

Red LED L9907

AlGaInP resonant cavity LED for POF data communication



Features

- High-speed response: 70 MHz
- Optical output power: 1.1 mW
- Emission area diameter: 100 μm
- Stable optical output with low temperature dependence:
85 °C/25 °C=70 %

Applications

- POF (Plastic Optical Fiber) communication
- Light source for optical switches

■ Absolute maximum ratings

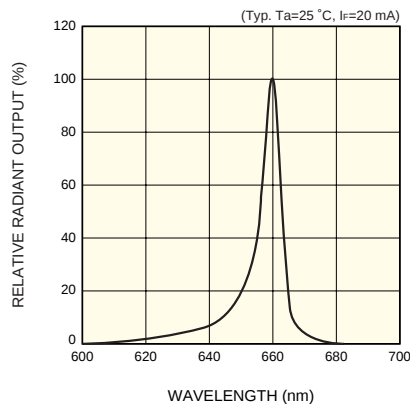
Parameter	Symbol	Value	Unit
Reverse voltage	VR Max.	3	V
Forward current	IF	50	mA
Pulsed forward current *	IFP	100	mA
Operating temperature	Topr	-30 to +85	°C
Storage temperature	Tstg	-45 to +125	°C

* Pulse width=1 μs , duty ratio 50 %

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

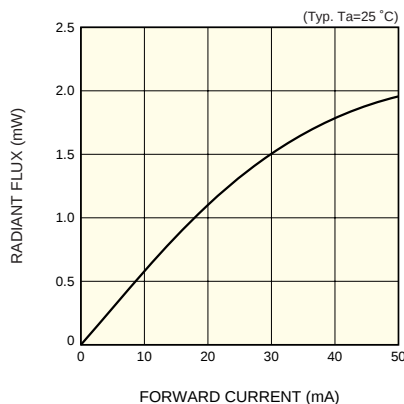
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Peak emission wavelength	λ_p	IF=20 mA	640	660	670	nm
Spectral half width	$\Delta\lambda$	IF=20 mA	-	10	20	nm
Radiant flux	ϕ_e	IF=20 mA	0.8	1.1	-	mW
Forward voltage	VF	IF=20 mA	-	1.9	2.4	V
Cut-off frequency	fc	IF=20 mA $\pm$ 1 mAp-p	60	70	-	MHz
Optical output ratio at different temperatures	dP/dTj	IF=20 mA, 85 °C/25 °C	-	70	-	%

Emission spectrum



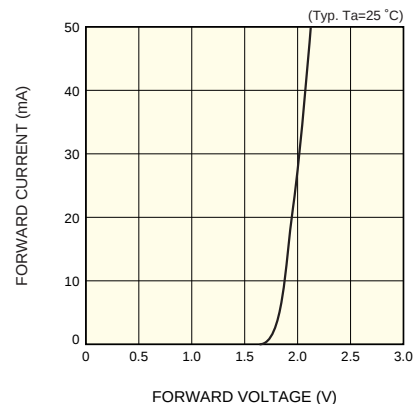
KLEDB0264EA

Radiant flux vs. forward current



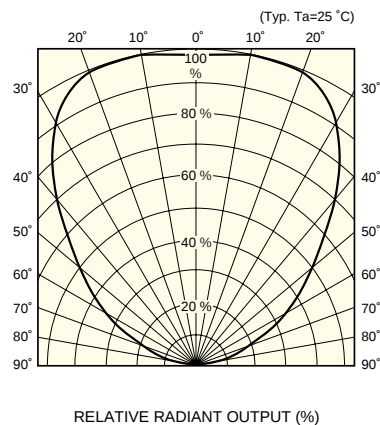
KLEDB0265EA

Forward current vs. forward voltage



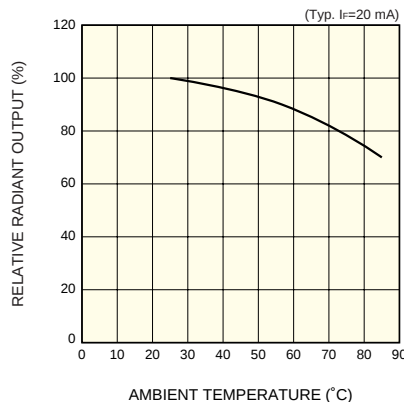
KLEDB0267EA

Directivity



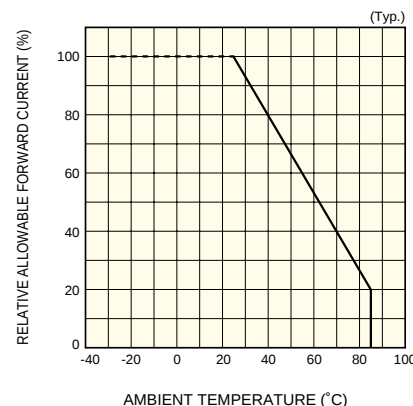
KLEDB0301EA

Radiant output vs. ambient temperature



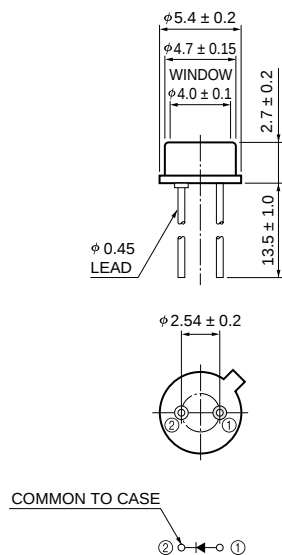
KLEDB0266EA

Allowable forward current vs. ambient temperature



KLEDB0027EB

Dimensional outline (unit: mm)



KLEDA0073EA

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