

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

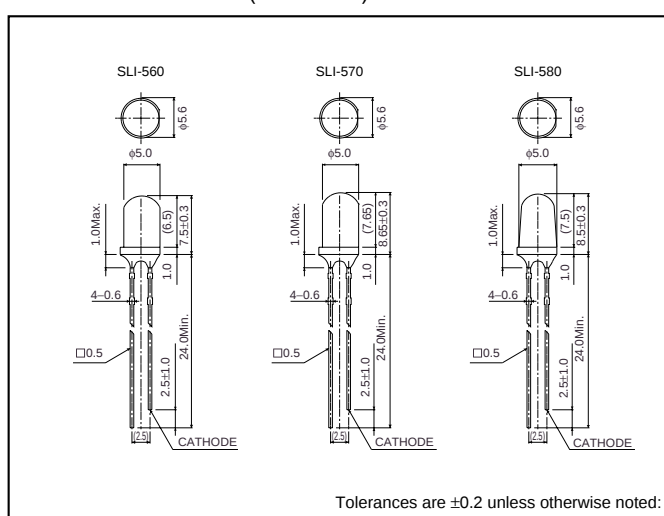
SLI-560 / SLI-570 / SLI-580 Series

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 _D	125	mW
Forward current	I _F	50	mA
Peak forward current	I _{FP}	200	mA
Reverse voltage	V _R	9	V
Operating temperature	T _{opr}	-30~+85	°C
Storage temperature	T _{stg}	-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 _F	I _F =20mA	—	1.9	2.5	—	1.9	2.5	—	1.9	2.5	V
Reverse current	I _R	V _R =9V	—	—	100	—	—	100	—	—	100	μA
Peak wavelength	λ _P	I _F =20mA	—	630	—	—	611	—	—	591	—	nm
Spectral line half width	Δλ	I _F =20mA	—	20	—	—	17	—	—	15	—	nm
Viewing angle	SLI-560	2θ 1/2	—	40	—	—	40	—	—	40	—	deg
	SLI-570			25			25			25		
	SLI-580			10			10			10		

●Luminous intensity vs. wavelength

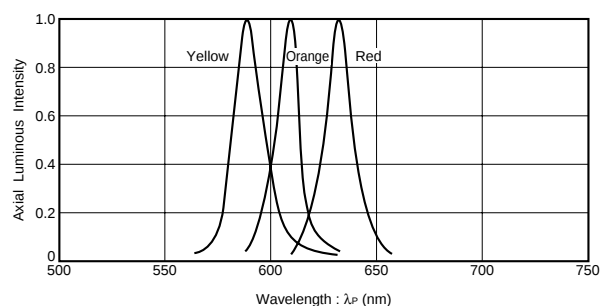


Fig.1

●Luminous intensity

Color	λ _P	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_F=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

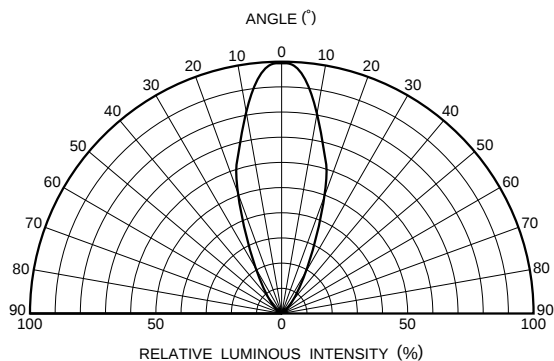


Fig.2 SLI-560 Directional pattern

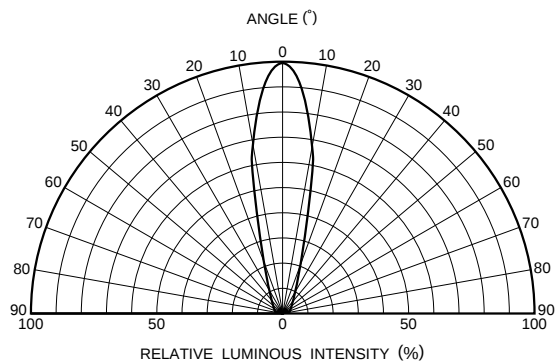


Fig.3 SLI-570 Directional pattern

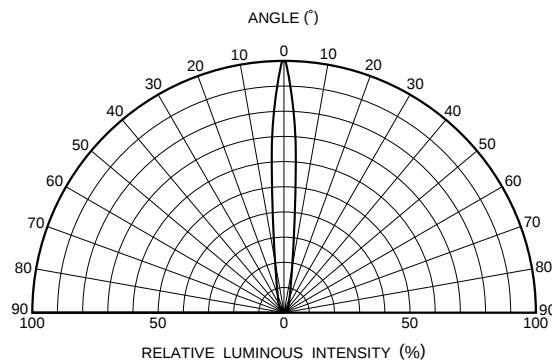


Fig.4 SLI-580 Directional pattern

●Electrical characteristic curves

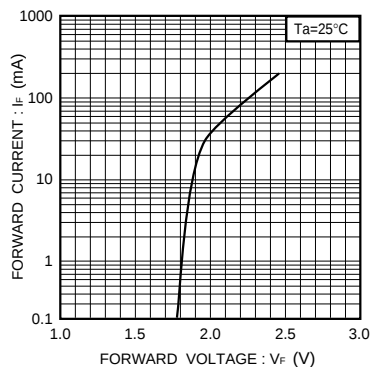


Fig.5 Forward current vs. forward voltage

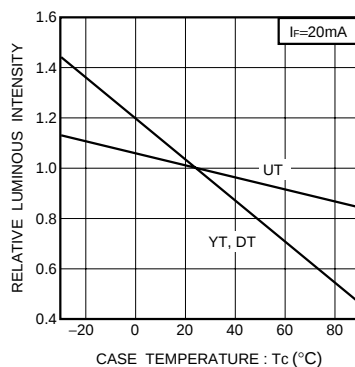


Fig.6 Luminous intensity vs. case temperature

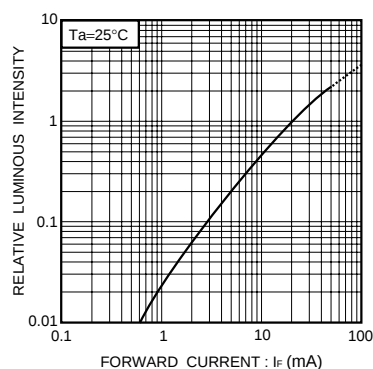


Fig.7 Luminous intensity vs. forward current

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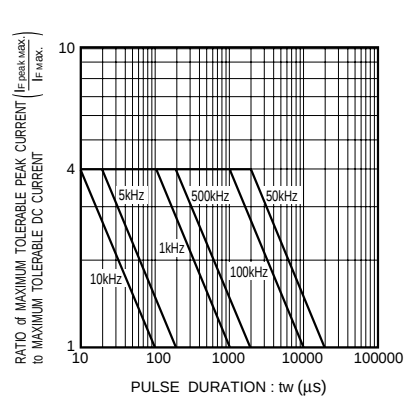


Fig.8 Ratio maximum tolerable peak vs. pulse duration

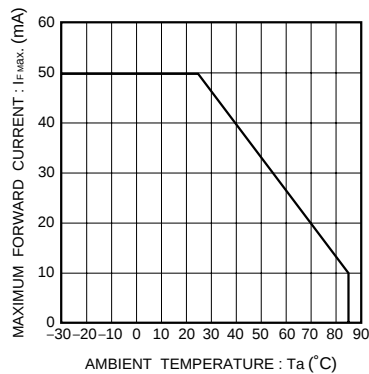


Fig.9 Maximum forward current vs. ambient temperature (Derating)