

<b>H-ZBaF52</b>	<b>670472</b>	$n_d = 1.67003$	$v_d = 47.20$	$n_F - n_C = 0.014197$
		$n_e = 1.67340$	$v_e = 46.90$	$n_{F'} - n_{C'} = 0.014358$

Refractive Indices		
	$\lambda$ (nm)	$n_\lambda$
$n_{2325}$	2325.42	1.63652
$n_{1970}$	1970.09	1.64169
$n_{1530}$	1529.58	1.64750
$n_{1129}$	1128.64	1.65305
$n_{1064}$	1064.00	1.65411
$n_t$	1013.98	1.65500
$n_s$	852.11	1.65856
$n_{A'}$	768.19	1.66107
$n_r$	706.52	1.66342
$n_C$	656.27	1.66579
$n_{C'}$	643.85	1.66646
$n_{He-Ne}$	632.80	1.66709
$n_D$	589.29	1.66990
$n_d$	587.56	1.67003
$n_e$	546.07	1.67340
$n_F$	486.13	1.67999
$n_{F'}$	479.99	1.68082
$n_g$	435.84	1.68798
$n_h$	404.66	1.69475
$n_i$	365.01	1.70662

Constants of Dispersion Formula	
$A_0$	2.72917137E+00
$A_1$	-1.01247435E-02
$A_2$	2.03135768E-02
$A_3$	5.48969301E-04
$A_4$	-1.03383424E-05
$A_5$	1.79727765E-06

Density	
$\rho$ (g/cm <sup>3</sup> )	3.49

Solarization	
$\Delta\lambda$ (%)	-1.0

Relative Partial Dispersion	
$P_{d,C}$	0.2987
$P_{e,d}$	0.2374
$P_{g,F}$	0.5628
$P'_{d,c'}$	0.2486
$P'_{e,d}$	0.2347
$P'_{g,F'}$	0.4987

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0000
$\Delta P_{g,F}$	-0.0024
$\Delta P_{C,t}$	-0.0088
$\Delta P_{C,s}$	-0.0044

Thermal Properties	
Tg (°C)	605
Ts (°C)	649
T <sub>10</sub> <sup>14.5</sup> (°C)	539
T <sub>10</sub> <sup>13</sup> (°C)	582
$\alpha_{50/80^\circ C}$ (10 <sup>-7</sup> /K)	67
$\alpha_{100/300^\circ C}$ (10 <sup>-7</sup> /K)	83
$\lambda$ (W/(m·K))	1.08

Mechanical Properties	
HK (10 <sup>7</sup> Pa)	626
F <sub>A</sub>	151
E (GPa)	96.3
G (GPa)	37.6
$\mu$	0.279
$\sigma_b$ (MPa)	70.2
B (10 <sup>-12</sup> /Pa)	1.90

Chemical Properties (grade)	
RC (S)	1
RA (S)	3
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	55
-40/-30	59
-30/-20	62
-20/-10	64
-10/0	66
0/10	68
10/20	70
20/30	71
30/40	72
40/50	73
50/60	73
60/70	74
70/80	74
80/90	75
90/100	76
100/110	77
110/120	77
120/130	78
130/140	79
140/150	81
150/160	82

Internal Transmittance		
$\lambda$ (nm)	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.938	0.877
2200	0.970	0.944
2000	0.989	0.978
1800	0.993	0.987
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	0.999	0.998
600	0.999	0.998
550	0.999	0.998
500	0.998	0.996
480	0.996	0.993
460	0.995	0.991
440	0.994	0.988
420	0.992	0.983
400	0.983	0.967
390	0.973	0.947
380	0.952	0.907
370	0.909	0.826
360	0.807	0.652
350	0.596	0.355
340	0.269	0.072
330		
320		
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	380/340
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	369/340

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	3.5	3.9	4.1	4.2	4.3	4.5	4.7	5.2	5.2	5.6
-40 ~ -20	3.5	3.8	4.1	4.2	4.3	4.5	4.7	5.2	5.2	5.6
-20 ~ 0	3.6	3.9	4.1	4.2	4.2	4.5	4.7	5.2	5.3	5.8
0 ~ 20	3.6	3.9	4.1	4.2	4.2	4.5	4.7	5.2	5.3	5.8
20 ~ 40	3.6	3.9	4.0	4.1	4.3	4.5	4.7	5.3	5.4	5.9
40 ~ 60	3.6	4.0	4.1	4.2	4.3	4.5	4.8	5.4	5.5	6.0
60 ~ 80	3.6	4.0	4.1	4.2	4.3	4.6	4.9	5.5	5.6	6.2
80 ~ 100	3.6	4.0	4.2	4.3	4.4	4.6	4.9	5.7	5.8	6.3
100 ~ 120	3.7	4.1	4.4	4.5	4.5	4.6	5.1	6.0	6.1	6.4
120 ~ 140	3.7	4.1	4.5	4.6	4.6	4.7	5.1	6.1	6.2	6.5
140 ~ 160	3.8	4.2	4.6	4.7	4.7	4.7	5.2	6.3	6.4	6.7

Constants of dn/dt		
D <sub>0</sub>	D <sub>1</sub>	D <sub>2</sub>
3.13E-06	9.94E-09	-1.48E-11
E <sub>0</sub>	E <sub>1</sub>	$\lambda_{TK}$
6.71E-07	8.33E-10	2.17E-01