H-ZF72B 923189	n_d = 1.92286	υ_d = 18.90	$n_F - n_C$ = 0.048837
	n_e = 1.93429	υ_e = 18.74	$n_{F'} - n_{C'}$ = 0.049853

Refractive Indices

	λ (nm)	n_λ
n_{2325}	2325.42	1.84193
n_{1970}	1970.09	1.85076
n_{1530}	1529.58	1.86140
n_{1129}	1128.64	1.87330
n_{1064}	1064.00	1.87587
n_t	1013.98	1.87811
n_s	852.11	1.88761
$n_{A'}$	768.19	1.89481
n_r	706.52	1.90181
n_C	656.27	1.90916
$n_{C'}$	643.85	1.91127
n_{He-Ne}	632.80	1.91327
n_D	589.29	1.92245
n_d	587.56	1.92286
n_e	546.07	1.93429
n_F	486.13	1.95800
$n_{F'}$	479.99	1.96112
n_g	435.84	1.98974
n_h	404.66	2.01970
n_i	365.01	

Relative Partial Dispersion

$P_{d,C}$	0.2805
$P_{e,d}$	0.2340
$P_{g,F}$	0.6499
$P'_{d,c'}$	0.2325
$P'_{e,d}$	0.2293
$P'_{g,F'}$	0.5741

Deviation of Relative Partial Dispersions

$\triangle P_{F,e}$	0.0057
$\triangle P_{g,F}$	0.0377
$\triangle P_{C,t}$	0.0041
$\triangle P_{C,s}$	-0.0045

Thermal Properties

Tg (℃)	656
Ts (℃)	684
$T_{10}^{14.5}$ (℃)	585
T_{10}^{13} (℃)	634
$\alpha_{-50/80℃}$ (10^{-7}/K)	66
$\alpha_{100/300℃}$ (10^{-7}/K)	82
λ (W/(m K))	1.13

Mechanical Properties

HK (10^7Pa)	488
F_A	206
E (GPa)	100.3
G (GPa)	40.3
μ	0.243
σ_b (MPa)	56
B (10^{-12}/Pa)	3.24

Chemical Properties (grade)

RC (S)	1
RA (S)	1
D_W	1
D_A	1
R_{OH} (S)	1
RP (S)	1
CR	

Expansion Coefficient α (×10^{-7}/K)

℃	α
-50/-40	57
-40/-30	60
-30/-20	62
-20/-10	64
-10/0	66
0/10	67
10/20	68
20/30	69
30/40	70
40/50	71
50/60	71
60/70	72
70/80	72
80/90	73
90/100	73
100/110	74
110/120	74
120/130	75
130/140	76
140/150	77
150/160	78

Internal Transmittance

λ (nm)	τ5mm	τ10mm
2400	0.983	0.966
2200	0.995	0.990
2000	0.997	0.994
1800	0.997	0.994
1600	0.997	0.994
1400	0.997	0.994
1200	0.997	0.994
1060	0.997	0.994
1000	0.997	0.994
950	0.997	0.994
900	0.997	0.994
850	0.997	0.994
800	0.997	0.994
750	0.997	0.994
700	0.997	0.994
650	0.997	0.994
600	0.997	0.994
550	0.990	0.981
500	0.973	0.954
480	0.966	0.938
460	0.954	0.915
440	0.933	0.875
420	0.890	0.788
400	0.642	0.410
390	0.253	0.066
380		
370		
360		
350		
340		
330		
320		
310		
300		
290		
280		

Constants of Dispersion Formula

A_0	3.47907547E+00
A_1	-1.82056514E-02
A_2	6.44069814E-02
A_3	4.67488595E-03
A_4	-2.34014347E-04
A_5	6.37833754E-05

Density

ρ (g/cm^3)	3.57

Solarization

$\triangle\lambda$ (%)	-0.4

Coloration Code

$\lambda_{80}(\lambda_{70})/\lambda_5$	(440)/385

Coloration of Internal Transmittance

$\lambda\tau_{80}/\lambda\tau_5$	422/389

Temperature Coefficients of Refractive Index

dn/dt relative (×10^{-6} / ℃)

Range of Temperature (℃)	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	-0.5	0.3	0.8	0.9	1.0	1.4	2.2	4.3	4.4	6.7
-40 ~ -20	-0.3	0.3	0.9	1.0	1.1	1.6	2.5	4.5	4.6	7.0
-20 ~ 0	-0.1	0.4	1.1	1.2	1.3	1.9	2.9	4.9	5.0	8.0
0 ~ 20	-0.1	0.5	1.2	1.3	1.6	2.1	3.1	5.3	5.5	8.6
20 ~ 40	0.0	0.6	1.6	1.7	1.8	2.4	3.3	5.7	6.0	9.4
40 ~ 60	0.2	0.8	1.8	1.8	2.0	2.6	3.6	6.3	6.5	9.9
60 ~ 80	0.3	1.0	1.9	2.0	2.2	2.9	4.0	6.8	7.0	10.7
80 ~ 100	0.5	1.2	2.1	2.3	2.4	3.1	4.3	7.3	7.5	11.1
100 ~ 120	0.6	1.4	2.3	2.4	2.5	3.3	4.6	7.8	8.0	11.9
120 ~ 140	0.6	1.5	2.5	2.6	2.8	3.6	4.8	8.2	8.3	12.4
140 ~ 160	0.7	1.7	2.7	2.9	3.0	3.8	5.1	8.6	8.7	12.8

Constants of dn/dt

D_0	D_1	D_2
-3.91E-06	1.21E-08	-2.37E-11
E_0	E_1	λ_{TK}
1.14E-06	1.61E-09	3.25E-01

NHG