

# Glass Types

<b>HEAT ABSORBING</b>	<b>HEBO</b>	Schott	Hoya
	<b>HA 02</b>	≈ KG 2	≈ HA-50
	<b>HA 03</b>	≈ KG 3	≈ HA-30

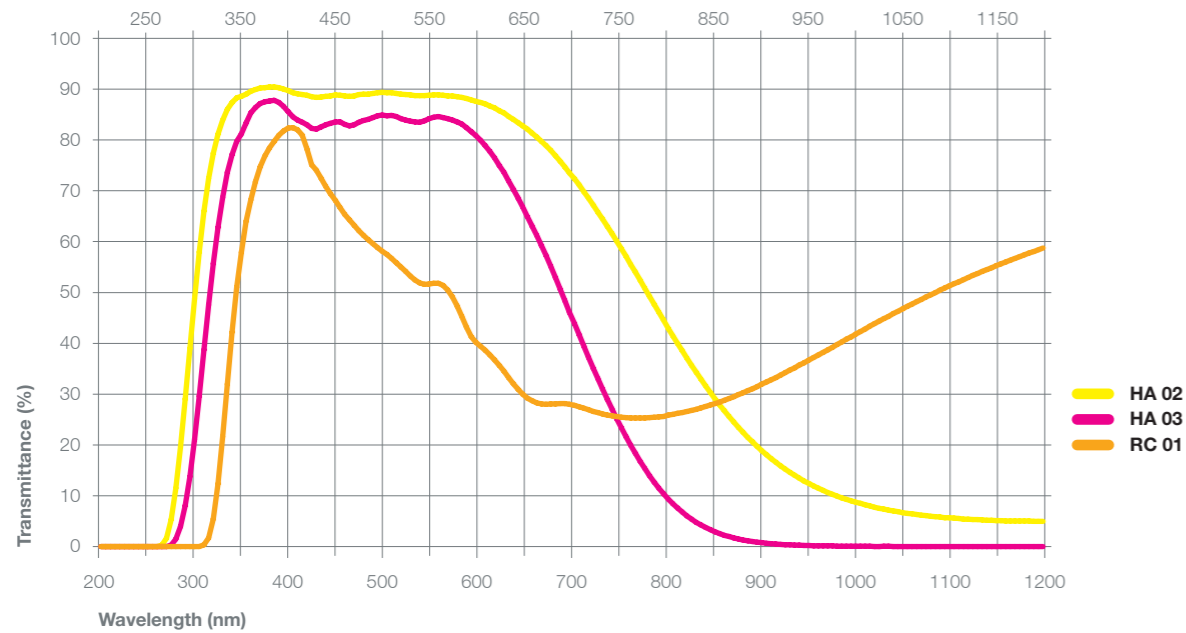
<b>RISING COLOR</b>	<b>HEBO</b>	Schott	Hoya
	<b>RC 01</b>	(≈ BG 34)	≈ LB-120

## Heat Absorbing and Rising Color Glass Characteristics

Type	Thickness (mm)	A[2856K]			D65			Chemical Stability		N <sub>D</sub>	α × 10 <sup>-7</sup> (°C)	T <sub>g</sub> (°C)	T <sub>s</sub> (°C)	ρ (g/cm <sup>3</sup> )
		x	y	Y	x	y	Y	D <sub>A</sub>	D <sub>w</sub>					
<b>HA 02</b>	2	0.440	0.441	93.9	0.331	0.331	92.9	3	2	1.510	59	587	656	2.54
<b>HA 03</b>	2	0.440	0.413	86.5	0.311	0.334	87.4	2	3	1.512	59	587	656	2.55
<b>RC 01</b>	1	0.412	0.427	71.0	0.281	0.330	72.7	2	4	1.521	102	602	672	2.57

Type	Bubbles	Striae	Stress
<b>HA 02</b>	C	3C	4
<b>HA 03</b>	D-C	3C	4

Type	Thickness (mm)	ν (mired)		Bubbles	Striae	Stress
		Standard	Range			
<b>RC 01</b>	1	-130	-130 ± 13	C-B	4	3



	<b>HA 02</b>	<b>HA 03</b>	<b>RC 01</b>
Thickness (mm)	2	2	1
Wavelength (nm)	%T	%T	%T
200	0,001	8·10 <sup>-4</sup>	0,003
210	3·10 <sup>-4</sup>	2·10 <sup>-4</sup>	0,001
220	0,001	5·10 <sup>-4</sup>	0,001
230	0,001	0,002	0,004
240	4·10 <sup>-4</sup>	6·10 <sup>-4</sup>	0,003
250	4·10 <sup>-4</sup>	7·10 <sup>-4</sup>	0,003
260	0,257	8·10 <sup>-4</sup>	0,001
270	5,316	0,288	0,001
280	19,641	3,999	5·10 <sup>-4</sup>
290	39,011	13,765	0,001
300	57,968	29,632	0,032
310	72,430	47,530	1,691
320	81,126	62,757	12,300
330	86,021	73,659	31,986
340	88,274	79,725	51,001
350	89,006	83,329	64,015
360	89,965	86,387	71,767
370	90,308	87,503	76,821
380	90,434	87,804	79,763
390	89,985	86,640	81,790
400	89,331	84,549	82,391
410	88,970	83,469	80,968
420	88,499	82,270	75,119
430	88,465	82,555	72,492
440	88,661	83,273	69,452
450	88,833	83,587	66,666
460	88,574	82,753	64,252
470	88,933	83,519	62,171
480	89,023	84,077	60,351
490	89,293	84,773	58,848
500	89,269	84,787	57,471
510	89,190	84,613	55,826
520	88,935	83,928	54,164
530	88,741	83,524	52,420
540	88,714	83,736	51,617
550	88,886	84,493	51,821
560	88,824	84,434	51,357
570	88,676	83,914	49,117
580	88,393	83,114	45,316
590	87,860	81,676	41,321
600	87,380	79,961	39,416
610	86,695	77,757	37,737
620	85,753	75,005	35,619
630	84,643	71,948	33,259
640	83,434	68,586	30,942
650	82,118	64,950	29,230
660	80,564	61,203	28,311
670	78,860	57,252	28,015
680	76,912	52,956	28,088
690	74,728	48,402	28,108

	<b>HA 02</b>	<b>HA 03</b>	<b>RC 01</b>
Thickness (mm)	2	2	1
Wavelength (nm)	%T	%T	%T
700	72,330	43,858	27,776
710	69,829	39,393	27,213
720	67,178	35,063	26,610
730	64,414	30,979	26,088
740	61,555	27,065	25,711
750	58,606	23,361	25,456
760	55,525	19,928	25,323
770	52,410	16,797	25,289
780	49,220	13,972	25,362
790	46,122	11,500	25,523
800	42,928	9,328	25,884
810	39,982	7,564	26,189
820	37,091	6,040	26,581
830	34,290	4,767	27,026
840	31,619	3,753	27,585
850	29,072	2,897	28,142
900	18,877	0,760	31,932
950	12,408	0,187	36,683
1000	8,702	0,058	41,789
1050	6,675	0,016	46,764
1065	6,290	0,011	48,192
1100	5,649	0,020	51,284
1200	4,969	0,022	58,728
1300	5,288	0,002	65,072
1400	6,372	0,041	70,472
1500	8,373	0,051	73,987
1600	11,282	0,090	77,492
1700	13,998	0,206	79,678
1800	15,155	0,291	81,429
1900	14,640	0,272	83,455
2000	13,587	0,194	84,991
2100	12,894	0,186	86,061
2200	12,444	0,144	86,372
2300	13,575	0,183	86,975
2400	15,864	0,280	87,279
2500	17,980	0,484	87,123
2600	18,981	0,807	87,003
2700	19,392	1,221	85,650
2800	1,716	0,776	64,734
2900	0,230	0,525	61,952
3000	0,153	0,455	62,500