>14.5</sup> (°C)	618
T <sub>10</sub> <sup>13</sup> (°C)	668
$\alpha_{50/80^\circ C}$ (10 <sup>-7</sup> /K)	76
$\alpha_{100/300^\circ C}$ (10 <sup>-7</sup> /K)	93
$\lambda$ (W/(m·K))	1.15

Mechanical Properties	
HK (10 <sup>7</sup> Pa)	640
F <sub>A</sub>	128
E (GPa)	111.6
G (GPa)	42.1
$\mu$	0.324
$\sigma_b$ (MPa)	86.9
B (10 <sup>-12</sup> /Pa)	1.64

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

Expansion Coefficient $\alpha$ (×10 <sup>-7</sup> /K)	
°C	$\alpha$
-50/-40	66
-40/-30	69
-30/-20	71
-20/-10	72
-10/0	74
0/10	74
10/20	75
20/30	76
30/40	77
40/50	78
50/60	78
60/70	79
70/80	79
80/90	80
90/100	81
100/110	82
110/120	83
120/130	85
130/140	86
140/150	87
150/160	88

Internal Transmittance		
$\lambda$ (nm)	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.936	0.876
2200	0.979	0.958
2000	0.991	0.983
1800	0.996	0.992
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	0.997	0.994
500	0.994	0.989
480	0.991	0.983
460	0.987	0.975
440	0.982	0.963
420	0.970	0.942
400	0.946	0.895
390	0.920	0.845
380	0.866	0.751
370	0.748	0.558
360	0.491	0.241
350	0.155	0.024
340		
330		
320		
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	425/355
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	387/354

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	3.2	3.8	4.1	4.2	4.3	4.5	4.8	5.5	5.6	6.5
-40 ~ -20	3.3	3.9	4.2	4.3	4.3	4.6	5.1	5.7	5.8	6.9
-20 ~ 0	3.3	3.8	4.3	4.4	4.4	4.8	5.4	5.9	6.0	7.0
0 ~ 20	3.4	4.0	4.4	4.5	4.6	5.0	5.7	6.1	6.1	7.4
20 ~ 40	3.6	4.1	4.6	4.6	4.7	5.0	5.8	6.3	6.3	7.6
40 ~ 60	3.7	4.3	4.8	4.8	4.8	5.3	5.9	6.4	6.5	8.0
60 ~ 80	3.8	4.5	4.8	4.9	4.9	5.4	6.1	6.6	6.6	8.1
80 ~ 100	3.8	4.5	4.9	5.0	5.1	5.5	6.1	6.8	6.9	8.4
100 ~ 120	4.0	4.7	5.0	5.1	5.2	5.6	6.3	7.1	7.1	8.6
120 ~ 140	4.1	4.8	5.2	5.3	5.3	5.8	6.4	7.2	7.2	8.8
140 ~ 160	4.3	4.9	5.4	5.5	5.5	6.0	6.6	7.3	7.4	9.0

Constants of dn/dt		
D <sub>0</sub>	D <sub>1</sub>	D <sub>2</sub>
2.52E-06	1.35E-08	-2.56E-11
E <sub>0</sub>	E <sub>1</sub>	$\lambda_{TK}$
7.53E-07	7.09E-10	2.67E-01