Data Sheet

SCHOTT

F2HT
620364.360

$n_d = 1.62004$	$\nu_d = 36.37$	$n_F - n_C = 0.017050$
$n_e = 1.62408$	$\nu_e = 36.11$	$n_{F'} - n_{C'} = 0.017284$

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.58465
$n_{1970.1}$	1970.1	1.58958
$n_{1529.6}$	1529.6	1.59513
$n_{1060.0}$	1060.0	1.60190
n_t	1014.0	1.60279
n_s	852.1	1.60671
n_r	706.5	1.61227
n_C	656.3	1.61503
$n_{C'}$	643.8	1.61582
$n_{632.8}$	632.8	1.61656
n_D	589.3	1.61989
n_d	587.6	1.62004
n_e	546.1	1.62408
n_F	486.1	1.63208
$n_{F'}$	480.0	1.63310
n_g	435.8	1.64202
n_h	404.7	1.65064
n_i	365.0	1.66623
$n_{334.1}$	334.1	1.68455
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.34533359
B_2	0.209073176
B_3	0.937357162
C_1	0.00997743871
C_2	0.0470450767
C_3	111.886764

Constants of Dispersion dn/dT

D_0	$1.51 \cdot 10^{-6}$
D_1	$1.56 \cdot 10^{-8}$
D_2	$-2.78 \cdot 10^{-11}$
E_0	$9.34 \cdot 10^{-7}$
E_1	$1.04 \cdot 10^{-9}$
λ_{TK} [µm]	0.25

Internal Transmittance τ_i

λ [nm]	τ_i (10mm)	τ_i (25mm)
2500	0.874	0.714
2325	0.912	0.795
1970	0.968	0.921
1530	0.998	0.994
1060	0.999	0.998
700	0.999	0.998
660	0.999	0.997
620	0.999	0.998
580	0.999	0.998
546	0.999	0.998
500	0.999	0.997
460	0.998	0.995
436	0.998	0.994
420	0.997	0.994
405	0.997	0.992
400	0.996	0.991
390	0.995	0.988
380	0.993	0.982
370	0.988	0.971
365	0.983	0.957
350	0.927	0.828
334	0.565	0.240
320	0.080	
310		
300		
290		
280		
270		
260		
250		

Color Code

λ_{80}/λ_5	35/32
(*= λ_{70}/λ_5)	

Remarks

lead containing glass type

Relative Partial Dispersion

$P_{s,t}$	0.2301
$P_{C,s}$	0.4882
$P_{d,C}$	0.2938
$P_{e,d}$	0.2370
$P_{g,F}$	0.5828
$P_{i,h}$	0.9142
$P'_{s,t}$	0.2270
$P'_{C',s}$	0.5270
$P'_{d,C'}$	0.2443
$P'_{e,d}$	0.2338
$P'_{g,F'}$	0.5159
$P'_{i,h}$	0.9018

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

$\Delta P_{C,t}$	0.0008
$\Delta P_{C,s}$	0.0005
$\Delta P_{F,e}$	0.0000
$\Delta P_{g,F}$	0.0002
$\Delta P_{i,g}$	0.0006

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.2
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.2
T_g [°C]	434
$T_{10}^{13.0}$ [°C]	430
$T_{10}^{7.6}$ [°C]	594
c_p [J/(g·K)]	0.557
λ [W/(m·K)]	0.780
ρ [g/cm^3]	3.60
E [10^3 N/mm^2]	57
μ	0.220
K [10^{-6} mm^2/N]	2.81
HK$_{0.1/20}$	420
HG	2
CR	1
FR	0
SR	1
AR	2.3
PR	1.3

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	2.4	3.9	5.5	0.3	1.6	3.2
+20/ +40	2.7	4.4	6.3	1.3	3.0	4.8
+60/ +80	3.0	4.8	6.8	1.9	3.7	5.7