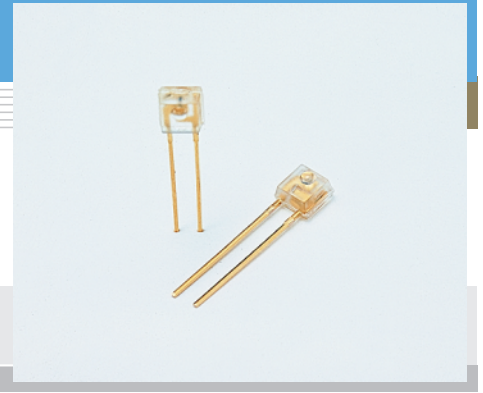


Infrared LED

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.

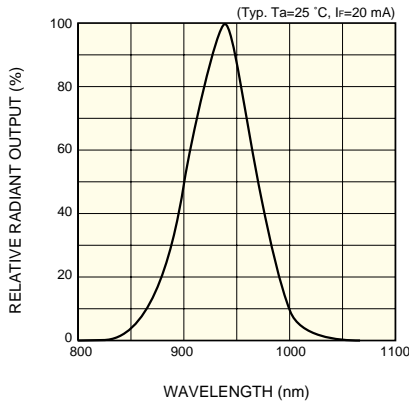
■ Absolute maximum ratings (Ta=25 °C)

Parameter	Symbol	Condition	Value	Unit
Forward current	I _F		60	mA
Reverse voltage	V _R Max.		5	V
Pulse forward current	I _{FP}	Pulse width: 100 μs Duty ratio: 1 %	1.0	A
Power dissipation	P		90	mW
Operating temperature	T _{opr}		-25 to +85	°C
Storage temperature	T _{stg}		-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)

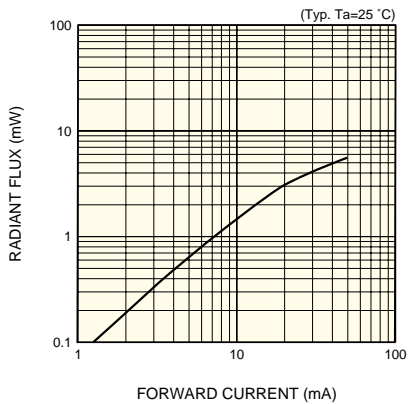
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Peak emission wavelength	λ _p	I _F =20 mA	-	940	-	nm
Spectral half width	Δλ	I _F =20 mA	-	45	-	nm
Forward voltage	V _F	I _F =20 mA	-	1.25	1.45	V
Reverse current	I _R	V _R =5 V	-	-	10	μA
Radiant flux	φ _e	I _F =20 mA	1.2	-	-	mW
Terminal capacitance	C _t	V _R =0 V, f=1 MHz	-	20	-	pF

Emission spectrum



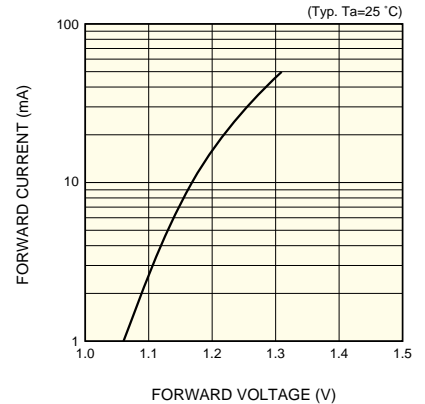
KLEDB0286EA

Radiant flux vs. forward current



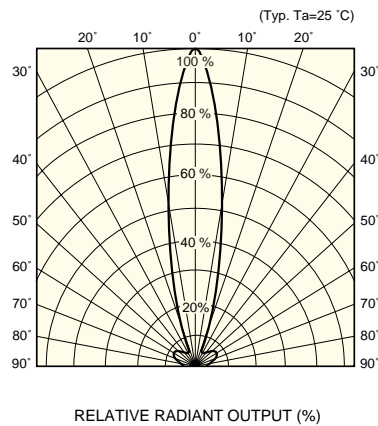
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Forward current vs. forward voltage



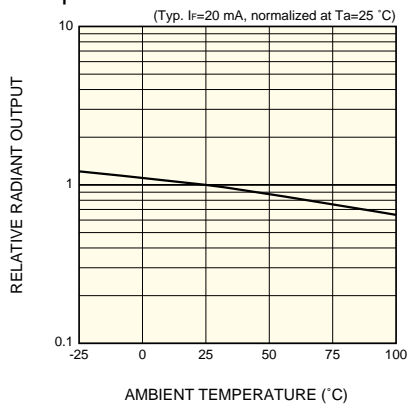
KLEDB0295EA

Directivity



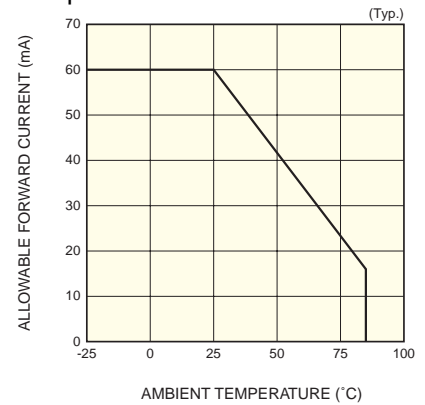
KLEDB0115EA

Radiant output vs. ambient temperature



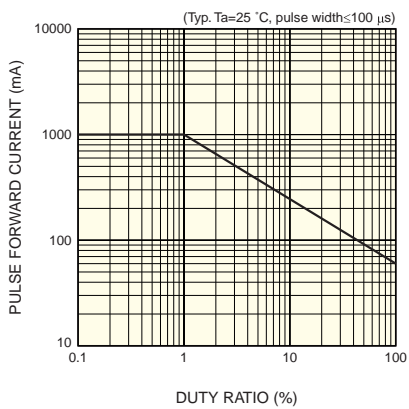
KLEDB0116EA

Allowable forward current vs. ambient temperature



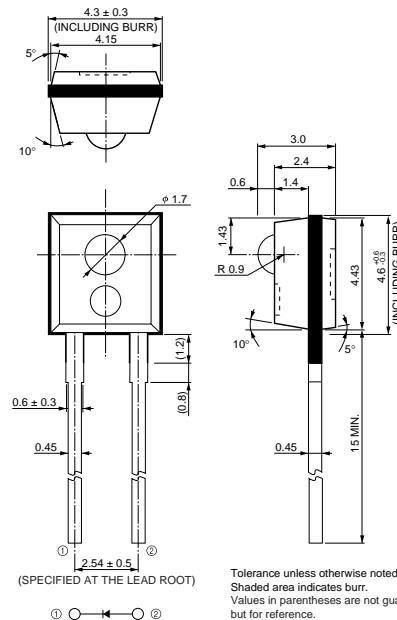
KLEDB0083EA

Pulse forward current vs. duty ratio



KLEDB0004EA

Dimensional outline (unit: mm)



KLEDA0044EA

HAMAMATSU

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