

KL857

Description

Model **KL857** is a an Infra Red Light Emitting Diode mounted in TO-18 type header with lens can.

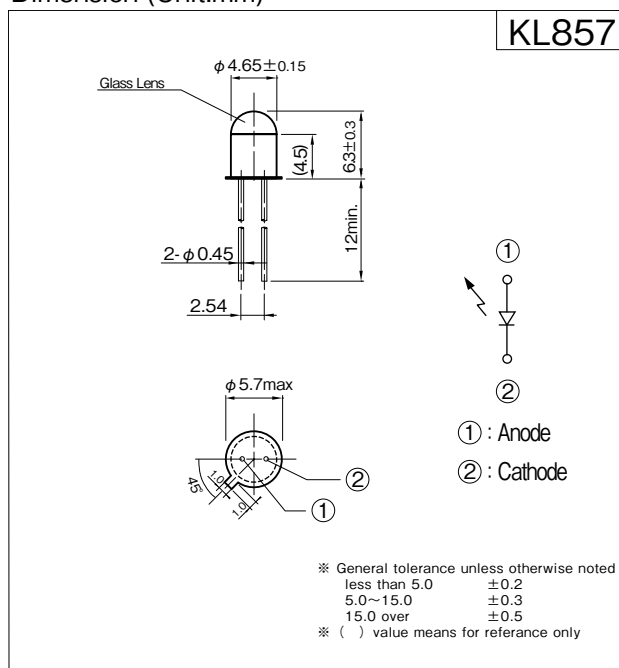
Feature

- High power Infra Red LED (λ p:940nm)
- TO-18 package.

Application

- Red LED for Photo sensor.
- Optical Switch.

Dimension (Unit:mm)



Absolute Maximum Ratings

[Ta=25°C Unless otherwise noted]

Item	Symbol	Rating	Units
Power Dissipation	P	120	mW
Forward Current	I _F	100	mA
Pulse Forward Current ^{※1}	I _{FP}	1	A
Reverse Voltage	V _R	5	V
Operating Temperature	T _{opr}	-40 ~ +125	°C
Storage Temperature	T _{stg}	-55 ~ +125	°C
Soldering Temperature ^{※2}	T _{sol}	260	°C

※ 1. Pulse width ≤ 100 μ sec, Duty ratio=0.01

※ 2. Soldering condition 5sec. At 2.6mm over from TO-18 header.

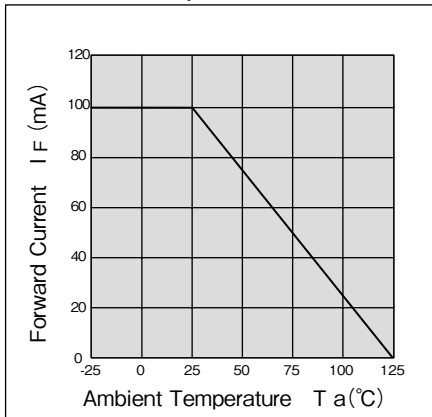
Electro-Optical Characteristics [Ta=25°C Unless otherwise noted]

Item	Symbol	Condition	min.	typ.	max.	Units
Forward Voltage	V _F	I _F =50mA	—	1.4	1.6	V
Reverse Current	I _R	V _R =5V	—	—	10	μ A
Power Output	P _o	I _F =50mA	1.0	3.3	—	mW
Peak Wavelength	λ _p	I _F =50mA	—	940	—	nm
Spectral Half Width	Δλ	I _F =50mA	—	40	—	nm
Half Angle	Δθ		—	± 7	—	deg

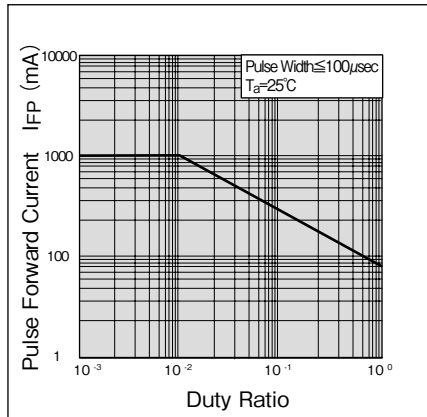
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Note: Operation never exceeds each value of Absolute Maximum Ratings.

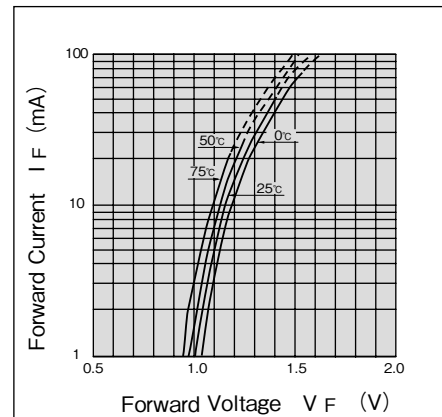
Forward Current vs. Ambient Temperature



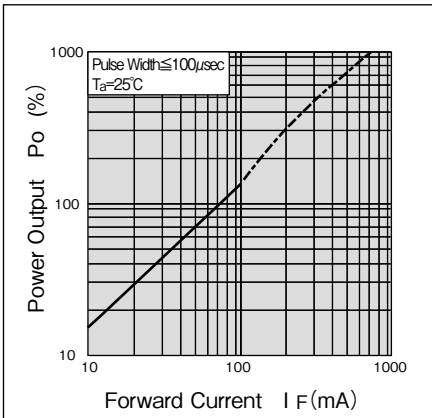
Pulse Forward Current vs. Duty Ratio



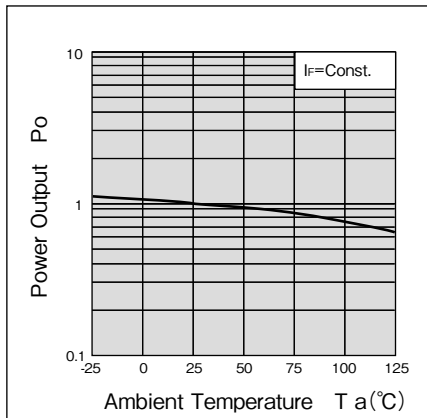
Forward Current vs. Forward Voltage (typ.)



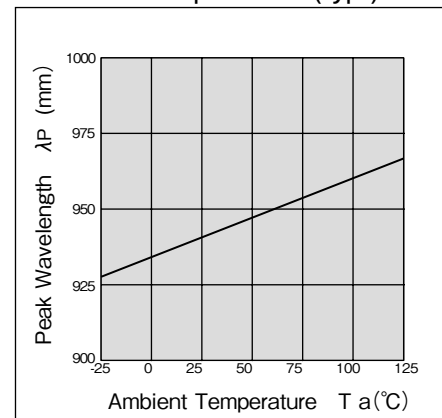
Power Output vs. Forward Current (typ.)



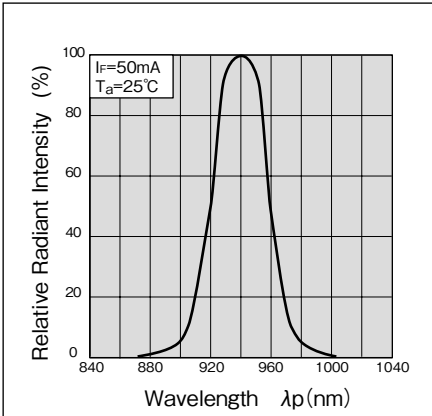
Power Output vs. Ambient Temperature (typ.)



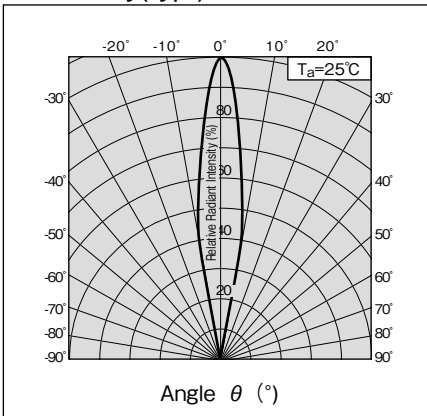
Peak Wavelength vs. Ambient Temperature (typ.)



Spectral Wavelength (typ.)



Directivity (typ.)



- A Custom designed package is available on request.
- Specification are subject to change without notice.

05.10-1A



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