

Sharp Cut Filter (Colorless)

L-38

Catalog Thickness $t = 2.5$ mm

Reflection Factor $P_d = 0.910$

Diagram-1

Transmittance (T) & Internal Transmittance (τ) units: (%)

λ_{nm}	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	
T																	.74	12.8	43.6	64.8	76.3	82.2	85.3	86.9	88.0	
τ																	.81	14.1	47.9	71.2	83.8	90.3	93.7	95.5	96.7	
λ_{nm}	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650	660	670	680	690	
T	88.6	89.1	89.3	89.6	89.8	90.0	90.1	90.1	90.1	90.2	90.4	90.5	90.6	90.8	90.8	90.8	90.8									
τ	97.4	97.9	98.1	98.5	98.7	98.9	99.0	99.0	99.0	99.1	99.3	99.5	99.6	99.8	99.8	99.8	99.8									
λ_{nm}	700	710	720	730	740	750	800	850	900	950	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400	
T																										
τ																										

Refractive Indices

Symbol	i	h	g	F'	F	e	d	D	C'	C	r	A'	t
λ_{nm}	365.0	404.7	435.8	480.0	486.1	546.1	587.6	589.3	643.8	656.3	706.5	768.2	1,014.0
n	1.586	1.576	1.570	1.564	1.563	1.558	1.555	1.555	1.552	1.551	1.549	1.547	1.542

Abbe-Number

$$\nu_d = \frac{n_d - 1}{n_F - n_C} = 47$$

Color Specifications

	x	y	Y	λ_d	P_e
A	.449	.408	90.5	686	1
C	.312	.319	90.3	572	1
D_{65}	.315	.322	90.4	- 530	3

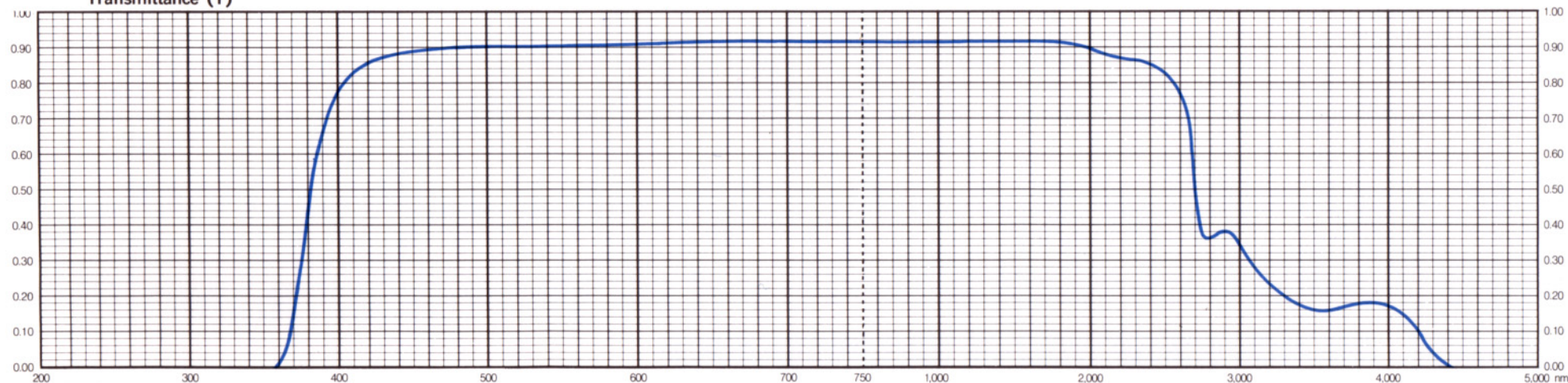
Properties

Chemical		Thermal				Mechanical		Other
D_w	D_A	T_g	T_s	$\alpha_{-30/70}$	$\alpha_{100/300}$	H_k	F_A	S
2	1	480	535	79	86	490	130	2.96

Tolerances of Transmittance (T)

Transition Wavelength	Transition Interval	Average High Transmittance
$\lambda T(nm)$	$\Delta\lambda(nm)$	$T_H(\%)$
380 ± 5	< 35	> 85

Transmittance (T)



All data are mean values of various melts.

HOYA 8304E