
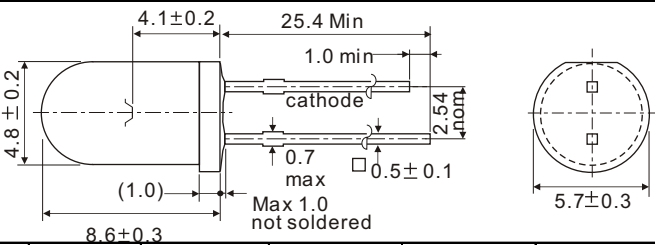



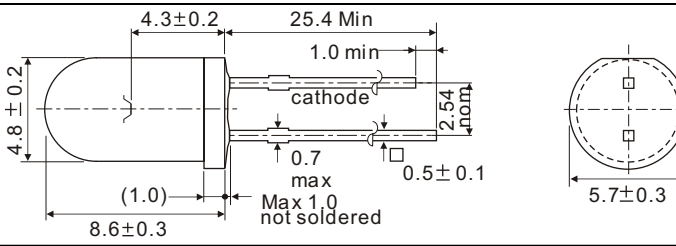
# Extra Bright LEDs

Lamps For Traffic Signal Use.

IF=20mA Ta=25°C

Device No	Color		Wavelength (nm)		VF Typical (V)	Brightness (mcd)		View Angle 2θ1/2
	Emitter	Lens	λp	λd		IV1	IV2	

φ 5									
	HB5d-433BG-C	yellow green	water clear	575	572	2.20	800	1800	24
	HB5d-433BA-C	bluish green	water clear	502	505	3.50	3500	6000	26
	HB5d-433AGCA-C	pure green	water clear	523	525	3.50	4000	6500	26
	HB5d-433AGD-C	pure green	water clear	523	525	3.50	4500	7000	26
	HB5d-434FY-C	yellow	water clear	592	590	2.00	1800	3800	24
	*HB5d-434SY-C	yellow	water clear	592	590	2.00	3000	4800	24
	HB5d-435FO-C	orange	water clear	620	615	2.00	2000	3800	24
	HB5d-435AOR-C	fresh red	water clear	635	626	2.00	1300	3300	24
	*HB5d-435SOR-C	fresh red	water clear	638	629	2.00	4000	4800	24
	HB5d-437FA-C	amber	water clear	607	605	2.00	2400	3800	24
	HB5d-438ABCA-C	blue	water clear	465	470	3.50	2200	2200	26
	HB5d-438ABD-C	blue	water clear	465	470	3.50	2600	2600	26

φ 5									
	HB5d-433BG-D	yellow green	water clear	575	572	2.20	600	1500	30
	HB5d-433BA-D	bluish green	water clear	502	505	3.50	2800	5500	33
	HB5d-433AGCA-D	pure green	water clear	523	525	3.50	3000	5400	33
	HB5d-433AGD-D	pure green	water clear	523	525	3.50	3500	6000	33
	HB5d-434FY-D	yellow	water clear	592	590	2.00	1200	3000	30
	*HB5d-434SY-D	yellow	water clear	592	590	2.00	2700	4000	30
	HB5d-435FO-D	orange	water clear	620	615	2.00	1400	3000	30
	HB5d-435AOR-D	fresh red	water clear	635	626	2.00	1100	2800	30
	*HB5d-435SOR-D	fresh red	water clear	638	629	2.00	3000	4000	30
	HB5d-437FA-D	amber	water clear	607	605	2.00	1600	3000	30
	HB5d-438ABCA-D	blue	water clear	465	470	3.50	1600	1800	33
	HB5d-438ABD-D	blue	water clear	465	470	3.50	2000	2200	33

\*:TS type LED lamps. IV1:Labsphere LED-1100 IV2:EXELTRON 2001.