

<b>H-ZF52N</b> <b>847238</b>	$n_d = 1.84666$	$v_d = 23.78$	$n_F - n_C = 0.035608$
	$n_e = 1.85504$	$v_e = 23.59$	$n_{F'} - n_{C'} = 0.036247$

Refractive Indices		
	$\lambda(\text{nm})$	$n_\lambda$
$n_{2325}$	2325.42	1.78524
$n_{1970}$	1970.09	1.79201
$n_{1530}$	1529.58	1.80020
$n_{1129}$	1128.64	1.80936
$n_t$	1013.98	1.81304
$n_s$	852.11	1.82028
$n_{A'}$	768.19	1.82573
$n_r$	706.52	1.83101
$n_C$	656.27	1.83649
$n_{C'}$	643.85	1.83807
$n_{\text{He-Ne}}$	632.80	1.83956
$n_D$	589.29	1.84635
$n_d$	587.56	1.84666
$n_e$	546.07	1.85504
$n_F$	486.13	1.87210
$n_{F'}$	479.99	1.87431
$n_g$	435.84	1.89416
$n_h$	404.66	1.91418
$n_i$	365.01	1.95237

Constants of Dispersion Formula	
$A_0$	3.25093122E+00
$A_1$	-1.35032313E-02
$A_2$	4.90304607E-02
$A_3$	2.49344608E-03
$A_4$	-1.81762799E-05
$A_5$	1.94686410E-05

Relative Partial Dispersions			
$P_{d,C}$	0.2856	$P'_{d,C'}$	0.2370
$P_{e,d}$	0.2353	$P'_{e,d}$	0.2312
$P_{g,F}$	0.6195	$P'_{g,F'}$	0.5477

Range of Temperature (°C)	Temperature Coefficients of Refractive Index						
	dn/dt relative ( $10^{-6} / ^\circ\text{C}$ )						
	t	C'	He-Ne	D	e	F'	g
-40 ~ -20	-0.8	0.4	0.4	0.9	1.4	2.8	4.5
-20 ~ 0	-0.8	0.5	0.6	1.0	1.6	3.1	5.0
0 ~ 20	-0.7	0.6	0.7	1.2	1.8	3.4	5.4
20 ~ 40	-0.7	0.7	0.8	1.3	2.0	3.7	5.8
40 ~ 60	-0.6	0.9	1.0	1.5	2.2	4.0	6.2
60 ~ 80	-0.6	1.0	1.1	1.6	2.4	4.3	6.6

Chemical Properties (grade)	
RC(S)	1
RA(S)	1
$D_w$	1
$D_A$	1
$R_{OH}(S)$	1
RP(S)	1

Thermal Properties	
$T_g(^\circ\text{C})$	618
$T_s(^\circ\text{C})$	656
$T_{10}^{14.5}(^\circ\text{C})$	582
$T_{10}^{13}(^\circ\text{C})$	608
$\alpha_{-50/80^\circ\text{C}}(10^{-7}/\text{K})$	83
$\alpha_{100/300^\circ\text{C}}(10^{-7}/\text{K})$	101

Mechanical Properties	
HK( $10^7\text{Pa}$ )	531
$F_A$	176
$E(10^7\text{Pa})$	9601
$G(10^7\text{Pa})$	3790
$\mu$	0.267
$B(\text{nm}/\text{cm}/10^5\text{Pa})$	2.800

Density	
$\rho(\text{g}/\text{cm}^3)$	3.54

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0020
$\Delta P_{g,F}$	0.0154
$\Delta P_{C,t}$	0.0032
$\Delta P_{C,s}$	-0.0023

Internal Transmittance		
$\lambda(\text{nm})$	$\tau_5\text{mm}$	$\tau_{10}\text{mm}$
2400	0.962	0.925
2200	0.980	0.961
2000	0.992	0.985
1800	0.997	0.994
1600	0.999	0.999
1400	0.999	0.999
1200	0.999	0.999
1060	0.999	0.999
1000	0.999	0.999
900	0.999	0.999
850	0.999	0.999
800	0.999	0.999
750	0.999	0.999
700	0.999	0.999
650	0.999	0.999
600	0.999	0.999
550	0.997	0.995
500	0.993	0.986
480	0.990	0.980
460	0.985	0.971
440	0.977	0.954
420	0.958	0.918
400	0.911	0.830
390	0.843	0.710
380	0.671	0.450
370	0.332	0.110
360		
350		
340		
330		
320		
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	(404)/368

Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	389/368