

Near infrared absorption (Color Compensating) Filter



CXA700

t= 0.21

T400 ≥ 85

T1200 ≤ 27

λ (nm)	n	T (%)	τ (%)	A	K ($\times 10^{-4}$)
		0. 21	0. 21		
2500	1. 51167				
2400	1. 51296				
2300	1. 51421				
2200	1. 51541				
2100	1. 51658				
2000	1. 51771				
1900	1. 51882				
1800	1. 51989				
1700	1. 52094				
1600	1. 52197				
1550	1. 52249				
1500	1. 52300				
1450	1. 52351				
1400	1. 52403				
1350	1. 52456				
1300	1. 52509				
1250	1. 52563				
1200	1. 52620	23. 14	25. 29	2. 84	6. 25
1180	1. 52643	21. 22	23. 19	3. 02	6. 53
1160	1. 52666	19. 19	20. 97	3. 23	6. 87
1140	1. 52690	17. 24	18. 84	3. 45	7. 21
1120	1. 52714	15. 45	16. 88	3. 68	7. 55
1100	1. 52738	13. 80	15. 08	3. 91	7. 89
1080	1. 52764	12. 28	13. 42	4. 15	8. 22
1060	1. 52790	10. 87	11. 88	4. 41	8. 56
1040	1. 52816	9. 57	10. 47	4. 67	8. 90
1020	1. 52843	8. 41	9. 20	4. 94	9. 22
1000	1. 52871	7. 36	8. 05	5. 21	9. 55
990	1. 52886	6. 89	7. 53	5. 35	9. 70
980	1. 52900	6. 44	7. 04	5. 49	9. 85
970	1. 52915	6. 02	6. 59	5. 63	10. 00
960	1. 52930	5. 65	6. 18	5. 76	10. 13
950	1. 52945	5. 31	5. 80	5. 89	10. 25
940	1. 52961	4. 99	5. 46	6. 01	10. 36
930	1. 52977	4. 70	5. 14	6. 14	10. 46
920	1. 52993	4. 44	4. 85	6. 26	10. 55
910	1. 53009	4. 20	4. 60	6. 37	10. 62
900	1. 53026	4. 00	4. 37	6. 47	10. 67
890	1. 53043	3. 83	4. 19	6. 56	10. 70
880	1. 53061	3. 70	4. 05	6. 63	10. 69
870	1. 53079	3. 61	3. 94	6. 69	10. 66
860	1. 53097	3. 54	3. 88	6. 72	10. 59
850	1. 53116	3. 53	3. 86	6. 73	10. 49
840	1. 53135	3. 55	3. 88	6. 72	10. 34
830	1. 53155	3. 63	3. 97	6. 67	10. 15
820	1. 53175	3. 77	4. 12	6. 59	9. 91
810	1. 53196	3. 94	4. 31	6. 50	9. 65
800	1. 53217	4. 15	4. 54	6. 40	9. 38
790	1. 53239	4. 52	4. 94	6. 22	9. 00
780	1. 53262	4. 97	5. 44	6. 02	8. 60
770	1. 53285	5. 54	6. 07	5. 79	8. 18
760	1. 53309	6. 35	6. 96	5. 51	7. 68
750	1. 53333	7. 33	8. 03	5. 22	7. 17
740	1. 53359	8. 53	9. 33	4. 90	6. 65
730	1. 53385	10. 10	11. 06	4. 55	6. 09
720	1. 53412	12. 07	13. 21	4. 19	5. 52
710	1. 53440	14. 42	15. 80	3. 82	4. 97
700	1. 53469	17. 22	18. 85	3. 45	4. 43

[illegible]

Specific Gravity	
d	3.06

Chemical Properties	
D_W	1
D_A	5
T_{Blue}	
D_{NaOH}	
D_{STPP}	
D_0	
D_H	

Thermal Properties	
$T_g (^{\circ}\text{C})$	393
$T_s (^{\circ}\text{C})$	439
$T_{10^{14.5}} (^{\circ}\text{C})$	
$T_{10^{13}} (^{\circ}\text{C})$	
$T_{10^{7.6}} (^{\circ}\text{C})$	
$\alpha_{-30/+70^{\circ}\text{C}} (10^{-7}/^{\circ}\text{C})$	125
$\alpha_{100/300^{\circ}\text{C}} (10^{-7}/^{\circ}\text{C})$	151
$\lambda \text{ [W/(m}\cdot\text{K)]}$	
$C_p \text{ [kJ/(kg}\cdot\text{K)]}$	

Mechanical Properties	
H_K	360
F_A	550
E (GPa)	71
G (GPa)	28
μ	0.27
σ_b (MPa)	

Constants of dispersion formula			
A_0	2.3298495	E	0
A_1	-7.5382342	E	-3
A_2	1.5203567	E	-2
A_3	-6.5072645	E	-4
A_4	1.0227068	E	-4
A_5	-4.0731785	E	-6

Refractive Index & ν d		
nC	656. 273	1. 53608
nd	588. 562	1. 53884
nF	486. 133	1. 54505
ν d		60. 07

Chromaticity coordinates		
	T	τ
x	0.280	0.280
y	0.325	0.325

Transmittance ratio		
	T	τ
700nm/500nm	0.191	0.191
600nm/500nm	0.767	0.766
400nm/500nm	0.981	0.984

Remarks	

Date:	2025. 11. 14

CXA700	Standard Thickness	T50% : 633±3	T400 ≥85			T700 ≤20
	t= 0.21					T1200 ≤27

