Data Sheet

SCHOTT

N-F2
620364.265

$n_d = 1.62005$	$\nu_d = 36.43$	$n_F - n_C = 0.017020$
$n_e = 1.62408$	$\nu_e = 36.16$	$n_{F'} - n_{C'} = 0.017258$

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.58136
$n_{1970.1}$	1970.1	1.58744
$n_{1529.6}$	1529.6	1.59410
$n_{1060.0}$	1060.0	1.60167
n_t	1014.0	1.60261
n_s	852.1	1.60667
n_r	706.5	1.61229
n_C	656.3	1.61506
$n_{C'}$	643.8	1.61584
$n_{632.8}$	632.8	1.61658
n_D	589.3	1.61990
n_d	587.6	1.62005
n_e	546.1	1.62408
n_F	486.1	1.63208
$n_{F'}$	480.0	1.63310
n_g	435.8	1.64209
n_h	404.7	1.65087
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.39757037
B_2	0.159201403
B_3	1.2686543
C_1	0.00995906143
C_2	0.0546931752
C_3	119.248346

Constants of Dispersion dn/dT

D_0	$4.62 \cdot 10^{-7}$
D_1	$1.17 \cdot 10^{-8}$
D_2	$-2.35 \cdot 10^{-11}$
E_0	$7.47 \cdot 10^{-7}$
E_1	$9.81 \cdot 10^{-10}$
λ_{TK} [µm]	0.263

Internal Transmittance τ_i

λ [nm]	τ_i (10mm)	τ_i (25mm)
2500	0.746	0.480
2325	0.837	0.640
1970	0.950	0.880
1530	0.991	0.977
1060	0.998	0.996
700	0.997	0.992
660	0.996	0.990
620	0.996	0.991
580	0.997	0.993
546	0.997	0.992
500	0.994	0.984
460	0.989	0.973
436	0.985	0.963
420	0.980	0.950
405	0.959	0.900
400	0.946	0.870
390	0.891	0.750
380	0.764	0.510
370	0.480	0.160
365	0.276	0.040
350	0.096	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ_{80}/λ_5	39/36
(*= λ_{70}/λ_5)	

Remarks

Relative Partial Dispersion

$P_{s,t}$	0.2389
$P_{C,s}$	0.4925
$P_{d,C}$	0.2935
$P_{e,d}$	0.2366
$P_{g,F}$	0.5881
$P_{i,h}$	
$P'_{s,t}$	0.2356
$P'_{C',s}$	0.5312
$P'_{d,C'}$	0.2440
$P'_{e,d}$	0.2334
$P'_{g,F'}$	0.5208
$P'_{i,h}$	

Deviation of Relative Partial Dispersions ΔP from the "Normal Line"

$\Delta P_{C,t}$	0.0137
$\Delta P_{C,s}$	0.0047
$\Delta P_{F,e}$	0.0006
$\Delta P_{g,F}$	0.0056
$\Delta P_{i,g}$	

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.1
T_g [°C]	569
$T_{10}^{13.0}$ [°C]	567
$T_{10}^{7.6}$ [°C]	686
c_p [J/(g·K)]	0.810
λ [W/(m·K)]	1.050
ρ [g/cm^3]	2.65
E [10^3 N/mm^2]	82
μ	0.228
K [10^{-6} mm^2/N]	3.03
HK$_{0.1/20}$	600
HG	2
CR	1
FR	0
SR	1
AR	1
PR	1

Temperature Coefficients of Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	**1060.0**	**e**	**g**	**1060.0**	**e**	**g**
-40/ -20	2.0	3.2	4.6	-0.1	1.0	2.3
+20/ +40	2.1	3.5	5.1	0.7	2.0	3.6
+60/ +80	2.2	3.7	5.5	1.1	2.6	4.4