

Reflecting small LEDs, directly mountable ($\phi 3.1\text{mm}$) (no need for solder modification)

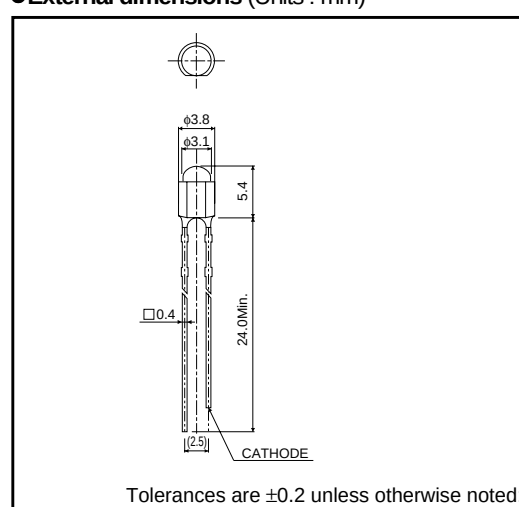
SLI-343 Series

The SLI-343 series are 3.1mm LEDs which can be directly mounted on a printed circuit board. Three colors and two lens types are available for a total of six types, and they are suitable for use in a wide variety of applications.

●Features

- 1) Three colors : red, orange and yellow.
- 2) Two lens types : Colored diffused and Colored clear.
- 3) High reliability even in case of direct mount.
- 4) Blow-holeless solder type.

●External dimensions (Units : mm)



●Selection guide

Emitting color	Red	Orange	Yellow
Lens			
Colored diffused	SLI-343UR	SLI-343DU	SLI-343YY
Colored clear	SLI-343URC	SLI-343DC	SLI-343YC

LED lamps

●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Red	Orange	Yellow	Unit
		SLI-343UR SLI-343URC	SLI-343DU SLI-343DC	SLI-343YY SLI-343YC	
Power dissipation	P _D	125	125	125	mW
Forward current	I _F	50	50	50	mA
Peak forward current	I _{FP}	200*	200*	200*	mA
Reverse voltage	V _R	9	9	9	V
Operating temperature	T _{opr}	-25~+85			°C
Storage temperature	T _{stg}	-30~+100			°C
Soldering temperature	—	260°C 5 seconds maximum			—

* Pulse width 100μs Duty 1 / 10

●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 =2mA	(1.4)	1.85	2.2	(1.4)	1.85	2.2	(1.4)	1.85	2.2	V
		I _F =20mA	(1.45)	1.9	2.4	(1.45)	1.9	2.4	(1.45)	1.9	2.4	
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	2θ _{1/2}	Diffused	—	40	—	—	40	—	—	40	—	deg
		Transparent	—	40	—	—	40	—	—	40	—	

●Luminous intensity vs. wavelength

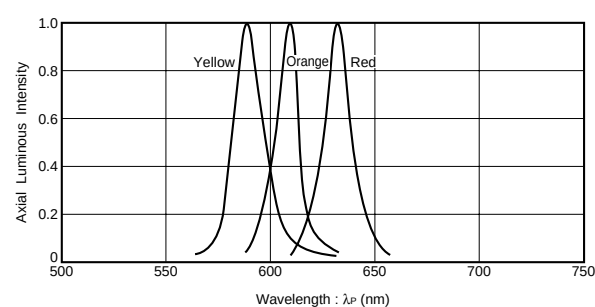


Fig.1

●Luminous intensity

Color	Type	Conditions	Min.	Typ.	Max.	Unit
Red	SLI-343UR	I _F =2mA	—	35	—	mcd
		I _F =20mA	90	350	—	
	SLI-343URC	I _F =2mA	—	45	—	
		I _F =20mA	90	450	—	
Orange	SLI-343DU	I _F =2mA	—	35	—	
		I _F =20mA	90	350	—	
	SLI-343DC	I _F =2mA	—	50	—	
		I _F =20mA	90	500	—	
Yellow	SLI-343YY	I _F =2mA	—	30	—	
		I _F =20mA	90	300	—	
	SLI-343YC	I _F =2mA	—	35	—	
		I _F =20mA	90	350	—	

LED lamps

● Directional pattern

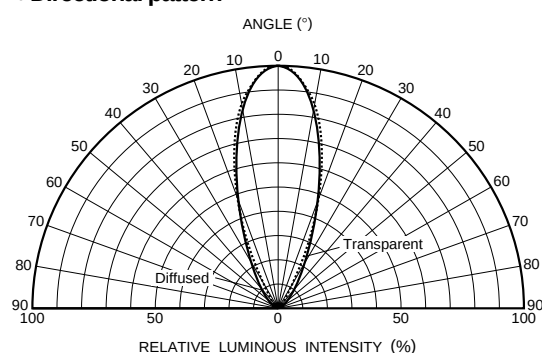


Fig.2

● Electrical characteristic curves (URC, UR, DC, DU, YC, YY)

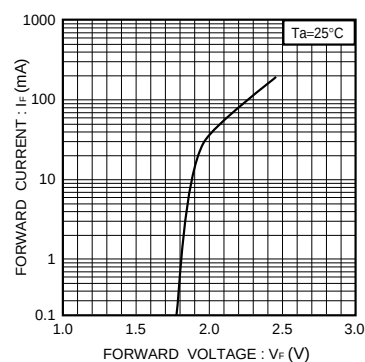


Fig.3 Forward current vs. forward voltage

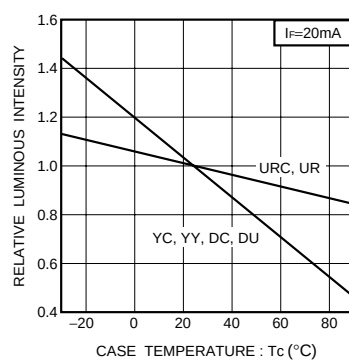


Fig.4 Luminous intensity vs. case temperature

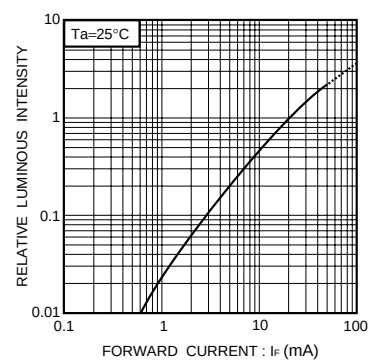


Fig.5 Luminous intensity vs. forward current

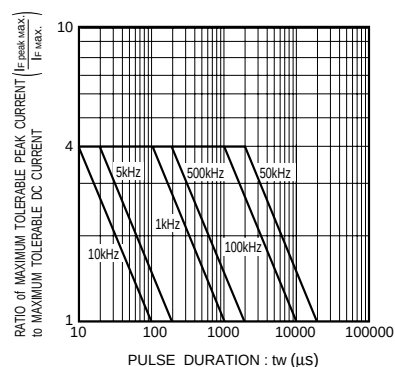


Fig.6 Ratio maximum tolerable peak vs. pulse duration

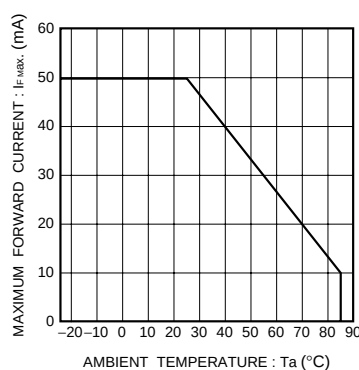


Fig.7 Derating