

Infrared LED

L5276, L5586, L6286

Subminiature LED



L5276, L5586 and L6286 are infrared LED molded into a subminiature, clear plastic package.

Features

- Peak emission wavelength
L5276 : 880 nm
L5586, L6286: 940 nm
- L6286: High output power
- Subminiature plastic package with lens

Applications

- Optical switches
- Cameras
- Encoders

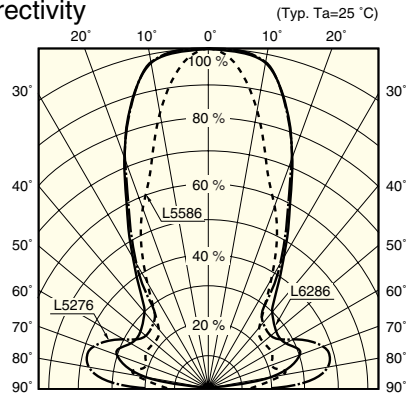
■ Absolute maximum ratings (Ta=25 °C)

Parameter	Symbol	Condition	Value	Unit
Forward current	IF		50	mA
Reverse voltage	VR		5	V
Pulse forward current	IFP	Pulse width: 100 μs Duty ratio: 1 %	0.5	A
Power dissipation	Po		80	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	L5276			L5586			L6286			Unit
			Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
Peak emission wavelength	λ_p	IF=20 mA	-	880	-	-	940	-	-	940	-	nm
Spectral half width	$\Delta\lambda$	IF=20 mA	-	50	-	-	45	-	-	45	-	nm
Forward voltage	VF	IF=20 mA	-	1.3	1.6	-	1.25	1.45	-	1.25	1.45	V
Reverse current	IR	VR=5 V	-	-	10	-	-	10	-	-	10	μA
Radiant flux	ϕ_e	IF=20 mA	1.0	2.2	-	0.5	-	-	0.8	-	-	mW
Terminal capacitance	Ct	VR=0 V, f=1 MHz	-	30	-	-	20	-	-	20	-	pF

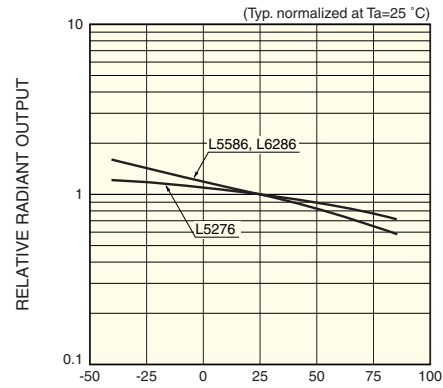
Directivity



RELATIVE RADIANT OUTPUT

KLEDB0108EA

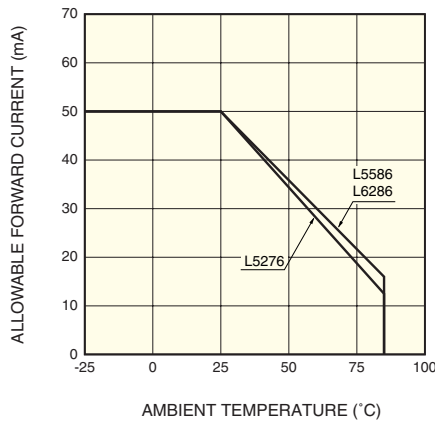
Radiant output vs. ambient temperature



AMBIENT TEMPERATURE ($^\circ\text{C}$)

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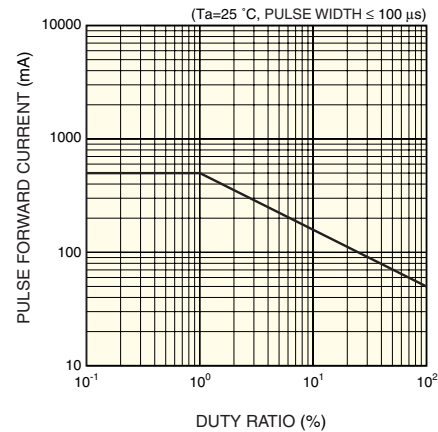
Allowable forward current vs. ambient temperature



AMBIENT TEMPERATURE ($^\circ\text{C}$)

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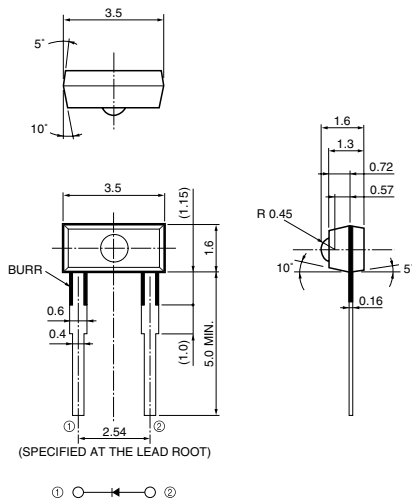
Pulse forward current vs. duty ratio



DUTY RATIO (%)

KLEDB0111EA

Dimensional outline (unit: mm)



Shaded area indicates burr.
Tolerance unless otherwise noted: ± 0.2 , $\pm 2^\circ$
Values in parentheses are not guaranteed, but for reference.

KLEDA0023EA

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