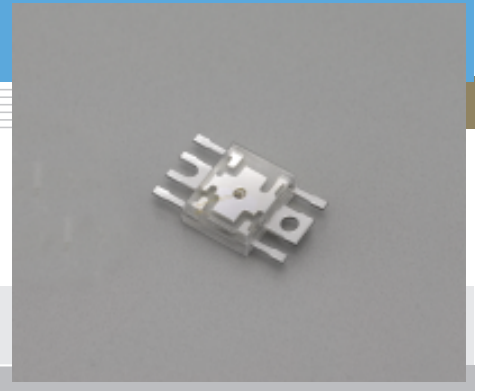


Infrared LED

L5871, L6486

Plastic package LED for camera auto-focus



Features

- Low forward voltage: 2.4 V (IF=1.0 A)
- High radiant output power by constant voltage drive
- Small emission spot (reflector size)

Applications

- Auto-focus

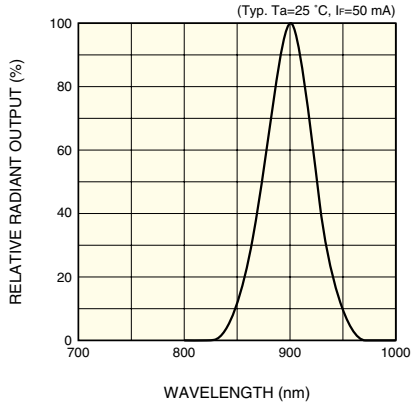
■ Absolute maximum ratings (Ta=25 °C)

Parameter	Symbol	Condition	Value	Unit
Forward current	IF		80	mA
Reverse voltage	VR		3	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)

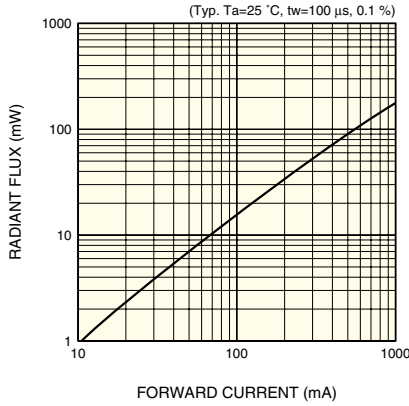
Parameter	Symbol	Condition	L5871			L6486			Unit
			Min.	Typ.	Max.	Min.	Typ.	Max.	
Peak emission wavelength	λ_p	IF=50 mA	880	900	930	880	900	930	nm
Spectral half width	$\Delta\lambda$	IF=50 mA	-	60	-	-	60	-	nm
Forward voltage	VF	IF=50 mA	-	1.35	1.45	-	1.35	1.45	V
Pulse forward voltage	VFP	IF=1.0 A	-	2.4	2.8	-	2.4	2.8	V
Reverse current	IR	VR=3 V	-	-	30	-	-	30	μA
Radiant flux	ϕ_e	IF=50 mA	5.0	7.0	-	5.0	7.0	-	mW
Radiant illuminance	PE	IF=50 mA	-	0.7	-	-	0.4	-	mW/cm ²
Rise time	tr	IF=50 mA, 10 to 90 %	-	0.45	0.7	-	0.45	0.7	μs
Fall time	tf	IF=50 mA, 90 to 10 %	-	0.45	0.7	-	0.45	0.7	μs

■ Emission spectrum



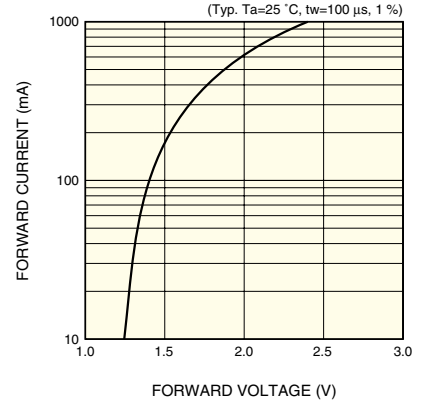
KLEDB0138EB

■ Radiant flux vs. forward current



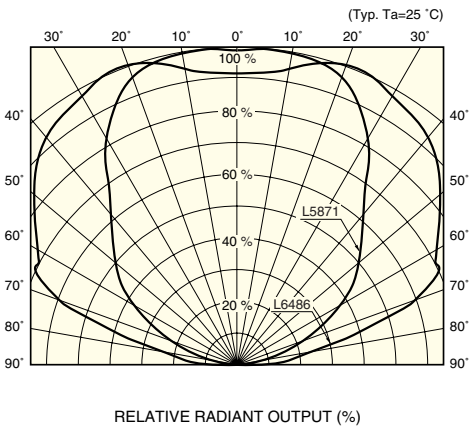
KLEDB0151EA

■ Forward current vs. forward voltage



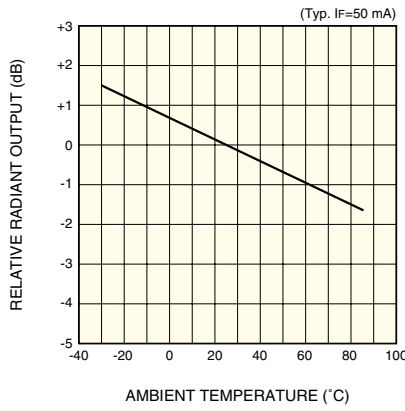
KLEDB0198EA

■ Directivity



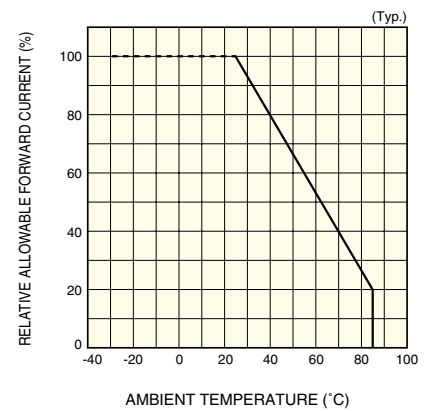
KLEDB0152EB

■ Radiant output vs. ambient temperature



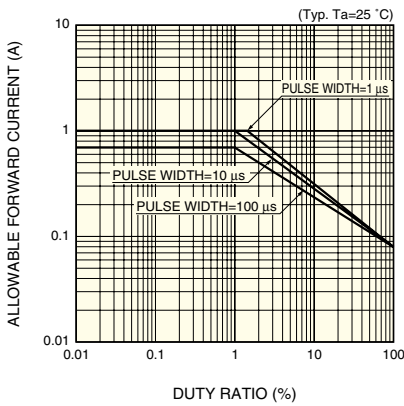
KLEDB0200EA

■ Allowable forward current vs. ambient temperature



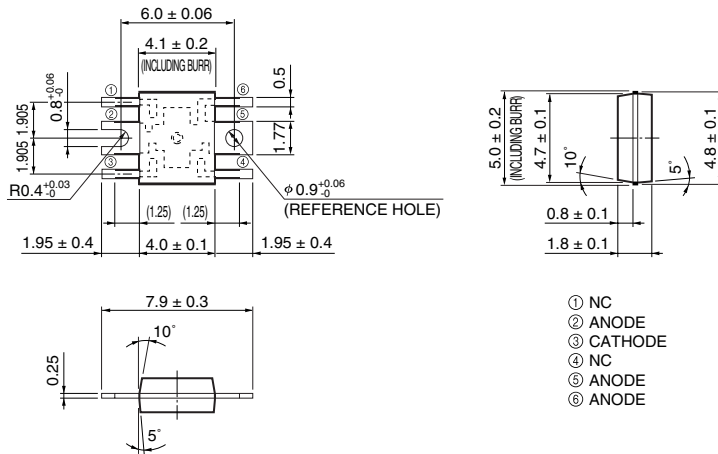
KLEDB0027EB

■ Allowable forward current vs. duty ratio



KLEDB0038EA

■ Dimensional outline (unit: mm)



KLEDA0057EA