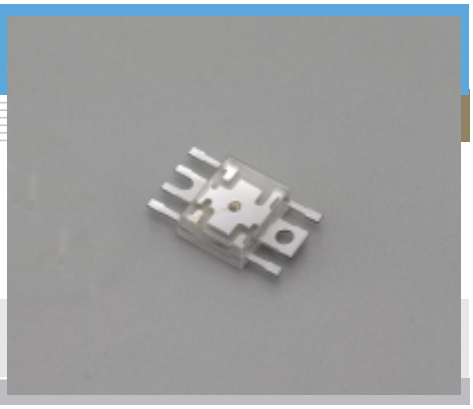
Infrared LED
L5871, L6486

Plastic package LED for camera auto-focus



Features

- Low forward voltage: 2.4 V (I_F=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	I_F		80	mA
Reverse voltage	V_R		3	V
Pulse forward current	I_{FP}	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	λp	I_F=50 mA	880	900	930	880	900	930	nm
Spectral half width	Δλ	I_F=50 mA	-	60	-	-	60	-	nm
Forward voltage	V_F	I_F=50 mA	-	1.35	1.45	-	1.35	1.45	V
Pulse forward voltage	V_{FP}	I_F=1.0 A	-	2.4	2.8	-	2.4	2.8	V
Reverse current	I_R	V_R=3 V	-	-	30	-	-	30	µA
Radiant flux	φe	I_F=50 mA	5.0	7.0	-	5.0	7.0	-	mW
Radiant illuminance	P_E	I_F=50 mA	-	0.7	-	-	0.4	-	mW/cm^2
Rise time	tr	I_F=50 mA, 10 to 90 %	-	0.45	0.7	-	0.45	0.7	µs
Fall time	tf	I_F=50 mA, 90 to 10 %	-	0.45	0.7	-	0.45	0.7	µs

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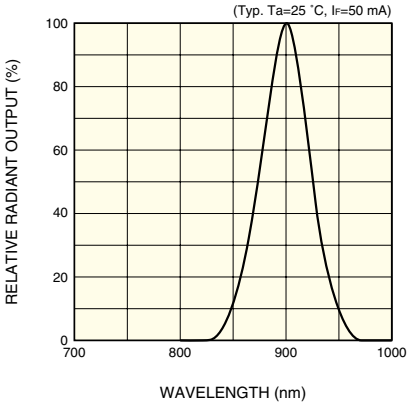
■ Emission spectrum



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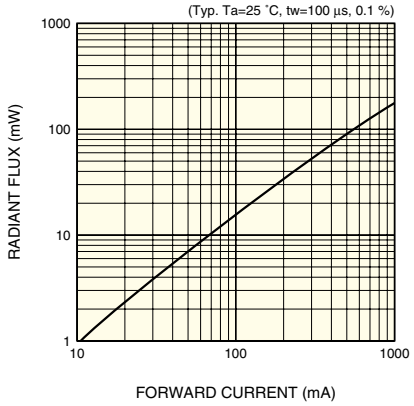
■ Radiant flux vs. forward current



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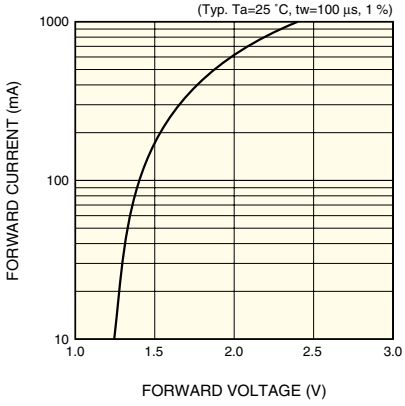
■ Forward current vs. forward voltage



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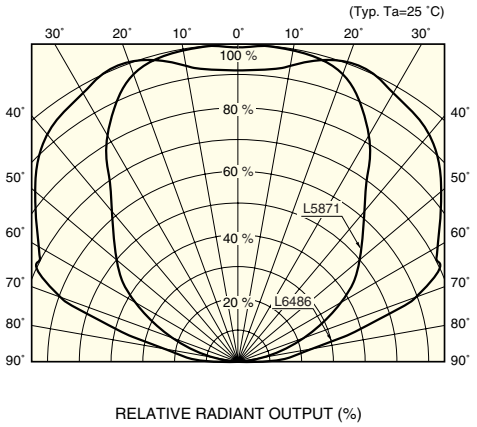
■ Directivity



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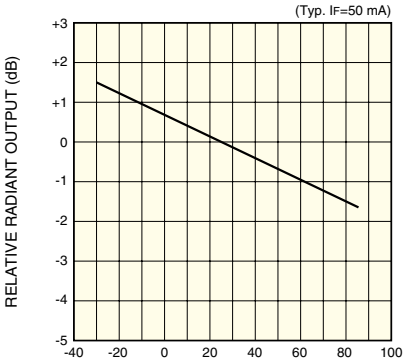
■ Radiant output vs. ambient temperature



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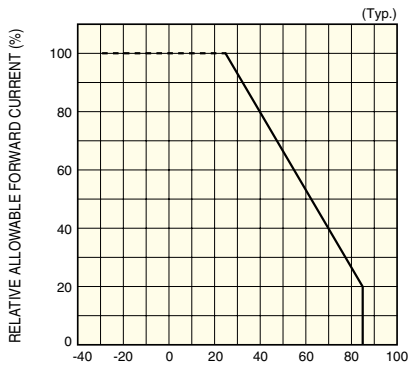
■ Allowable forward current vs. ambient temperature



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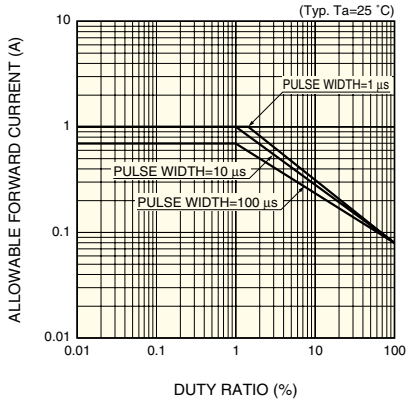
■ Allowable forward current vs. duty ratio



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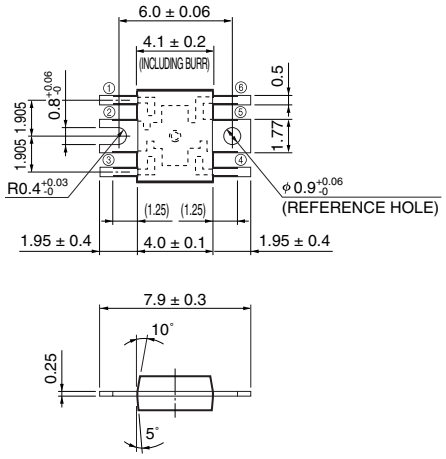
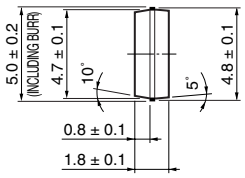
■ Dimensional outline (unit: mm)





① NC
② ANODE
③ CATHODE
④ NC
⑤ ANODE
⑥ ANODE

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