

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

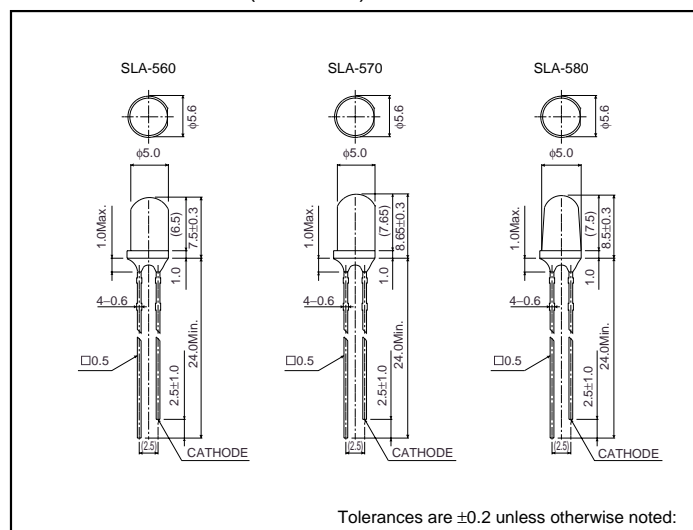
## SLA-560 / SLA-570 / SLA-580 Series

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

### ●Features

- 1) Very bright.
- 2) High reliability.

### ●External dimensions (Units : mm)



### ●Selection guide

Lens	Emitting color	
	Single-hetero GaAlAs (red)	GaP (green)
Narrow tupe	SLA-580LT3F	SLA-580MT3F
Medium tupe	SLA-570LT3F	SLA-570MT3F
Wide viewng tupe	SLA-560LT3F	SLA-560MT3F

# SLA-560 / SLA-570 / SLA-580 Series

## LED lamps

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

Parameter	Symbol	Red	Green	Unit
		SLA-560LT3F SLA-570LT3F SLA-580LT3F	SLA-560MT3F SLA-570MT3F SLA-580MT3F	
Power dissipation	P <sub>D</sub>	100	75	mW
Forward current	I <sub>F</sub>	50	25	mA
Peak forward current	I <sub>FP</sub>	75	60	mA
Reverse voltage	V <sub>R</sub>	4	4	V
Operating temperature	T <sub>opr</sub>	-25~+85		°C
Storage temperature	T <sub>stg</sub>	-30~+100		°C
Soldering temperature	—	260°C 5 seconds maximum		—

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

Parameter	Symbol	Conditions	Red			Green			Unit
			Min.	Typ.	Max.	Min.	Typ.	Max.	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	—	1.75	2.5	—	2.2	3.0	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =4V	—	—	100	—	—	10	μA
Peak wavelength	λ <sub>P</sub>	I <sub>F</sub> =20mA	—	660	—	—	563	—	nm
Spectral line half width	Δλ	I <sub>F</sub> =20mA	—	25	—	—	40	—	nm
Viewing angle	SLA-560	2θ 1/2	—	40	—	—	40	—	deg
	SLA-570			25			25		
	SLA-580			10			10		

### ●Luminous intensity vs. wavelength

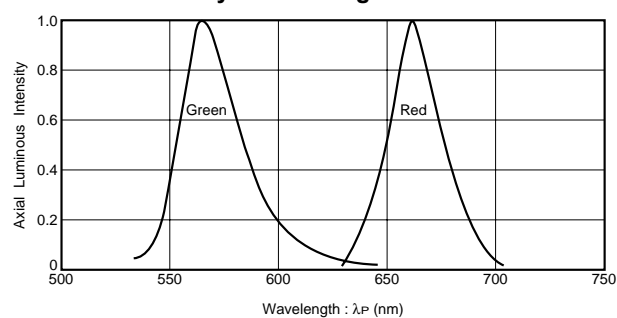


Fig.1

### ●Luminous intensity

Color	λ <sub>P</sub>	Type	Min.	Typ.	Max.	Unit
Red	660	SLA-560LT3F	42	100	—	mcd
		SLA-570LT3F	90	220	—	
		SLA-580LT3F	200	470	—	
Green	563	SLA-560MT3F	42	100	—	
		SLA-570MT3F	42	185	—	
		SLA-580MT3F	200	470	—	

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.

# SLA-560 / SLA-570 / SLA-580 Series

## LED lamps

### ●Directional pattern

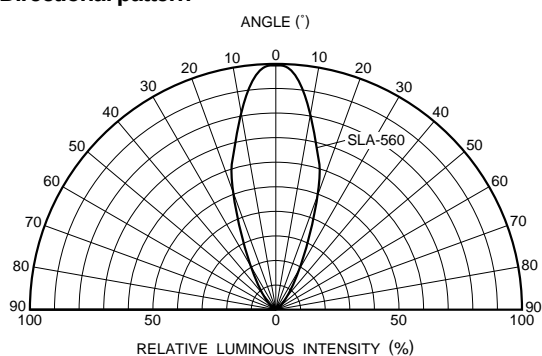


Fig.2 SLA-560 Directional pattern

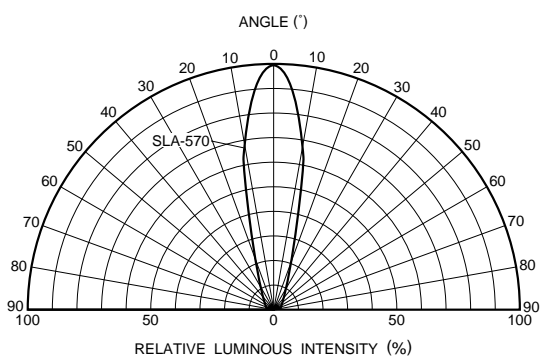


Fig.3 SLA-570 Directional pattern

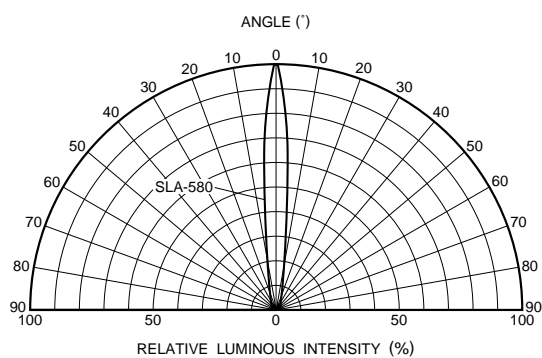


Fig.4 SLA-580 Directional pattern

### ●Electrical characteristic curves 1 (red)

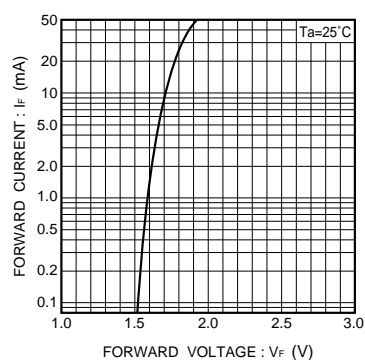


Fig.5 Forward current vs. forward voltage

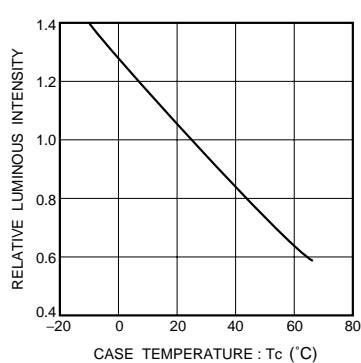


Fig.6 Luminous intensity vs. case temperature

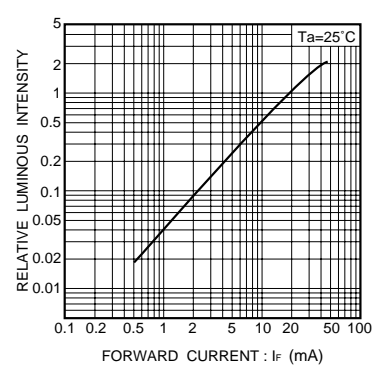


Fig.7 Luminous intensity vs. forward current

# SLA-560 / SLA-570 / SLA-580 Series

## LED lamps

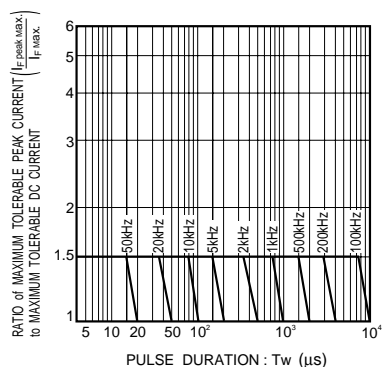


Fig.8 Maximum tolerable peak current vs. pulse duration

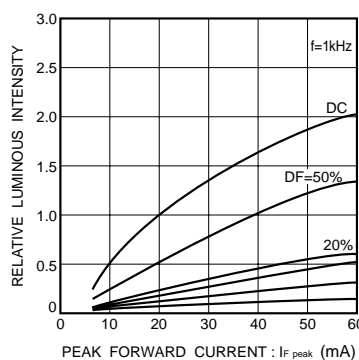


Fig.9 Luminous intensity vs. peak forward current

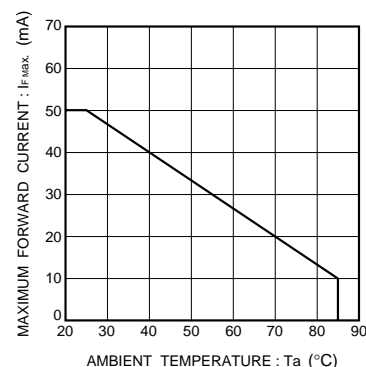


Fig.10 Maximum forward current vs. ambient temperature (Derating)

### ●Electrical characteristic curves 2 (green)

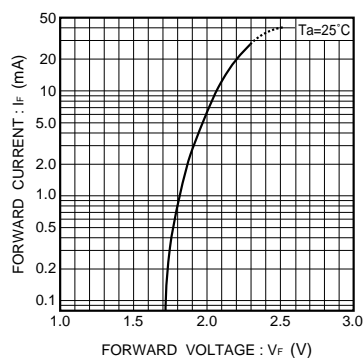


Fig.11 Forward current vs. forward voltage

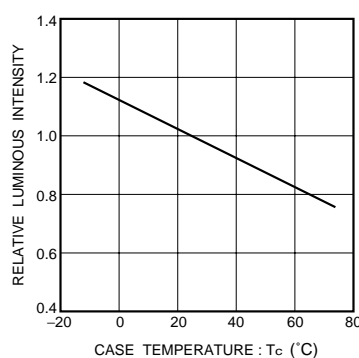


Fig.12 Luminous intensity vs. case temperature

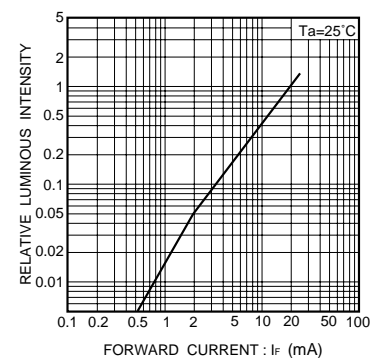


Fig.13 Luminous intensity vs. forward current

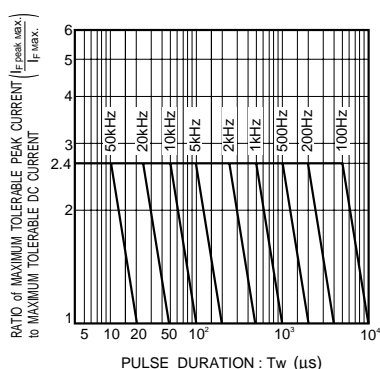


Fig.14 Maximum tolerable peak current vs. pulse duration

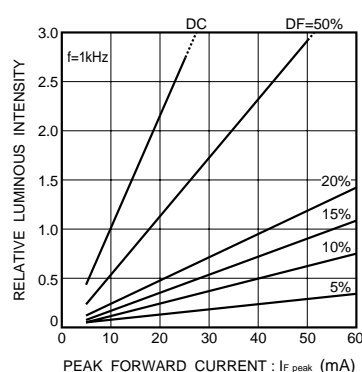


Fig.15 Luminous intensity vs. peak forward current

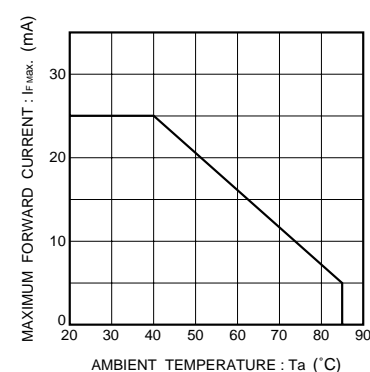


Fig.16 Maximum forward current vs. ambient temperature (Derating)

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