

Solid State Lamp (LED Lamp Cluster)

General Description

Sharp can supply 5 models of solid state lamps which are divided into 2 types; $\phi 26$ mm series and $\phi 52$ mm series. The radiation color is dichromatic emission type; red(super-luminosity) and yellow-green.

They are suited for LED information displays for outdoor use because they featured water-proof structure and high visibility due to the employment of wide viewing angle high-luminosity LED lamps.

Model Line-up

Radiation color	Radiation shape (mm)	Model No.	Viewing angle	Outline dimensions
Yellow-green+ Red(Super-luminosity)	$\phi 26$	LT6610	$\pm 25^\circ$	1
	26X26(Oval lamp type)	LT6850	Horizontal $\pm 35^\circ$, Vertical $\pm 15^\circ$	2
	$\phi 52$	LT6710	$\pm 25^\circ$	3
	$\phi 52$ (Food-cut type)	LT6725		4
	$\phi 52$ (Food-cut type, Oval lamp type)	LT6750	Horizontal $\pm 35^\circ$, Vertical 15°	5



Absolute Maximum Ratings

($T_a=25^\circ\text{C}$)

Model No.	Radiation color	Power dissipation P (W)	Forward current I_F (mA)	Reverse current V_R (V)	Operating temperature $T_{opr.}$ ($^\circ\text{C}$)	Storage temperature $T_{stg.}$ ($^\circ\text{C}$)
LT6610	Yellow-green	0.6	60	15	-25 to +60	-30 to +100
	Red(Super-luminosity)	0.3	30	15		
LT6850	Yellow-green	0.65	60	15	-25 to +60	-30 to +100
	Red(Super-luminosity)	0.3	30	15		
LT6710	Yellow-green	1.7	90	24	-25 to +60	-30 to +100
	Red(Super-luminosity)	1.1	60	24		
LT6725	Yellow-green	2.3	120	24	-25 to +60	-30 to +100
	Red(Super-luminosity)	0.8	60	24		
LT6750	Yellow-green	2.3	120	24	-25 to +60	-30 to +100
	Red(Super-luminosity)	0.8	60	24		

Electro-optical Characteristics

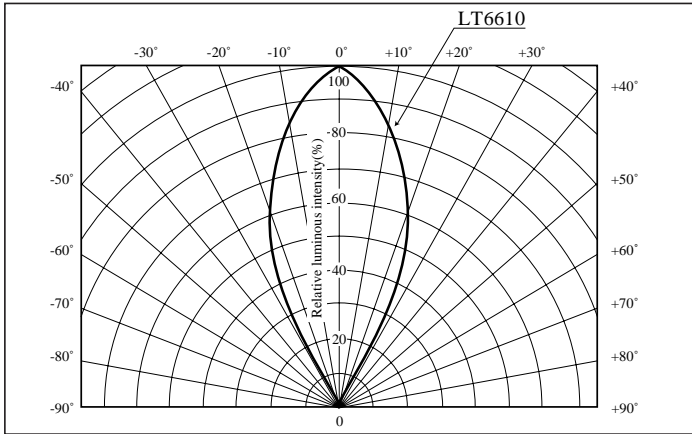
($T_a=25^\circ\text{C}$)

Model No.	Radiation color	Forward voltage V_F (V)		Luminous intensity I_v (cd) TYP.	Peak emission wavelength λ_p (nm) TYP.	Spectrum radiation bandwidth $\Delta\lambda$ (nm) TYP.		Reverse current	
		TYP.	MAX.			I_F (mA)	I_R (μA) MAX.	V_R (V)	
LT6610	Yellow-green	8.5	9.4	0.8	565	30	40	100	15
	Red(Super-luminosity)	9.3	10.2	1.6	660	20	20	100	15
LT6850	Yellow-green	10.8	11.8	1.8	565	30	40	100	15
	Red(Super-luminosity)	9.3	10.3	2.0	660	20	20	100	15
LT6710	Yellow-green	19.0	20.5	3.2	565	30	60	100	24
	Red(Super-luminosity)	18.5	20.0	6.0	660	20	40	100	24
LT6725	Yellow-green	19.0	20.5	5.0	565	30	40	100	24
	Red(Super-luminosity)	13.2	14.0	5.0	660	20	80	100	24
LT6750	Yellow-green	19.0	20.5	5.3	565	30	80	100	24
	Red(Super-luminosity)	13.2	14.0	5.6	660	20	40	100	24

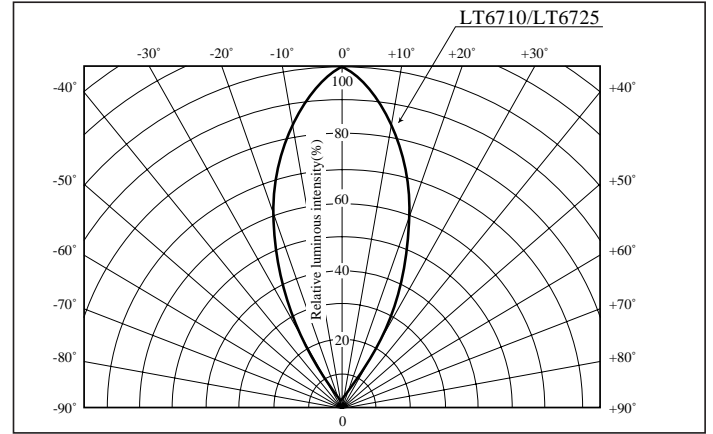
Solid State Lamp Outline Dimensions(Unit:mm)

Radiation Diagrams

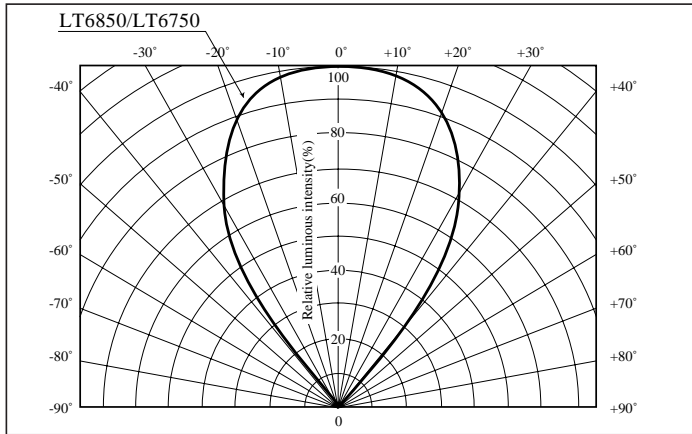
(Ta=25°C)



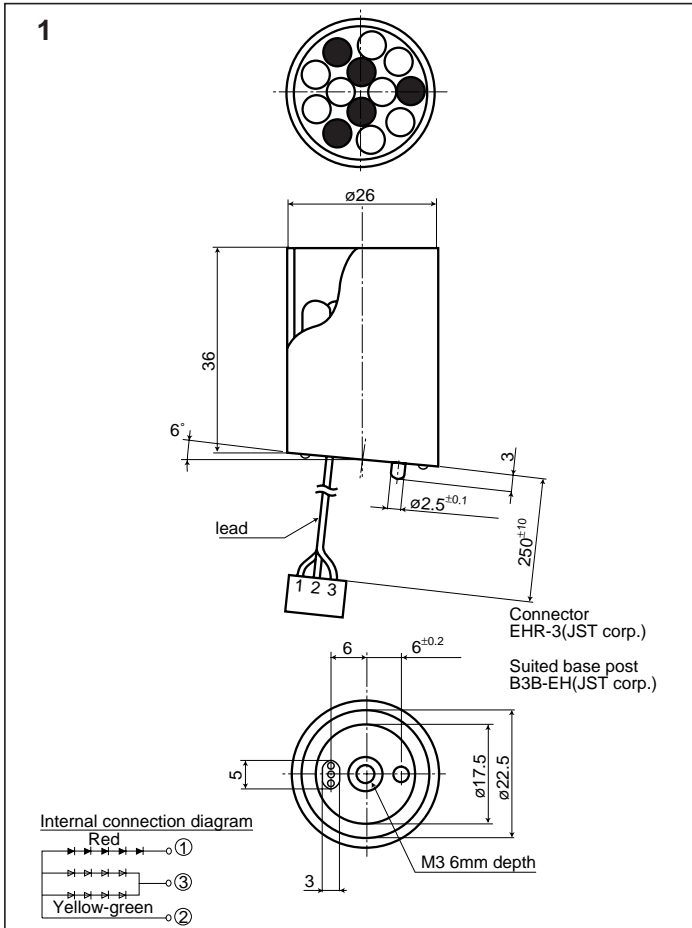
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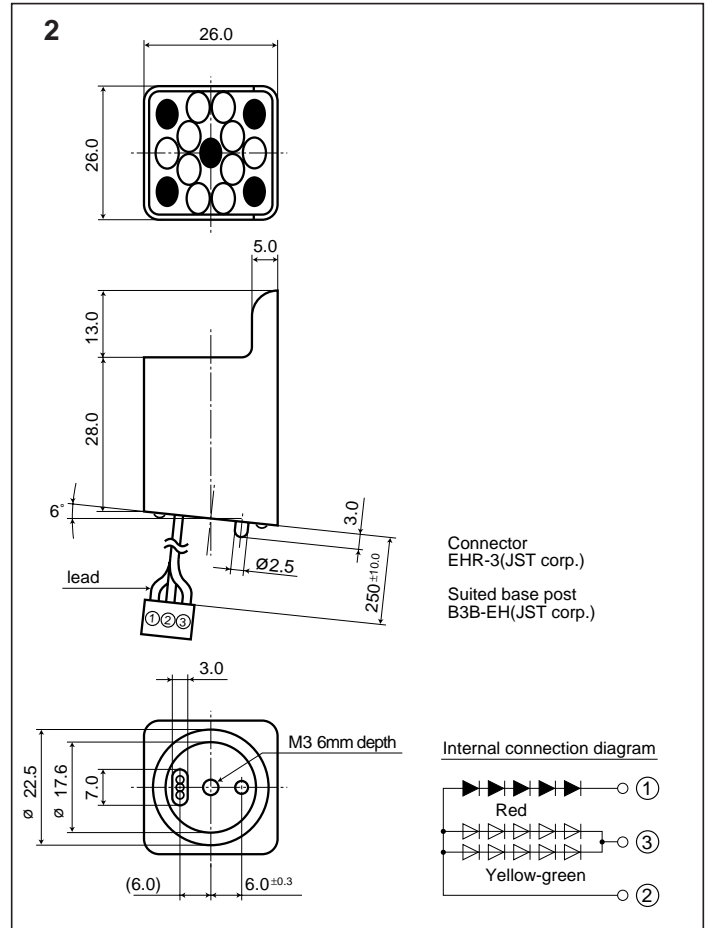
(Ta=25°C)



*As for current conditions, refer to I_f in electro-optical characteristics.

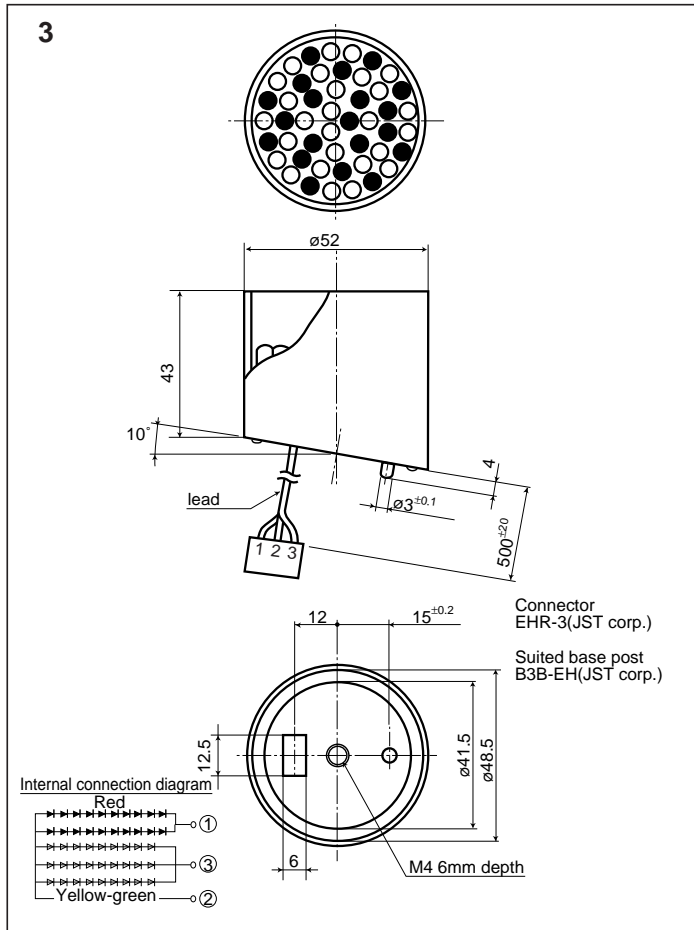


LT6610

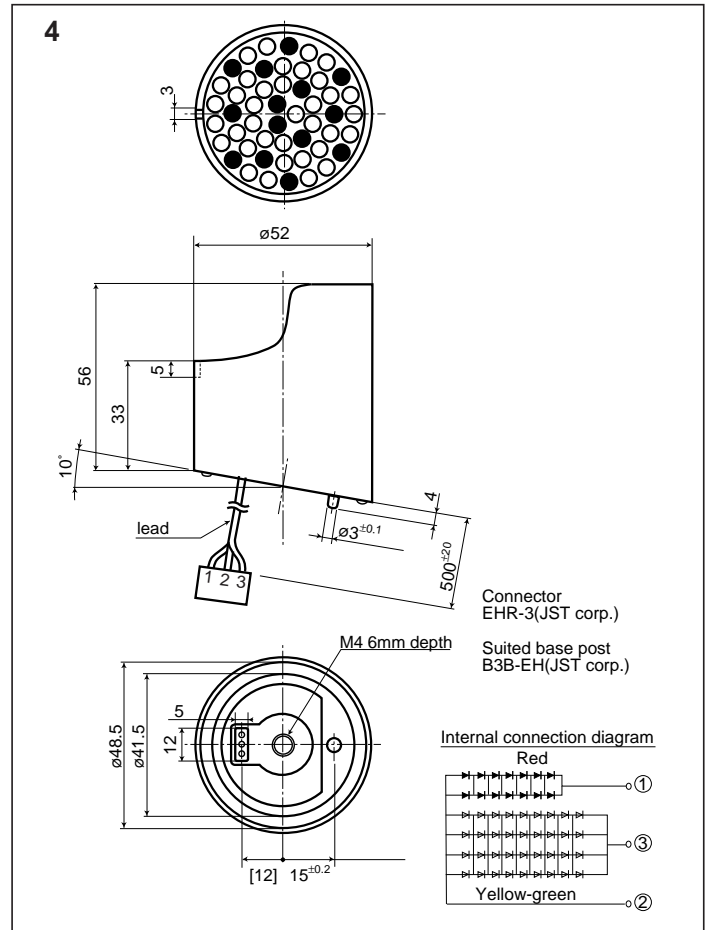


LT6850

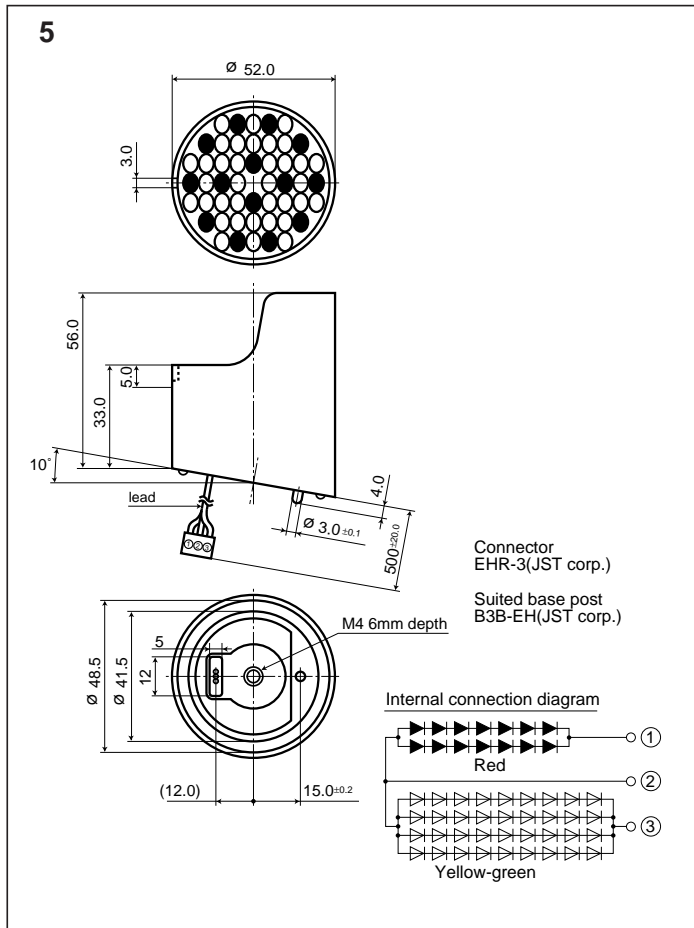
Solid State Lamp Outline Dimensions(Unit:mm)



LT6710



LT6725



LT6750