

H-ZF12GT 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	0.962	0.926
2200	0.980	0.960
2000	0.992	0.984
1800	0.999	0.998
1600	0.999	0.998
1400	0.999	0.998
1200	0.999	0.998
1060	0.999	0.998
1000	0.999	0.998
950	0.999	0.998
900	0.999	0.998
850	0.999	0.998
800	0.999	0.998
750	0.999	0.998
700	0.999	0.998
650	0.998	0.996
600	0.998	0.996
550	0.997	0.994
500	0.993	0.987
480	0.991	0.983
460	0.988	0.977
440	0.984	0.969
420	0.975	0.951
400	0.946	0.895
390	0.901	0.812
380	0.767	0.588
370	0.458	0.210
360	0.105	0.011
350		
340		
330		
320		
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	410/365
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	389/362

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