

Infrared Transmitting Filter

RM-90

Catalog Thickness $t = 2.5$ mm

Reflection Factor $P_d = 0.904$

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																										
τ																										
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																					$1 \cdot 10^{-3}$	$2 \cdot 10^{-3}$	$4 \cdot 10^{-3}$	$6 \cdot 10^{-3}$.01	.02
τ																					$1 \cdot 10^{-3}$	$2 \cdot 10^{-3}$	$4 \cdot 10^{-3}$	$7 \cdot 10^{-3}$.01	.02
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	.03	.06	.10	.17	.28	.46	3.8	16.4	38.1	59.4	74.5	81.8	86.2	87.1	87.2	87.3	87.5	87.4	87.2	87.6	88.0	87.5	86.8	86.1	85.3	
τ	.03	.07	.11	.19	.31	.51	4.2	18.1	42.1	65.7	82.4	90.5	95.4	96.4	96.5	96.6	96.8	96.7	96.5	96.9	97.3	96.8	96.0	95.2	94.4	

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							(1.580)						

Abbe-Number

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

Color Specifications

	x	y	Y	λ_d	P_e
A	—	—	—	—	—
C	—	—	—	—	—
D_{es}	—	—	—	—	—

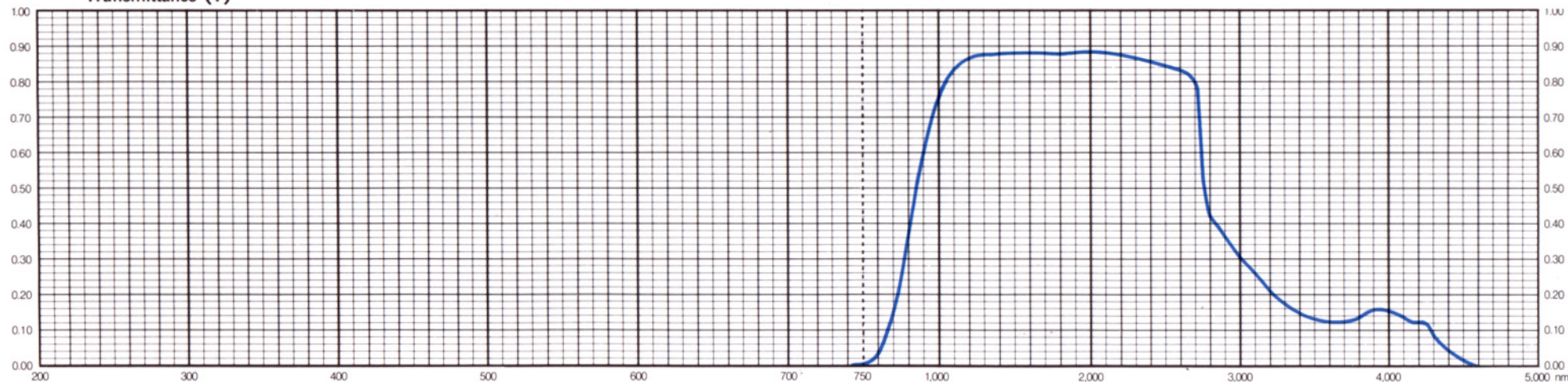
Properties

Chemical		Thermal				Mechanical		Other
D_w	D_A	T_g	T_s	$\alpha_{-30/70}$	$\alpha_{100/300}$	H_k	F_A	S
3	3	440	490	107	125	450	170	3.15

Tolerances of Transmittance (T)

Wavelength for less than 5% Transmittance	Wavelength for over 80% Transmittance
λ_{15} (nm)	λ_{80} (nm)
770	1050

Transmittance (T)



All data are mean values of various melts.

HOYA 8304E