High bright circular LED lamps (ϕ3, ϕ3.1mm)

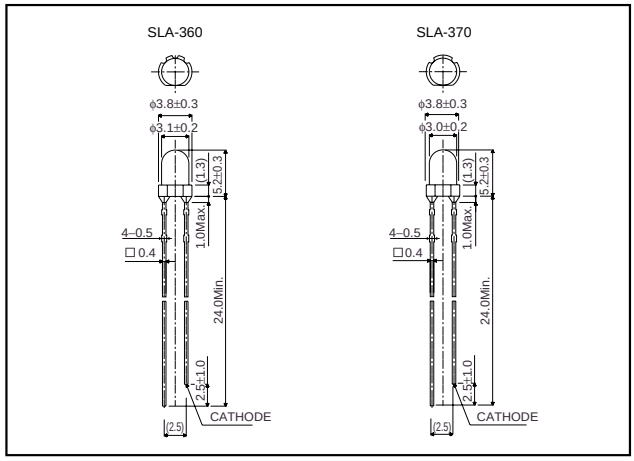
SLA-360 / SLA-370 Series

The SLA-360 and SLA-370 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 two packages for a total of four different types, and they are suitable for use in a wide variety of applications.

●Features

1) Very bright.
2) Ideal for outdoor and semi-outdoor applications.
3) High reliability.

●External dimensions (Units : mm)



●Selection guide

Emitting color / Lens	Single-hetero GaAlAs (red)	GaP (green)
Medium viewing type	SLA-370LT3F	SLA-370MT3F
Wide viewing type	SLA-360LT3F	SLA-360MT3F

●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Red	Green	Unit
		SLA-360LT3F SLA-370LT3F	SLA-360MT3F SLA-370MT3F	
Power dissipation	P_D	100	75	mW
Forward current	I_F	50	25	mA
Peak forward current	I_{FP}	75	60	mA
Reverse voltage	V_R	4	4	V
Operating temperature	Topr	–25~+85		°C
Storage temperature	Tstg	–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_F	I_F=20mA	–	1.75	2.5	–	2.2	3.0	V
Reverse current		I_R	V_R=4V	–	–	100	–	–	10	μA
Peak wavelength		λ_P	I_F=20mA	–	660	–	–	563	–	nm
Spectral line half width		Δλ	I_F=20mA	–	25	–	–	40	–	nm
Viewing angle	SLA-360	$2\theta_{1/2}$	–	–	40		–	40	–	deg
	SLA-370				25			25		

●Luminous intensity vs. wavelength

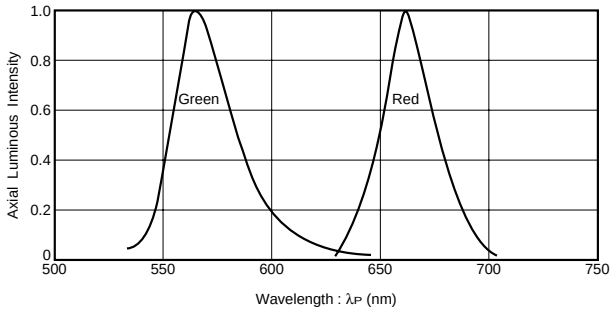


Fig.1

●Luminous intensity

Color	λP	Type	Min.	Typ.	Max.	Unit
Red	660	SLA-360LT3F	30	68	–	mcd
		SLA-370LT3F	42	100	–	
Green	563	SLA-360MT3F	42	100	–	
		SLA-370MT3F	42	100	–	

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.

●Directional pattern

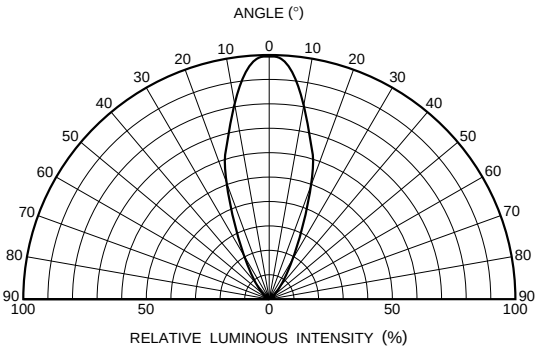


Fig.2 SLA-360 Directional patterm

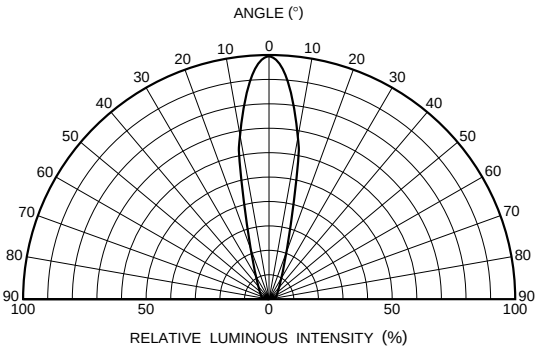


Fig.3 SLA-370 Directional patterm

●Electrical characteristic curves 1 (red)

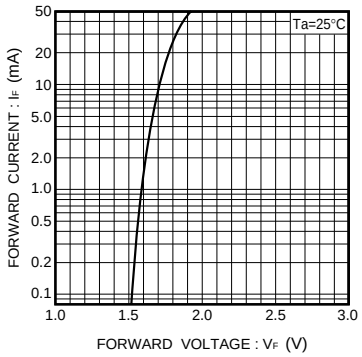


Fig.4 Forward current vs. forward voltage

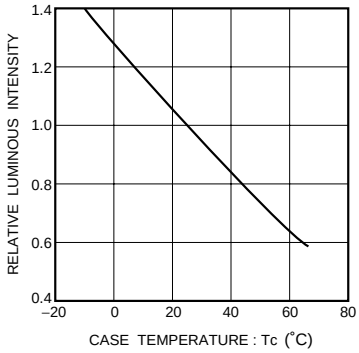


Fig.5 Luminous intensity vs. case temperature

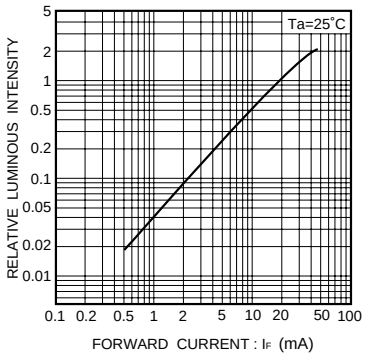


Fig.6 Luminous intensity vs. forward current

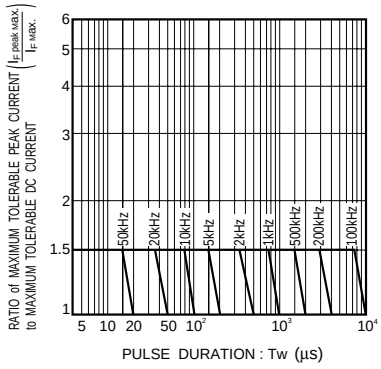


Fig.7 Maximum tolerable peak current vs. pulse duration

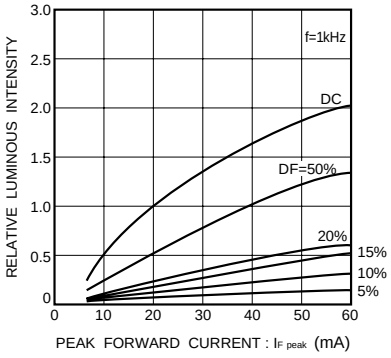


Fig.8 Luminous intensity vs. peak forward current

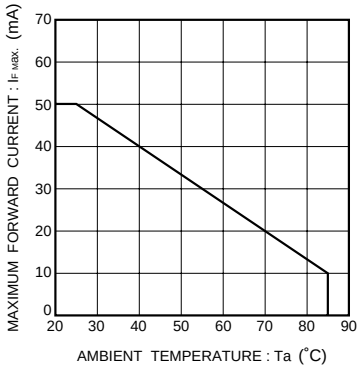


Fig.9 Maximum forward current vs. ambient temperature (Derating)

●Electrical characteristic curves 2 (green)

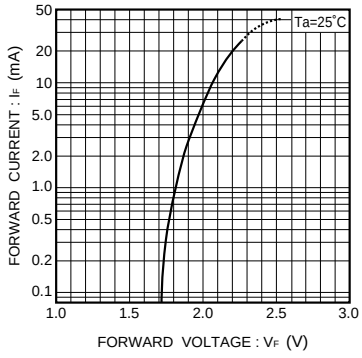


Fig.10 Forward current vs. forward voltage

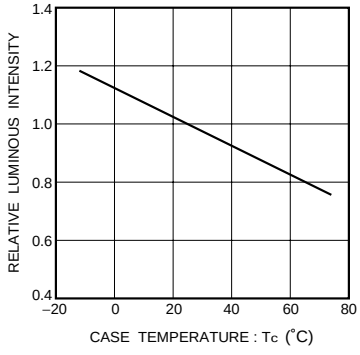


Fig.11 Luminous intensity vs. case temperature

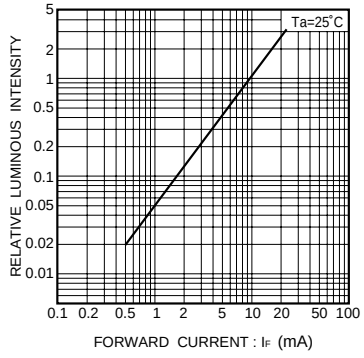


Fig.12 Luminous intensity vs. forward current

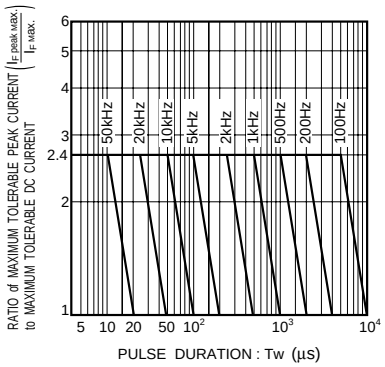


Fig.13 Maximum tolerable peak current vs. pulse duration

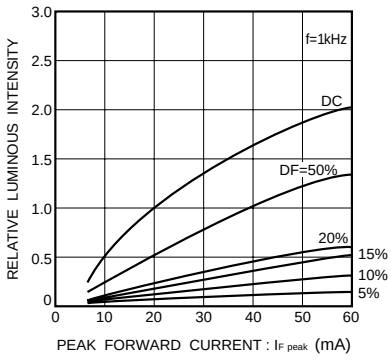


Fig.8 Luminous intensity vs. peak forward current

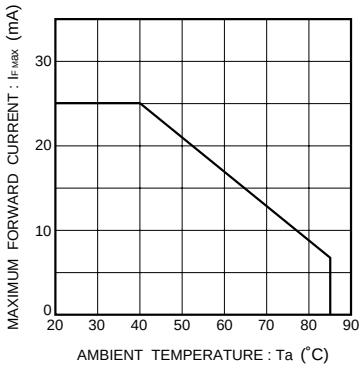


Fig.15 Maximum forward current vs. ambient temperature (Derating)