

## F5 603380.347

$n_d = 1.60342$   
 $n_e = 1.60718$

$v_d = 38.03$   
 $v_e = 37.77$

$n_F - n_C = 0.015867$   
 $n_{F'} - n_{C'} = 0.016078$

### Refractive Indices

	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.56934
$n_{1970.1}$	1970.1	1.57427
$n_{1529.6}$	1529.6	1.57979
$n_{1060.0}$	1060.0	1.58636
$n_t$	1014.0	1.58721
$n_s$	852.1	1.59093
$n_r$	706.5	1.59616
$n_C$	656.3	1.59875
$n_{C'}$	643.8	1.59948
$n_{632.8}$	632.8	1.60017
$n_D$	589.3	1.60328
$n_d$	587.6	1.60342
$n_e$	546.1	1.60718
$n_F$	486.1	1.61461
$n_{F'}$	480.0	1.61556
$n_g$	435.8	1.62381
$n_h$	404.7	1.63176
$n_i$	365.0	1.64606
$n_{334.1}$	334.1	1.66276
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

### Constants of Dispersion Formula

$B_1$	1.310446300
$B_2$	0.196034260
$B_3$	0.966129770
$C_1$	0.009586330
$C_2$	0.0457627627
$C_3$	115.01188300

### Constants of Formula for $dn/dT$

$D_0$	2.13E-06
$D_1$	1.65E-08
$D_2$	-6.98E-11
$E_0$	1.02E-06
$E_1$	6.56E-10
$\lambda_{TK}$ [ $\mu\text{m}$ ]	0.208

### Temperature Coefficients of the Refractive Index

[°C]	$\Delta n_{rel}/\Delta T$ [ $10^{-6}/K$ ]			$\Delta n_{abs}/\Delta T$ [ $10^{-6}/K$ ]		
	1060.0	e	g	1060.0	e	g
-40/-20	2.5	4.0	5.5	0.4	1.8	3.3
+20/+40	3.0	4.6	6.2	1.6	3.2	4.8
+60/+80	3.1	4.8	6.5	2.0	3.7	5.4

### Internal Transmittance $\tau_i$

$\lambda$ [nm]	$\tau_i$ [10mm]	$\tau_i$ [25mm]
2500	0.790	0.550
2325	0.840	0.650
1970	0.940	0.860
1530	0.995	0.987
1060	0.999	0.998
700	0.999	0.997
660	0.998	0.996
620	0.998	0.995
580	0.998	0.995
546	0.998	0.995
500	0.998	0.994
460	0.996	0.991
436	0.996	0.990
420	0.995	0.988
405	0.994	0.985
400	0.993	0.982
390	0.989	0.973
380	0.984	0.960
370	0.971	0.930
365	0.963	0.910
350	0.900	0.760
334	0.620	0.300
320	0.080	0.000
310	0.000	
300		
290		
280		
270		
260		
250		

### Color Code

$\lambda_{80} / \lambda_5$  35/32

### Remarks

lead containing glass type

### Relative Partial Dispersion P

$P_{s,t}$	0.2346
$P_{C,s}$	0.4925
$P_{d,C}$	0.2946
$P_{e,d}$	0.2371
$P_{g,F}$	0.5795
$P_{i,h}$	0.9015

### Relative Partial Dispersion P'

$P'_{s,t}$	0.2315
$P'_{C,s}$	0.5317
$P'_{d,C'}$	0.2451
$P'_{e,d}$	0.2340
$P'_{g,F'}$	0.5131
$P'_{i,h}$	0.8897

### Deviation of Rel. Partial Disp.

#### $\Delta P$ from the normal line

$\Delta P_{C,t}$	0.0017
$\Delta P_{C,s}$	0.0009
$\Delta P_{F,e}$	-0.0001
$\Delta P_{g,F}$	-0.0003
$\Delta P_{i,g}$	-0.0028

### Chemical Properties

CR	1
FR	0
SR	1
AR	2.3
PR	2

### Other Properties

$\alpha_{-30/+70^\circ\text{C}}$ [ $10^{-6}/K$ ]	8.0
$\alpha_{+20/+300^\circ\text{C}}$ [ $10^{-6}/K$ ]	8.9
$T_g$ [°C]	438
$T_{10}^{13}$ [°C]	425
$T_{10}^{7.6}$ [°C]	608
$c_p$ [J/(g·K)]	0.560
$\lambda$ [W/(m·K)]	0.880
$\rho$ [g/cm <sup>3</sup> ]	3.47
$E$ [ $10^3$ N/mm <sup>2</sup> ]	58
$\mu$	0.220
$K$ [ $10^{-6}$ mm <sup>2</sup> /N]	2.92
$HK_{0.1/20}$	450
HG	3