

H-ZF12	762266	$n_d = 1.76182$	$v_d = 26.61$	$n_F - n_C = 0.028631$
		$n_e = 1.76857$	$v_e = 26.39$	$n_{F'} - n_{C'} = 0.029118$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.70927
n_{1970}	1970.09	1.71556
n_{1530}	1529.58	1.72304
n_{1129}	1128.64	1.73106
n_{1064}	1064.00	1.73276
n_t	1013.98	1.73422
n_s	852.11	1.74028
$n_{A'}$	768.19	1.74478
n_r	706.52	1.74912
n_C	656.27	1.75359
$n_{C'}$	643.85	1.75487
n_{He-Ne}	632.80	1.75608
n_D	589.29	1.76157
n_d	587.56	1.76182
n_e	546.07	1.76857
n_F	486.13	1.78222
$n_{F'}$	479.99	1.78399
n_g	435.84	1.79975
n_h	404.66	1.81558
n_i	365.01	1.84562

Constants of Dispersion Formula	
A_0	2.98048977E+00
A_1	-1.22396125E-02
A_2	3.91094110E-02
A_3	1.60680583E-03
A_4	1.39107243E-06
A_5	1.34851004E-05

Density	
ρ (g/cm ³)	3.16

Solarization	
$\Delta\lambda$ (%)	-0.3

Relative Partial Dispersion	
$P_{d,C}$	0.2875
$P_{e,d}$	0.2358
$P_{g,F}$	0.6123
$P'_{d,c'}$	0.2387
$P'_{e,d}$	0.2318
$P'_{g,F'}$	0.5412

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0012
$\Delta P_{g,F}$	0.0129
$\Delta P_{C,t}$	0.0075
$\Delta P_{C,s}$	0.0006

Thermal Properties	
T_g (°C)	618
T_s (°C)	651
$T_{10}^{14.5}$ (°C)	544
T_{10}^{13} (°C)	590
$\alpha_{50/80^\circ C}$ (10 ⁻⁷ /K)	85
$\alpha_{100/300^\circ C}$ (10 ⁻⁷ /K)	106
λ (W/(m·K))	1.10

Mechanical Properties	
HK (10 ⁷ Pa)	545
F_A	158
E (GPa)	92.3
G (GPa)	36.0
μ	0.283
σ_b (MPa)	77.3
B (10 ⁻¹² /Pa)	2.85

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

Expansion Coefficient α (×10 ⁻⁷ /K)	
°C	α
-50/-40	76
-40/-30	78
-30/-20	81
-20/-10	82
-10/0	83
0/10	84
10/20	84
20/30	85
30/40	86
40/50	86
50/60	87
60/70	88
70/80	89
80/90	90
90/100	91
100/110	92
110/120	93
120/130	95
130/140	96
140/150	98
150/160	99

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.935	0.874
2200	0.956	0.914
2000	0.979	0.958
1800	0.986	0.972
1600	0.995	0.990
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	0.998	0.996
500	0.995	0.990
480	0.991	0.982
460	0.987	0.974
440	0.983	0.966
420	0.969	0.939
400	0.923	0.849
390	0.849	0.718
380	0.711	0.508
370	0.355	0.129
360		
350		
340		
330		
320		
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	415/365
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	391/365

Range of Temperature (°C)	Temperature Coefficients of Refractive Index									
	dn/dt relative (×10 ⁻⁶ / °C)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	0.3	0.9	1.3	1.3	1.4	1.7	2.1	3.2	3.2	4.5
-40 ~ -20	0.3	0.9	1.4	1.4	1.5	1.7	2.2	3.3	3.3	4.7
-20 ~ 0	0.3	1.0	1.4	1.4	1.5	1.9	2.2	3.5	3.5	4.9
0 ~ 20	0.3	1.0	1.5	1.5	1.6	1.9	2.4	3.8	3.8	5.2
20 ~ 40	0.3	1.0	1.5	1.5	1.6	1.9	2.5	3.8	3.8	5.5
40 ~ 60	0.4	1.1	1.6	1.6	1.6	2.2	2.6	4.1	4.1	5.8
60 ~ 80	0.4	1.3	1.8	1.8	1.8	2.3	2.8	4.3	4.3	6.1
80 ~ 100	0.4	1.3	1.9	1.9	1.9	2.4	3.0	4.5	4.5	6.3
100 ~ 120	0.6	1.4	2.0	2.0	2.0	2.6	3.2	4.8	4.8	6.5
120 ~ 140	0.8	1.6	2.2	2.2	2.3	2.8	3.4	5.0	5.0	6.7
140 ~ 160	1.0	1.8	2.3	2.4	2.5	3.1	3.6	5.3	5.3	7.0

Constants of dn/dt		
D_0	D_1	D_2
-2.98E-06	1.11E-08	-1.51E-11
E_0	E_1	λ_{TK}
9.37E-07	9.52E-10	2.89E-01