Surface Mount High Output Infared LEDs

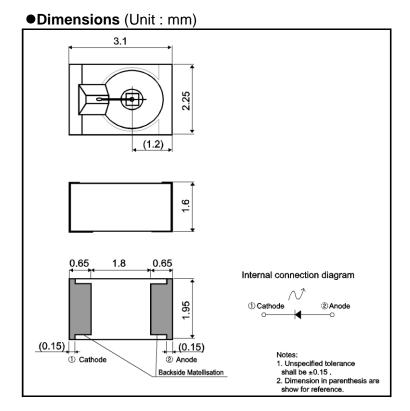
SIM-040ST Data Sheet

Applications

Light source for sensors
 (proximity sensors, signal transmission applications)

Features

- 1) Higt compact, low-profile
- 2) Higt output, over a narrow angle
- 3) Exellent temperature property
- 4) Long life, high reliability
- Original optical tecnology is ultra-high-output surface mount infrared LEDs.



●Absolute maximum ratings (T_a = 25°C)

Parameter	Symbol	Value	Unit	
Forward current	I _F	100	mA	
Pulse forward current*1	I _{FP}	1	А	
Reverse voltage	V _R	5	V	
Power dissipation	P _D	180	mW	
Operating temperature	T _{opr}	-25 to +85	°C	
Storage temperature	T _{stg}	-40 to +85	°C	

^{*1} Pulse width 0.1msec,duty ratio1%

●Electrical and optical characteristics (T_a = 25°C)

Parameter	Symbol	Conditions	Values			Unit
			Min.	Тур.	Max.	Offic
Forward voltage	V_{F}	I _F =100mA	-	1.7	2.5	V
Reverse current	I _R	V _R =5V	-	-	15	μΑ
Peak light emitting wavelength	λ_{p}	I _F =100mA	-	870	-	nm
Spectral line half width	Δλ	I _F =100mA	-	35	-	nm
View angle	θ1/2	-	-	±20	-	deg.
Radiant intensity	I _E	I _F =100mA	20	-	100	mW/sr

^{*} This product is not designed to be protected against electromagnetic wave.

^{*} Non-coherent infrared light emiting diode used.

•Electrical and optical characteristic curves

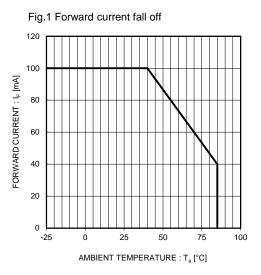


Fig.3 Radiant intensity vs. Forward current

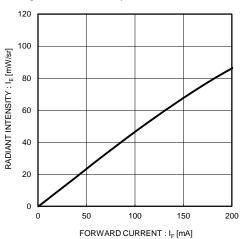


Fig.5 Spectral date

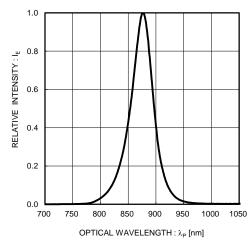


Fig.3 Forward current vs. Forward voltage

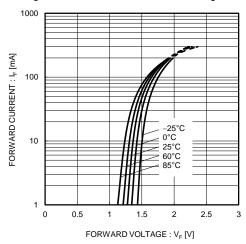


Fig.4 Relative radiant vs. Ambient temperature

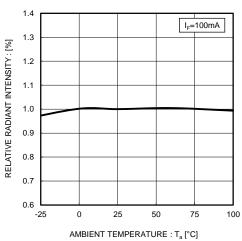
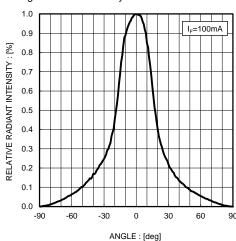
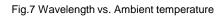
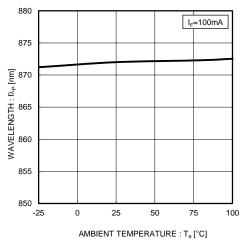


Fig.6 Radiant intensity



•Electrical and optical characteristic curves





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