

# Ultra high bright circular LED lamps ( $\phi 5.0\text{mm}$ )

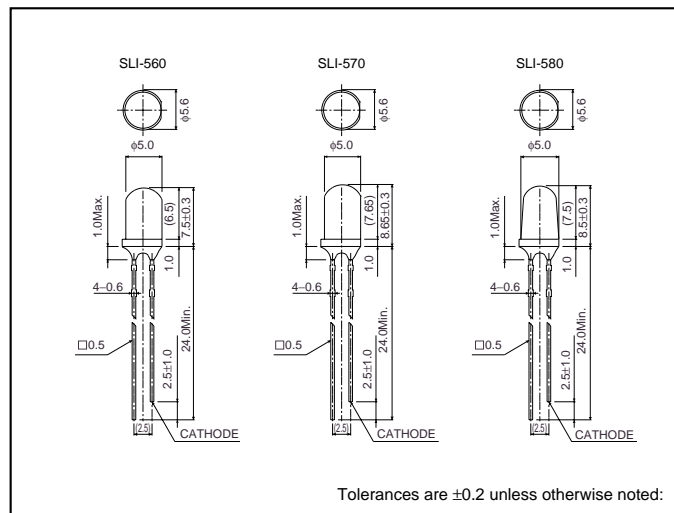
## SLI-560 / SLI-570 / SLI-580 Series

The SLI-560, SLI-570 and SLI-580 series are high luminance LEDs which give you a choice of narrow to wide viewing angles. One red type, one orange type and yellow type are available in three packages for a total of nine different types, and they suitable for use in a wide variety of applications.

### ●Features

- 1) Super high brightness using AlInGaP.
- 2) 3 types of viewing angle is available.
- 3) High reliability.
- 4) Suitable for information board application.

### ●External dimensions (Units : mm)



### ●Selection guide

Emitting color	Red	Orange	Yellow
	Lens		
Narrow tupe	SLI-580UT3F	SLI-580DT3F	SLI-580YT3F
Medium tupe	SLI-570UT3F	SLI-570DT3F	SLI-570YT3F
Wide viewng tupe	SLI-560UT3F	SLI-560DT3F	SLI-560YT3F

# SLI-560 / SLI-570 / SLI-580 Series

## LED lamps

### ●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Maximum ratings	Unit
Power dissipation	P <sub>D</sub>	125	mW
Forward current	I <sub>F</sub>	50	mA
Peak forward current	I <sub>FP</sub>	200	mA
Reverse voltage	V <sub>R</sub>	9	V
Operating temperature	T <sub>opr</sub>	-30~+85	°C
Storage temperature	T <sub>stg</sub>	-40~+100	°C
Soldering temperature	-	260°C 5 seconds maximum	-

### ●Electrical and optical characteristics (Ta=25°C)

Parameter	Symbol	Conditions	Red			Orange			Yellow			Unit			
			Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.				
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	-	1.9	2.5	-	1.9	2.5	-	1.9	2.5	V			
Reverse current	I <sub>R</sub>	V <sub>R</sub> =9V	-	-	100	-	-	100	-	-	100	μA			
Peak wavelength	λ <sub>P</sub>	I <sub>F</sub> =20mA	-	630	-	-	611	-	-	591	-	nm			
Spectral line half width	Δλ	I <sub>F</sub> =20mA	-	20	-	-	17	-	-	15	-	nm			
Viewing angle	SLI-560	2θ 1/2	-	-	-	-	-	-	-	-	-	deg			
	SLI-570												40	25	10
	SLI-580												25	10	10

### ●Luminous intensity vs. wavelength

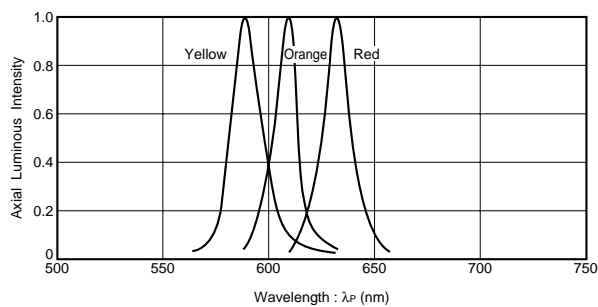


Fig.1

### ●Luminous intensity

Color	λ <sub>P</sub>	Type	Min.	Typ.	Max.	Unit
Red	630	SLI-560UT3F	300	1000	-	mcd
		SLI-570UT3F	900	3000	-	
		SLI-580UT3F	1350	5000	-	
Orange	611	SLI-560DT3F	300	1000	-	
		SLI-570DT3F	900	3000	-	
		SLI-580DT3F	1350	5000	-	
Yellow	591	SLI-560YT3F	300	1000	-	
		SLI-570YT3F	610	2500	-	
		SLI-580YT3F	1350	5000	-	

Note : 1. Measured at I<sub>F</sub>=20mA

2. The specification is subject to be without notice.

We would like you to refer to the latest specification in use.

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●Directional pattern

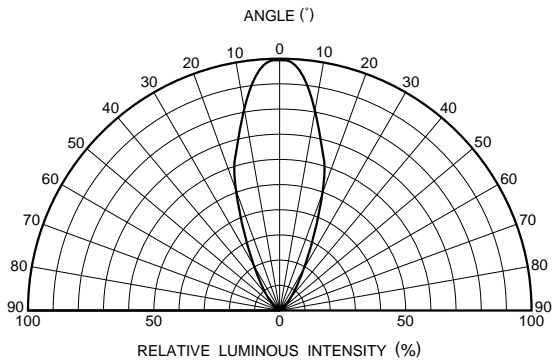


Fig.2 SLI-560 Directional pattern

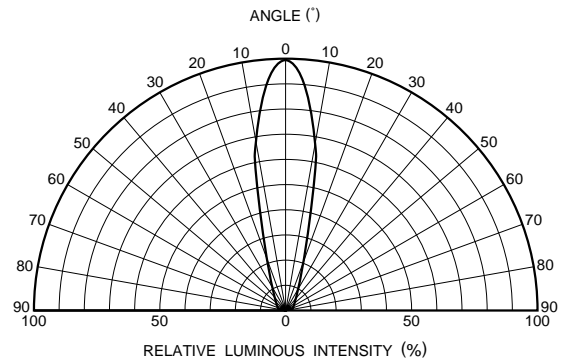


Fig.3 SLI-570 Directional pattern

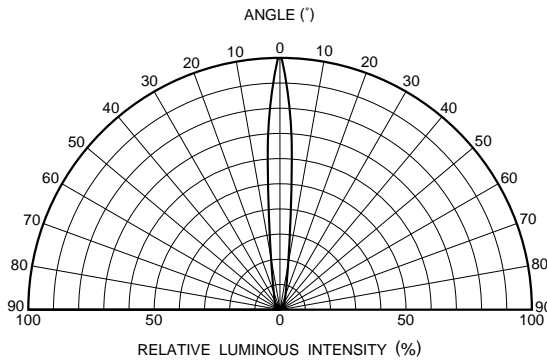


Fig.4 SLI-580 Directional pattern

●Electrical characteristic curves

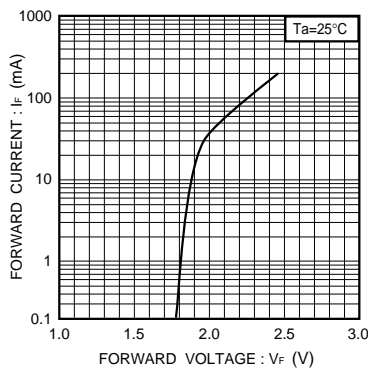


Fig.5 Forward current vs. forward voltage

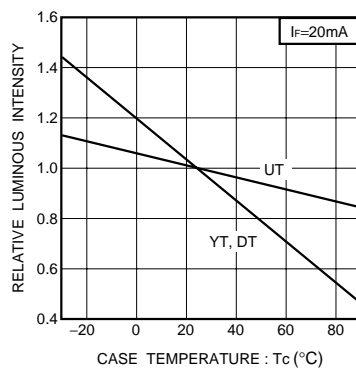


Fig.6 Luminous intensity vs. case temperature

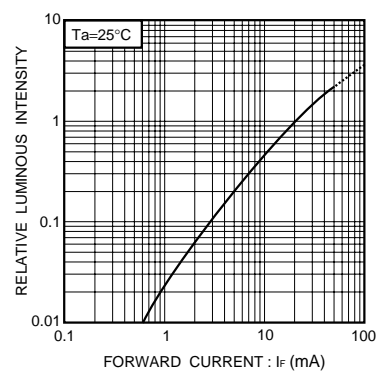


Fig.7 Luminous intensity vs. forward current

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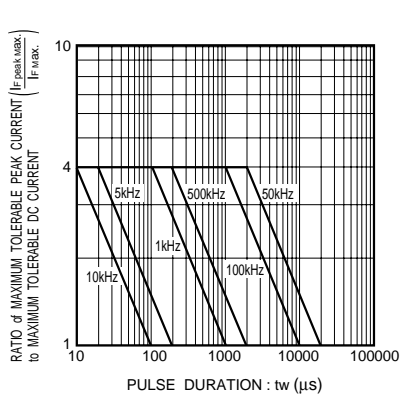


Fig.8 Ratio maximum tolerable peak vs. pulse duration

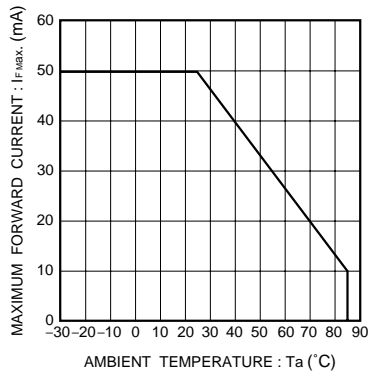


Fig.9 Maximum forward current vs. ambient temperature (Derating)