

H-ZF52N	847238	$n_d = 1.84666$	$v_d = 23.78$	$n_F - n_C = 0.035608$
		$n_e = 1.85504$	$v_e = 23.59$	$n_{F'} - n_{C'} = 0.036247$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.78524
n_{1970}	1970.09	1.79201
n_{1530}	1529.58	1.80020
n_{1129}	1128.64	1.80936
n_{1064}	1064.00	1.81133
n_t	1013.98	1.81304
n_s	852.11	1.82028
$n_{A'}$	768.19	1.82573
n_r	706.52	1.83101
n_C	656.27	1.83649
$n_{C'}$	643.85	1.83807
n_{He-Ne}	632.80	1.83956
n_D	589.29	1.84635
n_d	587.56	1.84666
n_e	546.07	1.85504
n_F	486.13	1.87210
$n_{F'}$	479.99	1.87431
n_g	435.84	1.89416
n_h	404.66	1.91418
n_i	365.01	1.95237

Constants of Dispersion Formula	
A_0	3.25093122E+00
A_1	-1.35032313E-02
A_2	4.90304607E-02
A_3	2.49344608E-03
A_4	-1.81762799E-05
A_5	1.94686410E-05

Density		Solarization	
ρ (g/cm ³)	3.54	$\Delta\lambda$ (%)	-1.2

Relative Partial Dispersion	
$P_{d,C}$	0.2856
$P_{e,d}$	0.2353
$P_{g,F}$	0.6195
$P'_{d,c'}$	0.2370
$P'_{e,d}$	0.2312
$P'_{g,F'}$	0.5476

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0020
$\Delta P_{g,F}$	0.0154
$\Delta P_{C,t}$	0.0032
$\Delta P_{C,s}$	-0.0022

Thermal Properties	
Tg (°C)	632
Ts (°C)	662
T ₁₀ ^{14.5} (°C)	582
T ₁₀ ¹³ (°C)	608
$\alpha_{50/80^\circ C}$ (10 ⁻⁷ /K)	83
$\alpha_{100/300^\circ C}$ (10 ⁻⁷ /K)	101
λ (W/(m·K))	1.04

Mechanical Properties	
HK (10 ⁷ Pa)	531
F _A	176
E (GPa)	96.1
G (GPa)	38.1
μ	0.262
σ_b (MPa)	56.1
B (10 ⁻¹² /Pa)	2.54

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	75
-40/-30	78
-30/-20	79
-20/-10	81
-10/0	82
0/10	83
10/20	84
20/30	85
30/40	85
40/50	86
50/60	86
60/70	87
70/80	87
80/90	88
90/100	89
100/110	90
110/120	92
120/130	93
130/140	94
140/150	96
150/160	97

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.962	0.925
2200	0.980	0.961
2000	0.992	0.985
1800	0.997	0.994
1600	0.999	0.999
1400	0.999	0.999
1200	0.999	0.999
1060	0.999	0.999
1000	0.999	0.999
950	0.999	0.999
900	0.999	0.999
850	0.999	0.999
800	0.999	0.999
750	0.999	0.999
700	0.999	0.999
650	0.999	0.999
600	0.999	0.999
550	0.997	0.995
500	0.993	0.986
480	0.990	0.980
460	0.985	0.971
440	0.977	0.954
420	0.958	0.918
400	0.911	0.830
390	0.843	0.710
380	0.671	0.450
370	0.332	0.110
360		
350		
340		
330		
320		
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	(404)/368
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	398/368

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	-1.0	-0.9	0.0	0.5	0.5	0.7	1.0	1.6	1.7	3.0
-40 ~ -20	-0.9	-0.9	0.0	0.5	0.6	0.8	1.1	1.9	2.0	3.6
-20 ~ 0	-0.7	-0.8	0.1	0.5	0.6	0.9	1.3	2.4	2.5	4.0
0 ~ 20	-0.7	-0.7	0.2	0.6	0.7	0.9	1.4	2.7	3.1	4.4
20 ~ 40	-0.7	-0.6	0.4	0.7	0.7	1.0	1.6	3.1	3.7	4.8
40 ~ 60	-0.7	-0.6	0.4	0.7	0.7	1.0	1.9	3.5	4.0	5.3
60 ~ 80	-0.7	-0.6	0.4	0.7	0.8	1.2	2.1	3.8	4.3	5.7
80 ~ 100	-0.6	-0.6	0.5	0.7	0.8	1.3	2.1	4.1	4.6	6.1
100 ~ 120	-0.6	-0.5	0.5	0.8	0.9	1.3	2.2	4.4	4.8	6.5
120 ~ 140	-0.6	-0.4	0.7	0.8	1.0	1.5	2.3	4.7	5.0	6.9
140 ~ 160	-0.7	-0.4	0.8	0.9	1.1	1.9	2.5	5.1	5.4	7.2

Constants of dn/dt		
D ₀	D ₁	D ₂
-5.25E-06	7.18E-09	-2.89E-11
E ₀	E ₁	λ_{TK}
1.16E-06	2.39E-09	2.61E-01