

<b>H-ZF7LGT</b>	<b>805255</b>	$n_d = 1.80518$	$v_d = 25.46$	$n_F - n_C = 0.031630$
		$n_e = 1.81263$	$v_e = 25.25$	$n_{F'} - n_{C'} = 0.032180$

Refractive Indices		
	$\lambda$ (nm)	$n_\lambda$
$n_{2325}$	2325.42	1.74928
$n_{1970}$	1970.09	1.75560
$n_{1530}$	1529.58	1.76321
$n_{1129}$	1128.64	1.77158
$n_{1064}$	1064.00	1.77339
$n_t$	1013.98	1.77494
$n_s$	852.11	1.78150
$n_{A'}$	768.19	1.78642
$n_r$	706.52	1.79118
$n_C$	656.27	1.79611
$n_{C'}$	643.85	1.79752
$n_{He-Ne}$	632.80	1.79883
$n_D$	589.29	1.80491
$n_d$	587.56	1.80518
$n_e$	546.07	1.81263
$n_F$	486.13	1.82774
$n_{F'}$	479.99	1.82970
$n_g$	435.84	1.84721
$n_h$	404.66	1.86480
$n_i$	365.01	1.89846

Constants of Dispersion Formula	
$A_0$	3.11898504E+00
$A_1$	-1.24052596E-02
$A_2$	4.32862244E-02
$A_3$	2.26049835E-03
$A_4$	-7.69462999E-05
$A_5$	2.11453139E-05

Density		Solarization	
$\rho$ (g/cm <sup>3</sup> )	3.38	$\Delta\lambda$ (%)	-0.6

Relative Partial Dispersion	
$P_{d,C}$	0.2868
$P_{e,d}$	0.2355
$P_{g,F}$	0.6156
$P'_{d,c'}$	0.2380
$P'_{e,d}$	0.2315
$P'_{g,F'}$	0.5441

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0016
$\Delta P_{g,F}$	0.0142
$\Delta P_{C,t}$	0.0058
$\Delta P_{C,s}$	0.0004

Thermal Properties	
Tg (°C)	606
Ts (°C)	636
T <sub>10</sub> <sup>14.5</sup> (°C)	565
T <sub>10</sub> <sup>13</sup> (°C)	581
$\alpha_{50/80^\circ C}$ (10 <sup>-7</sup> /K)	88
$\alpha_{100/300^\circ C}$ (10 <sup>-7</sup> /K)	109
$\lambda$ (W/(m·K))	0.99

Mechanical Properties	
HK (10 <sup>7</sup> Pa)	523
F <sub>A</sub>	186
E (GPa)	93.6
G (GPa)	36.1
$\mu$	0.296
$\sigma_b$ (MPa)	77
B (10 <sup>-12</sup> /Pa)	2.67

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	80
-40/-30	82
-30/-20	85
-20/-10	87
-10/0	89
0/10	90
10/20	91
20/30	92
30/40	92
40/50	93
50/60	93
60/70	94
70/80	95
80/90	95
90/100	97
100/110	98
110/120	99
120/130	100
130/140	102
140/150	102
150/160	103

Internal Transmittance		
$\lambda$ (nm)	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.951	0.905
2200	0.974	0.949
2000	0.990	0.980
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	0.993
500	0.994	0.988
480	0.992	0.983
460	0.990	0.980
440	0.987	0.971
420	0.977	0.953
400	0.952	0.904
390	0.913	0.830
380	0.815	0.669
370	0.548	0.301
360	0.157	0.025
350		
340		
330		
320		
310		
300		
290		
280		

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	-0.8	-0.2	0.2	0.3	0.4	0.6	1.2	2.4	2.5	3.7
-40~-20	-0.8	-0.1	0.3	0.4	0.4	0.7	1.3	2.5	2.6	4.0
-20~0	-0.8	-0.1	0.3	0.4	0.5	0.8	1.4	2.6	2.7	4.3
0~20	-0.8	-0.1	0.3	0.4	0.5	0.9	1.5	2.9	3.0	4.7
20~40	-0.8	-0.1	0.4	0.5	0.6	1.0	1.6	3.0	3.1	5.0
40~60	-0.7	0.1	0.5	0.6	0.7	1.1	1.8	3.3	3.4	5.3
60~80	-0.7	0.1	0.7	0.8	0.9	1.3	2.0	3.6	3.7	5.7
80~100	-0.6	0.2	0.9	1.0	1.1	1.5	2.1	3.8	3.9	5.9
100~120	-0.4	0.3	1.0	1.1	1.2	1.7	2.3	4.0	4.1	6.1
120~140	-0.3	0.4	1.1	1.2	1.3	1.8	2.4	4.2	4.3	6.4
140~160	-0.2	0.5	1.2	1.3	1.4	2.0	2.6	4.5	4.6	6.7

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	420/365
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	387/361

Constants of dn/dt		
D <sub>0</sub>	D <sub>1</sub>	D <sub>2</sub>
-4.83E-06	1.06E-08	-1.80E-11
E <sub>0</sub>	E <sub>1</sub>	$\lambda_{TK}$
9.79E-07	1.08E-09	2.95E-01