KL898

Description

Model **KL898** is 2 C/W (890/660nm) Light Emitting Diode mounted in ceramic stem with epoxy encapsulation.

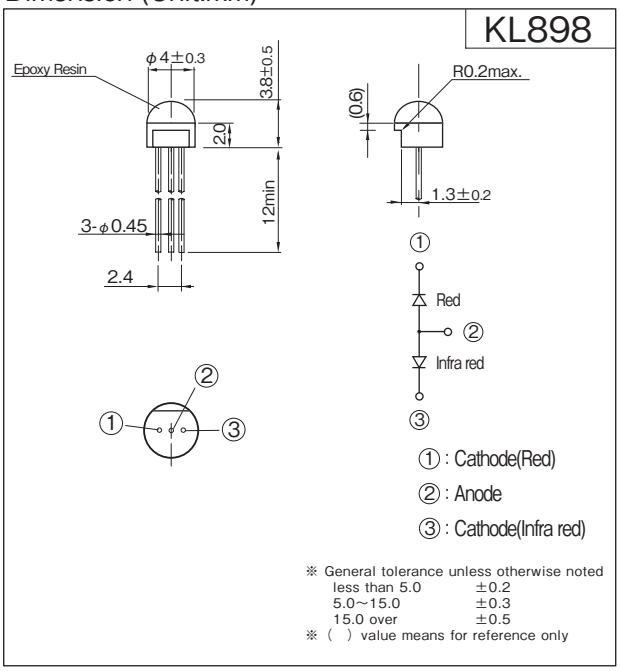
Feature

- 2 C/W LED: Red (λ p:660nm) and Infra Red (λ p:890nm).
- Φ 4 ceramc stem.
- Wide Beam Angle (θ : ± 84°), High power.

Application

- Light source for printing discrimination.
- Light source for color sensor.
- Light source for paper quality discrimination.

Dimension (Unit:mm)



Absolute Maximum Ratings [Ta=25℃ Unless otherwise noted]

Item	Symbol	Rating		Units
		Red	Infra Red	
Power Dissipation※1	P	90	100	mW
Forward Current	I_F	50	60	mA
Pulse Forward Current※2	I_{FP}	0.5	0.6	A
Reverse Voltage	V_R	5	5	V
Operating Temperature	T_{opr}	-25 ~ +85		℃
Storage Temperature	T_{stg}	-40 ~ +100		℃
Soldering Temperature※3	T_{sol}	260		℃

※1. Power Dissipation is max. 100mW
※2. Pulse width ≦ 100 μ sec, Duty ratio=0.01
※3. Soldering condition 5sec. At 2.6mm over from ceramic stem.

Electro-Optical Characteristics [Ta=25℃ Unless otherwise noted]

Item		Symbol	Condition	min.	typ.	max.	Units
Forward Voltage	Red	V_F	I_F=25mA	—	1.8	2.2	V
	Infra Red		I_F=30mA	—	1.35	1.6	
Reverse Current		I_R	V_R=5V	—	—	10	μ A
Power Output	Red	P_O	I_F=25mA	0.2	0.5	—	mW
	Infra Red		I_F=30mA	1.1	2.3	—	
Peak Wavelength	Red	λ p	I_F=25mA	—	660	—	nm
	Infra Red		I_F=30mA	—	890	—	
Spectral Half Width	Red	Δ λ	I_F=25mA	—	20	—	nm
	Infra Red		I_F=30mA	—	70	—	
Half Angle		Δ θ		—	± 84	—	deg

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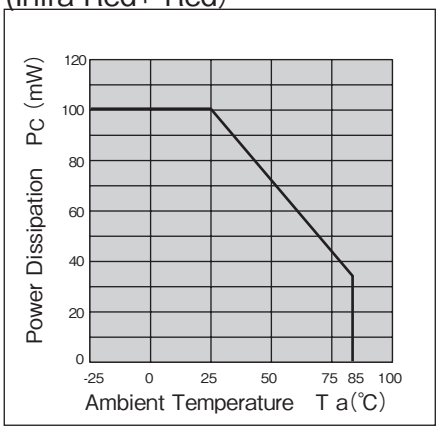
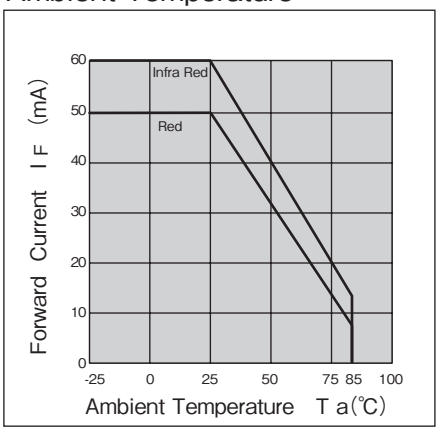
Note: Operation never exceeds each value of Absolute Maximum Ratings.

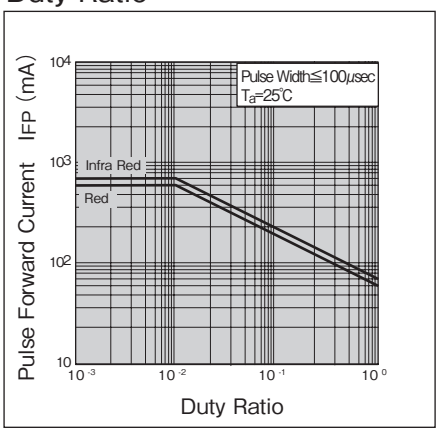
Power Dissipation vs. Ambient Temperature (Infra Red+ Red)



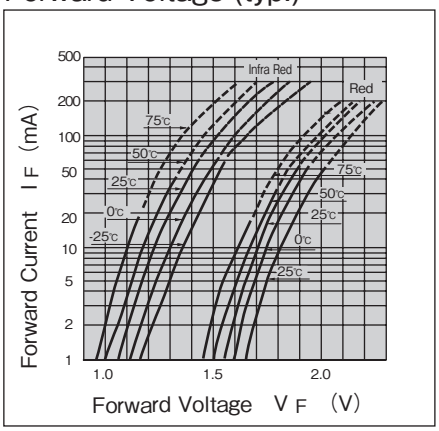
Forward Current vs. Ambient Temperature



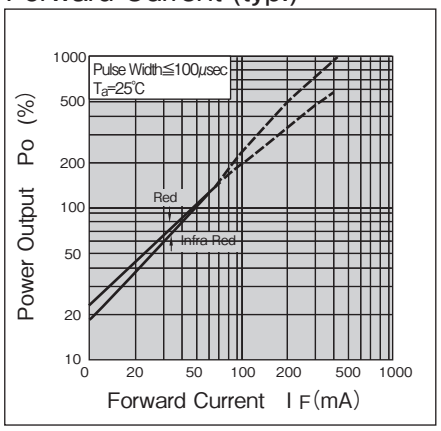
Pulse Forward Current vs. Duty Ratio



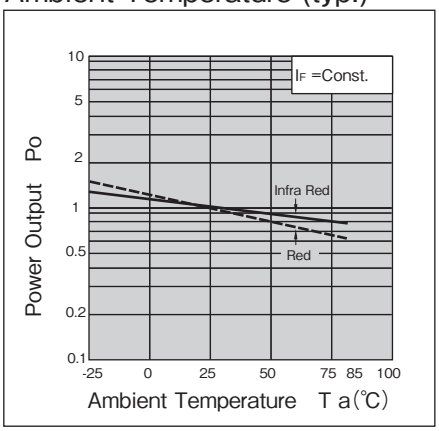
Forward Current vs. Forward Voltage (typ.)



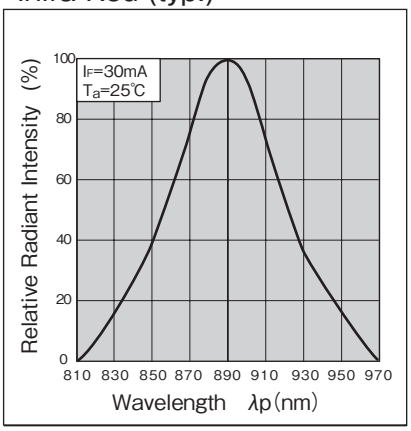
Power Output vs. Forward Current (typ.)



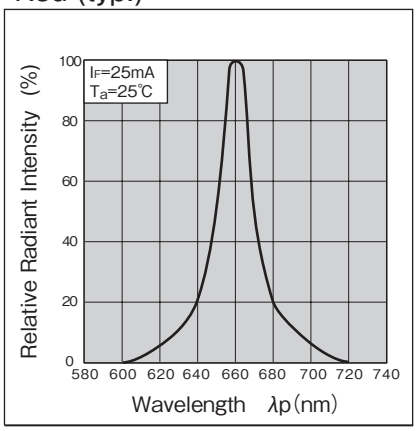
Power Output vs. Ambient Temperature (typ.)



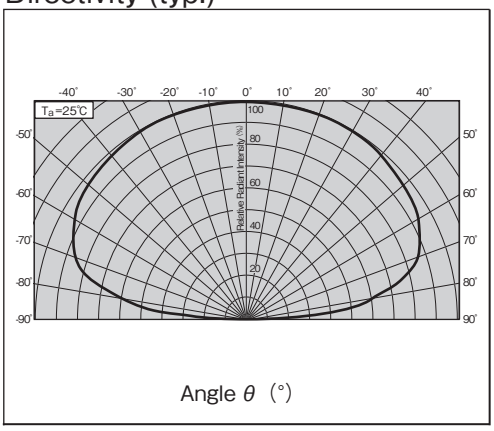
Spectral Wavelength -Infra Red (typ.)



Spectral Wavelength -Red (typ.)



Directivity (typ.)



- A Custom designed package is available on request.
- Specification are subject to change without notice.

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