

<b>H-ZF62GT      923209</b>	$n_d = 1.92286$	$v_d = 20.88$	$n_F - n_C = 0.044198$
	$n_e = 1.93323$	$v_e = 20.71$	$n_{F'} - n_{C'} = 0.045071$

Refractive Indices		
	$\lambda$ (nm)	$n_\lambda$
$n_{2325}$	2325.42	1.84761
$n_{1970}$	1970.09	1.85605
$n_{1530}$	1529.58	1.86617
$n_{1129}$	1128.64	1.87734
$n_{1064}$	1064.00	1.87974
$n_t$	1013.98	1.88181
$n_s$	852.11	1.89061
$n_{A'}$	768.19	1.89723
$n_r$	706.52	1.90366
$n_C$	656.27	1.91038
$n_{C'}$	643.85	1.91231
$n_{He-Ne}$	632.80	1.91413
$n_D$	589.29	1.92248
$n_d$	587.56	1.92286
$n_e$	546.07	1.93323
$n_F$	486.13	1.95457
$n_{F'}$	479.99	1.95738
$n_g$	435.84	1.98274
$n_h$	404.66	2.00892
$n_i$	365.01	

Constants of Dispersion Formula	
$A_0$	3.49733468E+00
$A_1$	-1.75493772E-02
$A_2$	5.99594355E-02
$A_3$	3.90005481E-03
$A_4$	-1.39531497E-04
$A_5$	4.41807948E-05

Density	
$\rho$ (g/cm <sup>3</sup> )	3.93

Solarization	
$\Delta\lambda$ (%)	-0.4

Relative Partial Dispersion	
$P_{d,C}$	0.2824
$P_{e,d}$	0.2346
$P_{g,F}$	0.6374
$P'_{d,c'}$	0.2341
$P'_{e,d}$	0.2301
$P'_{g,F'}$	0.5627

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0042
$\Delta P_{g,F}$	0.0284
$\Delta P_{C,t}$	0.0051
$\Delta P_{C,s}$	-0.0032

Thermal Properties	
T <sub>g</sub> (°C)	690
T <sub>s</sub> (°C)	725
T <sub>10</sub> <sup>14.5</sup> (°C)	625
T <sub>10</sub> <sup>13</sup> (°C)	664
$\alpha_{-50/80^\circ C}$ (10 <sup>-7</sup> /K)	61
$\alpha_{100/300^\circ C}$ (10 <sup>-7</sup> /K)	74
$\lambda$ (W/(m·K))	0.99

Mechanical Properties	
HK (10 <sup>7</sup> Pa)	485
F <sub>A</sub>	228
E (GPa)	98.0
G (GPa)	39.0
$\mu$	0.257
$\sigma_b$ (MPa)	70.5
B (10 <sup>-12</sup> /Pa)	2.85

Chemical Properties (grade)	
RC (S)	1
RA (S)	1
D <sub>W</sub>	1
D <sub>A</sub>	1
R <sub>OH</sub> (S)	1
RP (S)	1

Expansion Coefficient $\alpha$ (×10 <sup>-7</sup> /K)	
°C	$\alpha$
-50/-40	54
-40/-30	56
-30/-20	58
-20/-10	60
-10/0	61
0/10	62
10/20	62
20/30	63
30/40	63
40/50	64
50/60	64
60/70	65
70/80	65
80/90	65
90/100	67
100/110	67
110/120	68
120/130	70
130/140	70
140/150	72
150/160	72

Internal Transmittance		
$\lambda$ (nm)	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.961	0.924
2200	0.984	0.969
2000	0.999	0.998
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	0.997
600	0.997	0.995
550	0.997	0.994
500	0.991	0.983
480	0.988	0.975
460	0.983	0.965
440	0.974	0.949
420	0.945	0.894
400	0.836	0.700
390	0.615	0.378
380	0.245	0.060
370		
360		
350		
340		
330		
320		
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	(415)/382
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	408/380

Range of Temperature (°C)	Temperature Coefficients of Refractive Index									
	dn/dt relative (×10 <sup>-6</sup> / °C)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	-0.4	0.1	0.7	0.7	0.8	1.0	1.6	3.3	3.5	6.2
-40 ~ -20	0.1	0.5	1.0	1.1	1.2	1.5	2.2	3.9	4.1	6.7
-20 ~ 0	0.4	0.7	1.0	1.2	1.3	1.7	2.6	4.4	4.6	7.1
0 ~ 20	0.5	1.0	1.2	1.3	1.5	1.8	2.8	4.8	4.9	7.6
20 ~ 40	0.5	1.2	1.5	1.6	1.7	1.9	3.1	5.2	5.3	8.2
40 ~ 60	0.6	1.3	1.6	1.7	1.8	2.2	3.4	5.7	5.9	8.8
60 ~ 80	0.8	1.5	1.9	2.0	2.2	2.6	3.7	6.2	6.3	9.3
80 ~ 100	1.0	1.7	2.2	2.3	2.5	3.0	4.0	6.5	6.7	9.7
100 ~ 120	1.3	1.9	2.3	2.3	2.5	3.2	4.3	6.7	6.9	10.1
120 ~ 140	1.5	2.0	2.4	2.5	2.6	3.4	4.5	6.9	7.1	10.5
140 ~ 160	1.7	2.1	2.6	2.8	2.9	3.7	4.7	7.1	7.2	10.9

Constants of dn/dt		
D <sub>0</sub>	D <sub>1</sub>	D <sub>2</sub>
-2.92E-06	1.58E-08	-3.18E-11
E <sub>0</sub>	E <sub>1</sub>	$\lambda_{TK}$
8.11E-07	8.16E-10	3.44E-01