

<b>H-ZLaF56</b>	<b>806333</b>	$n_d = 1.80610$	$v_d = 33.27$	$n_F - n_C = 0.024229$
		$n_e = 1.81184$	$v_e = 33.03$	$n_{F'} - n_{C'} = 0.024579$

Refractive Indices		
	$\lambda$ (nm)	$n_\lambda$
$n_{2325}$	2325.42	1.75788
$n_{1970}$	1970.09	1.76418
$n_{1530}$	1529.58	1.77151
$n_{1129}$	1128.64	1.77906
$n_{1064}$	1064.00	1.78060
$n_t$	1013.98	1.78192
$n_s$	852.11	1.78735
$n_{A'}$	768.19	1.79134
$n_r$	706.52	1.79512
$n_C$	656.27	1.79902
$n_{C'}$	643.85	1.80013
$n_{He-Ne}$	632.80	1.80117
$n_D$	589.29	1.80589
$n_d$	587.56	1.80610
$n_e$	546.07	1.81184
$n_F$	486.13	1.82325
$n_{F'}$	479.99	1.82471
$n_g$	435.84	1.83760
$n_h$	404.66	1.85020
$n_i$	365.01	1.87341

Constants of Dispersion Formula	
$A_0$	3.15298545E+00
$A_1$	-1.28281407E-02
$A_2$	3.50678569E-02
$A_3$	1.45594413E-03
$A_4$	-4.44157215E-05
$A_5$	1.00656359E-05

Density	
$\rho$ (g/cm <sup>3</sup> )	3.56

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

Relative Partial Dispersion	
$P_{d,C}$	0.2922
$P_{e,d}$	0.2369
$P_{g,F}$	0.5923
$P'_{d,c'}$	0.2429
$P'_{e,d}$	0.2335
$P'_{g,F'}$	0.5244

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0009
$\Delta P_{g,F}$	0.0039
$\Delta P_{C,t}$	0.0044
$\Delta P_{C,s}$	0.0014

Thermal Properties	
T <sub>g</sub> (°C)	650
T <sub>s</sub> (°C)	695
T <sub>10</sub> <sup>14.5</sup> (°C)	582
T <sub>10</sub> <sup>13</sup> (°C)	614
$\alpha_{50/80^\circ C}$ (10 <sup>-7</sup> /K)	71
$\alpha_{100/300^\circ C}$ (10 <sup>-7</sup> /K)	89
$\lambda$ (W/(m·K))	1.27

Mechanical Properties	
HK (10 <sup>7</sup> Pa)	617
F <sub>A</sub>	133
E (GPa)	119.0
G (GPa)	46.0
$\mu$	0.295
$\sigma_b$ (MPa)	82.3
B (10 <sup>-12</sup> /Pa)	1.83

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	63
-40/-30	66
-30/-20	68
-20/-10	69
-10/0	70
0/10	71
10/20	72
20/30	73
30/40	74
40/50	74
50/60	75
60/70	76
70/80	76
80/90	78
90/100	79
100/110	80
110/120	81
120/130	82
130/140	83
140/150	84
150/160	86

Internal Transmittance		
$\lambda$ (nm)	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.963	0.930
2200	0.986	0.977
2000	0.998	0.996
1800	0.998	0.996
1600	0.998	0.996
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	0.996	0.991
500	0.991	0.990
480	0.989	0.986
460	0.986	0.980
440	0.981	0.971
420	0.972	0.942
400	0.951	0.900
390	0.925	0.851
380	0.876	0.759
370	0.755	0.559
360	0.474	0.216
350		
340		
330		
320		
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	430/355
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	383/354

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	3.6	4.0	4.4	4.5	4.6	4.9	5.3	6.2	6.3	7.4
-40 ~ -20	3.7	4.0	4.4	4.5	4.6	4.9	5.3	6.3	6.3	7.4
-20 ~ 0	3.8	4.1	4.5	4.6	4.7	5.0	5.4	6.3	6.4	7.5
0 ~ 20	3.8	4.1	4.6	4.6	4.7	5.0	5.4	6.4	6.4	7.5
20 ~ 40	3.8	4.2	4.7	4.7	4.8	5.0	5.5	6.5	6.5	7.7
40 ~ 60	3.8	4.2	4.8	4.8	4.8	5.2	5.7	6.7	6.7	7.9
60 ~ 80	3.8	4.3	4.8	4.9	5.0	5.4	5.9	6.9	7.1	8.3
80 ~ 100	3.8	4.4	4.9	5.0	5.1	5.6	6.1	7.2	7.3	8.5
100 ~ 120	3.8	4.5	5.0	5.1	5.3	5.8	6.3	7.4	7.5	8.7
120 ~ 140	3.9	4.6	5.1	5.3	5.4	5.9	6.4	7.6	7.6	8.8
140 ~ 160	3.9	4.7	5.3	5.4	5.5	6.1	6.6	7.7	7.7	9.0

Constants of dn/dt		
D <sub>0</sub>	D <sub>1</sub>	D <sub>2</sub>
2.40E-06	1.05E-08	-1.57E-11
E <sub>0</sub>	E <sub>1</sub>	$\lambda_{TK}$
8.61E-07	8.63E-10	2.53E-01