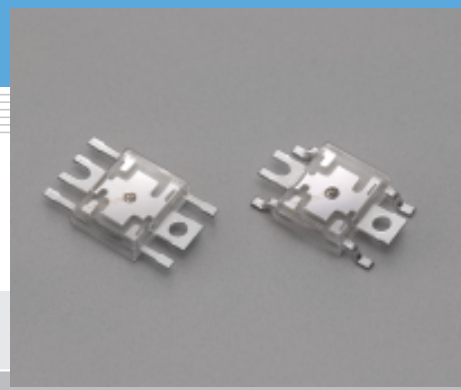


Infrared LED

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

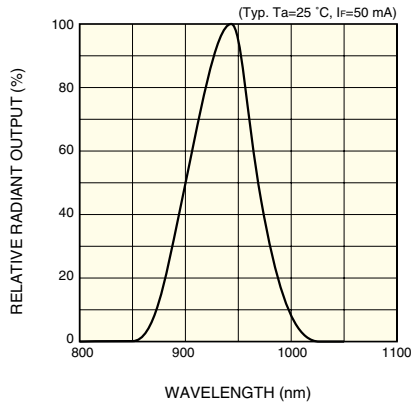
■ Absolute maximum ratings (Ta=25 °C)

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)

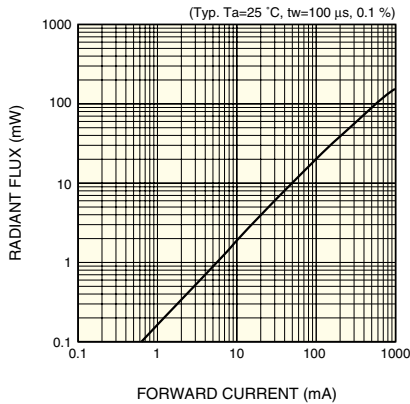
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Peak emission wavelength	λ_p	IF=50 mA	920	945	970	nm
Spectral half width	$\Delta\lambda$	IF=50 mA	-	60	-	nm
Forward voltage	VF	IF=50 mA	-	1.35	1.45	V
Pulse forward voltage	VFP	IF=1.0 A	-	2.5	3.1	V
Reverse current	IR	VR=5 V	-	-	20	μA
Radiant flux	ϕ_e	IF=50 mA	7.0	10.0	-	mW
Radiant illuminance	PE	IF=50 mA	-	0.5	-	mW/cm ²
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



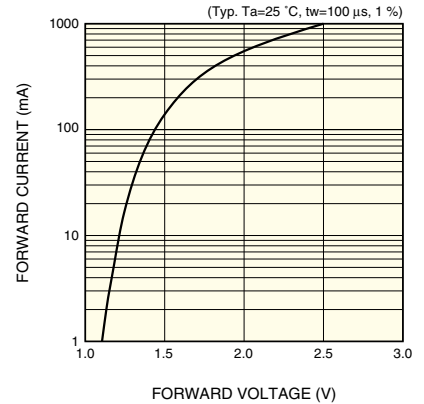
KLEDB0181EA

■ Radiant flux vs. forward current



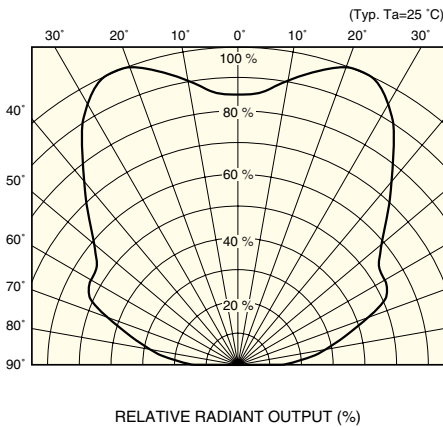
KLEDB0182EA

■ Forward current vs. forward voltage



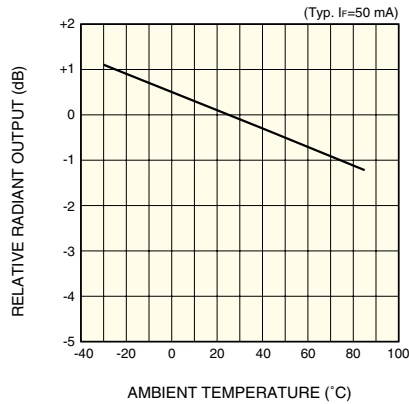
KLEDB0183EA

■ Directivity



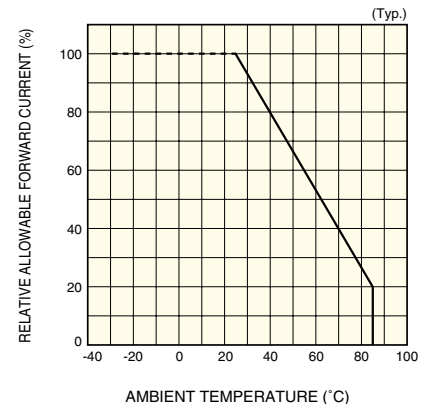
KLEDB0071EB

■ Radiant output vs. ambient temperature



KLEDB0184EA

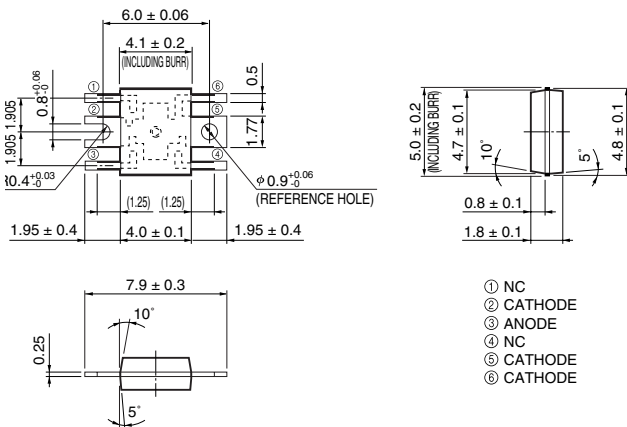
■ Allowable forward current vs. ambient temperature



KLEDB0027EB

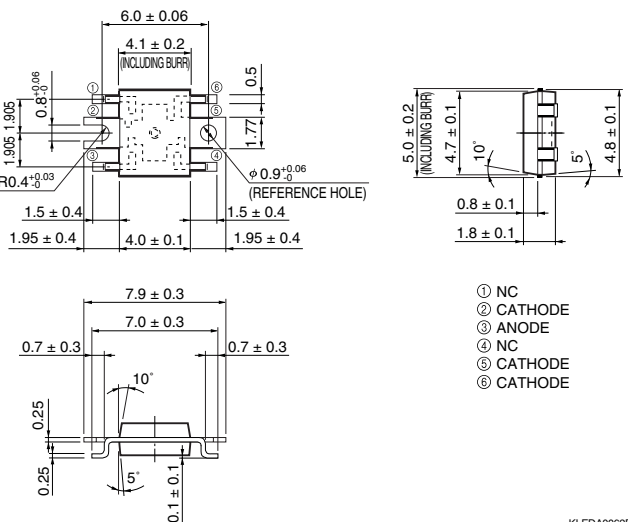
■ Dimensional outlines (unit: mm)

① L6437



KLEDA0031EB

② L6437-01



KLEDA0062EA

HAMAMATSU

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