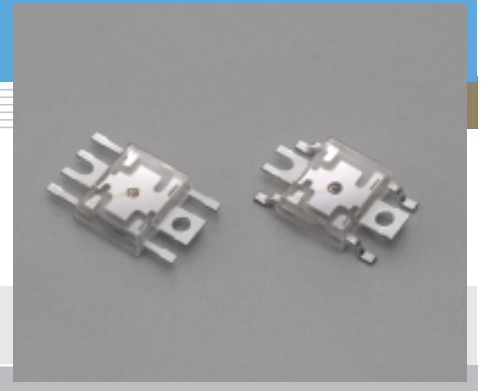


# Infrared LED

## L6437 series

High radiant output GaAs LED with position reference hole



### Features

- Lead frame package with position reference hole
- Small package
- High radiant output power

### Applications

- Auto-focus
- Optical switch

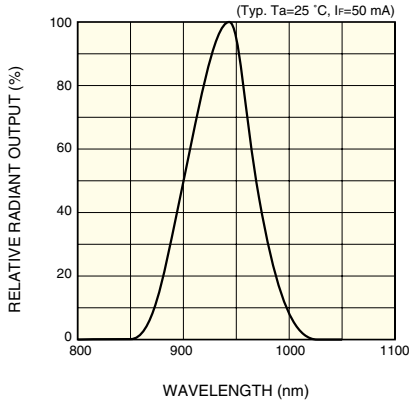
#### ■ Absolute maximum ratings (Ta=25 °C)

Parameter	Symbol	Condition	Value	Unit
Forward current	IF		65	mA
Reverse voltage	VR		5	V
Pulse forward current	IFP	Pulse width=10 μs Duty ratio=1 %	1.0	A
Operating temperature	Topr		-25 to +80	°C
Storage temperature	Tstg		-30 to +100	°C

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

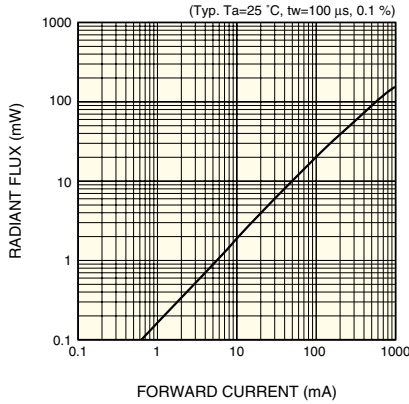
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Peak emission wavelength	$\lambda_p$	IF=50 mA	920	945	970	nm
Spectral half width	$\Delta\lambda$	IF=50 mA	-	60	-	nm
Forward voltage	VF	IF=50 mA	-	1.35	1.45	V
Pulse forward voltage	VFP	IF=1.0 A	-	2.5	3.1	V
Reverse current	IR	VR=5 V	-	-	20	μA
Radiant flux	$\phi_e$	IF=50 mA	7.0	10.0	-	mW
Radiant illuminance	PE	IF=50 mA	-	0.5	-	mW/cm <sup>2</sup>
Rise time	tr	IF=50 mA, 10 to 90 %	-	2.0	3.0	μs
Fall time	tf	IF=50 mA, 90 to 10 %	-	1.0	2.0	μs

## ■ Emission spectrum



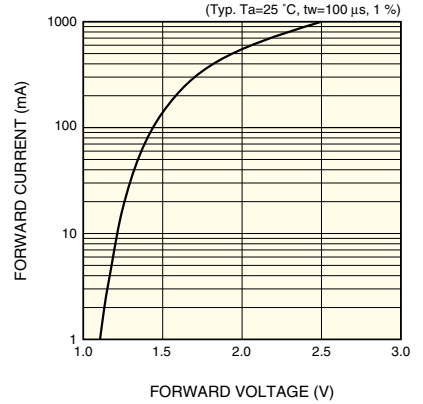
KLEDB0181EA

## ■ Radiant flux vs. forward current



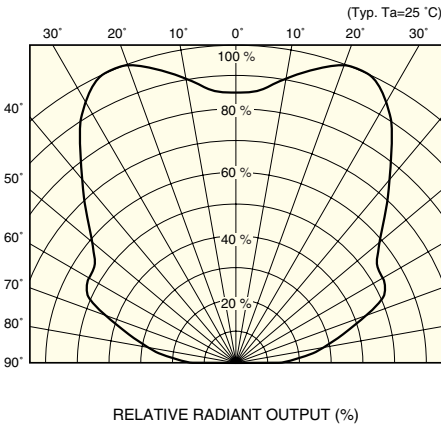
KLEDB0182EA

## ■ Forward current vs. forward voltage



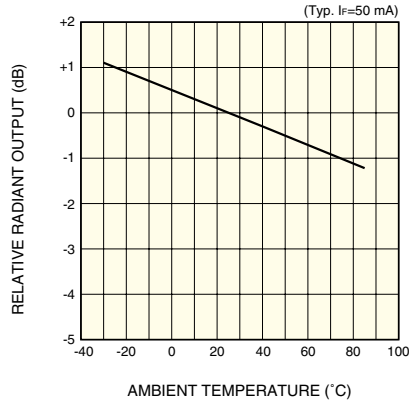
KLEDB0183EA

## ■ Directivity



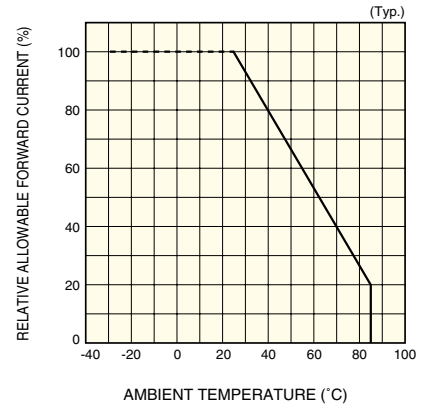
KLEDB0071EB

## ■ Radiant output vs. ambient temperature



KLEDB0184EA

## ■ Allowable forward current vs. ambient temperature



KLEDB0027EB

## ■ Dimensional outlines (unit: mm)

