

Heat Absorbing Filter

HA-30

Catalog Thickness t= 3.0 mm

Reflection Factor P_d=0.917

Diagram-7

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									.01	.35	3.3	14.7	34.9	55.5	69.7	78.0	83.2	85.2	85.7	85.0	83.2	82.1	81.5	82.0	82.7
τ									.01	.38	3.6	16.0	38.1	60.5	76.0	85.1	90.7	92.9	93.5	92.7	90.7	89.5	88.9	89.4	90.2
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	82.7	82.2	83.0	83.7	84.0	83.9	83.8	83.2	83.2	83.5	84.2	84.2	84.1	83.5	82.4	81.2	79.6	77.5	75.1	72.2	69.2	65.8	62.2	58.3	54.0
τ	90.2	89.6	90.5	91.3	91.6	91.5	91.4	90.7	90.7	91.1	91.8	91.8	91.7	91.1	89.9	88.6	86.8	84.5	81.9	78.7	75.5	71.8	67.8	63.6	58.9
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	49.8	45.3	41.0	36.8	32.7	29.0	12.8	4.1	1.0	.10	.03	.02	.04	.05	.07	.08	.1	.3	.4	.3	.2	.1	.1	.1	.3
τ	54.3	49.4	44.7	40.1	35.7	31.6	14.0	4.5	1.1	.11	.03	.02	.04	.05	.08	.09	.1	.3	.4	.3	.2	.1	.1	.1	.3

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	1.542	1.537	1.534	1.530	1.529	1.526	1.524	1.524	1.522	1.522	1.520	1.519	

Abbe-Number

$$V_d = \frac{n_d - 1}{n_F - n_C} = 69$$

Color Specifications

	x	y	Y	λ _d	P _e
A	.439	.412	81.5	505	2
C	.305	.318	82.3	495	2
D ₆₅	.307	.331	82.4	496	2

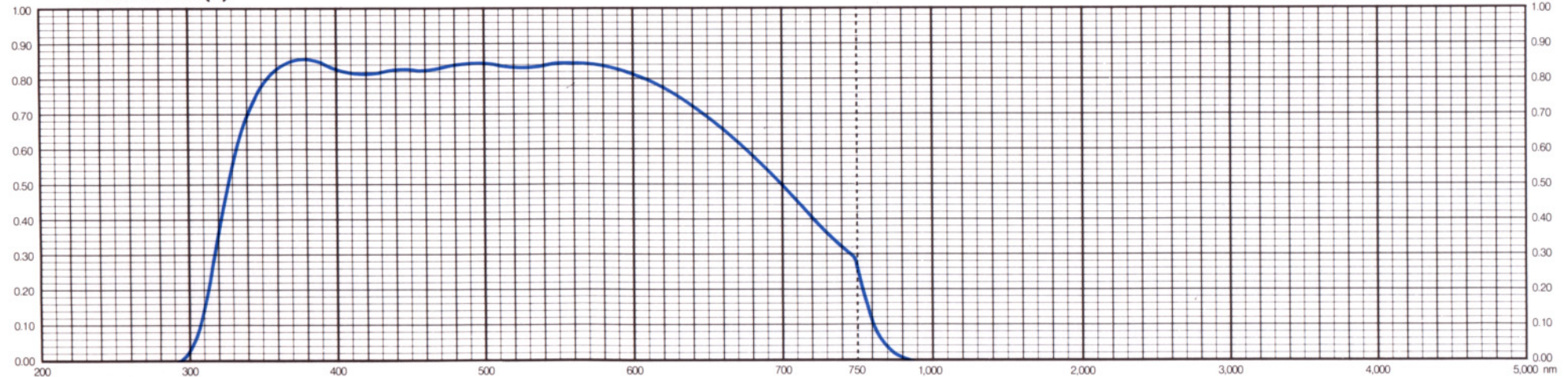
Properties

Chemical		Thermal				Mechanical		Other
D _w	D _A	T _g	T _s	α _{-30/70}	α _{100/300}	H _K	F _A	S
2	1	555	615	58	67	570	140	2.55

Tolerances of Transmittance (T)

Transmittance at 750 nm	Transmittance at 1,000 nm	Average Transmittance at 400 nm-700 nm
T ₇₅₀ (%)	T _{1,000} (%)	T _{av} (%)
< 35	< 1	80 ± 5

Transmittance (T)



All data are mean values of various melts.

HOYA 8304E