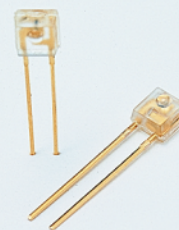


Infrared LED

L6895-10

High-power LED with miniature package



L6895-10 is a high-power LED molded into a miniature, clear plastic package that emits infrared light at a peak emission wavelength of 940 nm. An optical encoder resistant to tough environmental conditions can be configured by combining L6895-10 with S7610-10 (made by Hamamatsu).

Features

- Pd plated leads
- Miniature package with lens
- Peak emission wavelength: 940 nm
- Operating temperature range: -25 to +85 °C
- Storage temperature range : -30 to +85 °C

Applications

- Rotary encoders, etc.

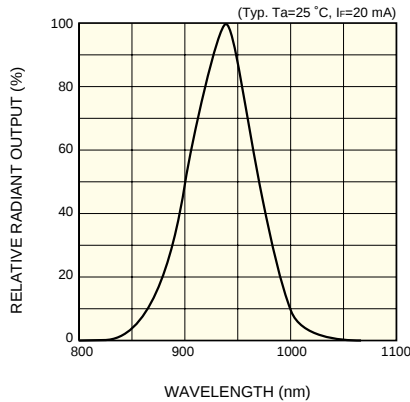
■ Absolute maximum ratings (Ta=25 °C)

Parameter	Symbol	Condition	Value	Unit
Forward current	IF		60	mA
Reverse voltage	VR Max.		5	V
Pulse forward current	IFP	Pulse width: 100 μs Duty ratio: 1 %	1.0	A
Power dissipation	P		90	mW
Operating temperature	Topr		-25 to +85	°C
Storage temperature	Tstg		-30 to +85	°C
Soldering	-		260 °C, 3 s at least 2.5 mm away from package surface	-

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

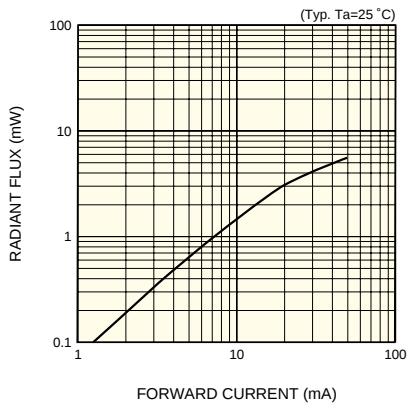
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Peak emission wavelength	λ_p	IF=20 mA	-	940	-	nm
Spectral half width	$\Delta\lambda$	IF=20 mA	-	45	-	nm
Forward voltage	VF	IF=20 mA	-	1.25	1.45	V
Reverse current	IR	VR=5 V	-	-	10	μA
Radiant flux	ϕ_e	IF=20 mA	1.2	-	-	mW
Terminal capacitance	Ct	VR=0 V, f=1 MHz	-	20	-	pF

■ Emission spectrum



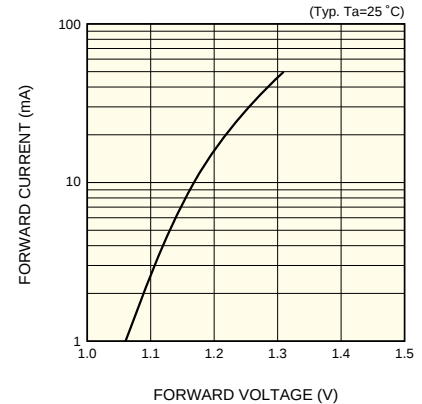
KLED80286EA

■ Radiant flux vs. forward current



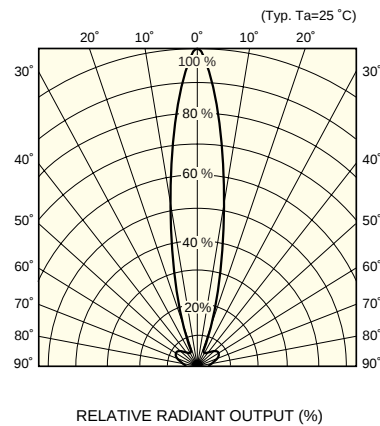
KLED80294EA

■ Forward current vs. forward voltage



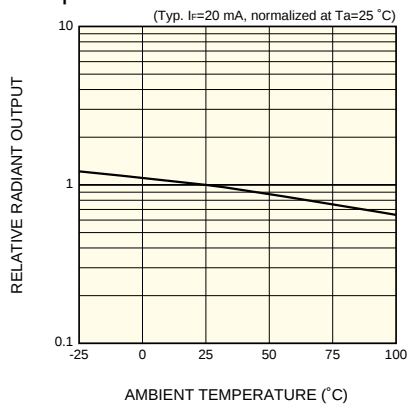
KLED80295EA

■ Directivity



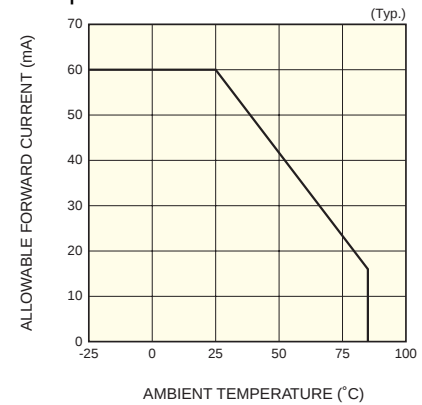
KLED80115EA

■ Radiant output vs. ambient temperature



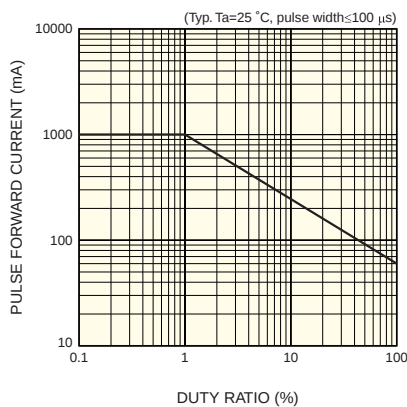
KLED80116EA

■ Allowable forward current vs. ambient temperature



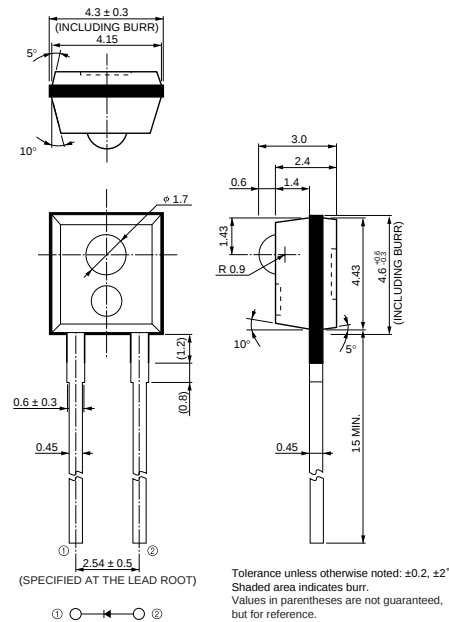
KLED80083EA

■ Pulse forward current vs. duty ratio



KLED80084EA

■ Dimensional outline (unit: mm)



KLEDA0044EA

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