

H-ZLaF60GT 850323

$n_d = 1.85026$	$v_d = 32.27$	$n_F - n_C = 0.026349$
$n_e = 1.85649$	$v_e = 32.05$	$n_{F'} - n_{C'} = 0.026727$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.79843
n_{1970}	1970.09	1.80513
n_{1530}	1529.58	1.81293
n_{1129}	1128.64	1.82100
n_{1064}	1064.00	1.82266
n_t	1013.98	1.82407
n_s	852.11	1.82993
$n_{A'}$	768.19	1.83424
n_r	706.52	1.83835
n_C	656.27	1.84259
$n_{C'}$	643.85	1.84379
n_{He-Ne}	632.80	1.84491
n_D	589.29	1.85003
n_d	587.56	1.85026
n_e	546.07	1.85649
n_F	486.13	1.86893
$n_{F'}$	479.99	1.87052
n_g	435.84	1.88450
n_h	404.66	1.89819
n_i	365.01	1.92348

Relative Partial Dispersion	
$P_{d,C}$	0.2911
$P_{e,d}$	0.2364
$P_{g,F}$	0.5909
$P'_{d,c'}$	0.2421
$P'_{e,d}$	0.2331
$P'_{g,F'}$	0.5231

Chemical Properties (grade)	
RC (S)	1
RA (S)	1
D_W	1
D_A	1
R_{OH} (S)	1
RP (S)	2

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.942	0.882
2200	0.986	0.959
2000	0.993	0.985
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	0.996	0.994
500	0.993	0.989
480	0.989	0.983
460	0.985	0.974
440	0.979	0.960
420	0.963	0.929
400	0.935	0.877
390	0.904	0.820
380	0.849	0.726
370	0.733	0.541
360	0.476	0.231
350	0.110	0.019
340		
330		
320		
310		
300		
290		
280		

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0003
$\Delta P_{g,F}$	0.0009
$\Delta P_{C,t}$	0.0064
$\Delta P_{C,s}$	0.0026

Expansion Coefficient α ($\times 10^{-7}/K$)	
$^{\circ}C$	α
-50/-40	65
-40/-30	67
-30/-20	70
-20/-10	71
-10/0	71
0/10	73
10/20	74
20/30	75
30/40	76
40/50	77
50/60	77
60/70	78
70/80	79
80/90	80
90/100	81
100/110	82
110/120	83
120/130	84
130/140	85
140/150	86
150/160	87

Thermal Properties	
T_g ($^{\circ}C$)	617
T_s ($^{\circ}C$)	663
$T_{10}^{14.5}$ ($^{\circ}C$)	569
T_{10}^{13} ($^{\circ}C$)	591
$\alpha_{50/80^{\circ}C}$ ($10^{-7}/K$)	73
$\alpha_{100/300^{\circ}C}$ ($10^{-7}/K$)	92
λ (W/(m·K))	1.19

Mechanical Properties	
HK ($10^7 Pa$)	625
F_A	98
E (GPa)	121.5
G (GPa)	46.5
μ	0.307
σ_b (MPa)	89.3
B ($10^{-12}/Pa$)	1.71

Constants of Dispersion Formula	
A_0	3.30260921E+00
A_1	-1.39415408E-02
A_2	3.82606507E-02
A_3	1.95805494E-03
A_4	-1.07295242E-04
A_5	1.47824013E-05

Density		Solarization	
ρ (g/cm ³)	4.00	$\Delta\lambda$ (%)	-0.2

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	3.2	3.7	4.1	4.1	4.2	4.5	4.9	5.8	5.8	6.9
-40 ~ -20	3.1	3.7	4.1	4.1	4.2	4.5	5.0	5.9	5.9	7.1
-20 ~ 0	3.1	3.7	4.2	4.2	4.3	4.7	5.1	6.2	6.2	7.4
0 ~ 20	3.1	3.7	4.2	4.2	4.3	4.6	5.2	6.2	6.2	7.6
20 ~ 40	3.1	3.7	4.3	4.3	4.3	4.8	5.2	6.3	6.3	7.9
40 ~ 60	3.1	3.7	4.3	4.4	4.5	4.8	5.3	6.5	6.5	8.1
60 ~ 80	3.2	3.8	4.4	4.5	4.6	5.0	5.5	6.8	6.8	8.4
80 ~ 100	3.3	3.9	4.5	4.6	4.6	5.2	5.5	7.0	7.0	8.6
100 ~ 120	3.3	4.0	4.6	4.7	4.8	5.3	5.6	7.2	7.2	8.9
120 ~ 140	3.5	4.1	4.7	4.7	4.8	5.6	5.8	7.4	7.4	9.1
140 ~ 160	3.6	4.2	4.8	4.8	4.9	5.7	6.0	7.7	7.7	9.3

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	(395)/355
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	387/353

Constants of dn/dt		
D_0	D_1	D_2
1.56E-06	9.55E-09	-1.73E-11
E_0	E_1	λ_{TK}
8.08E-07	1.02E-09	2.78E-01