

**LED and Photo diode in single package  
Model No. AL130K**

*LED + Photodiode Model*

◆ **Description**

For the application with a highly stabilized light source for precise optical system, LED and the monitored Photodiode are packaged together.



◆ **Absolute Maximum Ratings**

T<sub>a</sub> = 25°C

Parameter	Symbol	Value	Unit
LED Forward Current (DC)	I <sub>F</sub>	100	mA
LED Pulse Forward Current <sup>*1</sup>	I <sub>FP</sub>	1.0	A
LED Reverse Voltage (DC)	V <sub>Re</sub>	5	V
PD Reverse Voltage (DC)	V <sub>Rd</sub>	20	V
Power Dissipation	P <sub>D</sub>	170	mW
Operating Temperature	T <sub>opr</sub>	-20 ~ +100	°C
Storage Temperature	T <sub>stg</sub>	-30 ~ +125	°C
Soldering Temperature <sup>*2</sup>	T <sub>sol</sub>	260	°C

<sup>\*1</sup> : Tw=10 μ s, T=10mS

<sup>\*2</sup> : within 5sec / up to 3.0mm from the body

◆ **Electro-optical Characteristics**

T<sub>a</sub> = 25°C

Parameter	Symbol		Value	Unit	
Radiated Power	P <sub>O</sub>	Min	3.0	mW	I <sub>F</sub> = 50mA
		Typ	5.0		
Forward Voltage	V <sub>F</sub>	Typ	1.3	V	I <sub>F</sub> = 50mA
		Max	1.7		
Reverse Current	I <sub>R</sub>	Max	100	μ A	V <sub>R</sub> = 5V
PD Output Current	I <sub>L</sub>	Typ	200	μ A	I <sub>F</sub> =50mA, V <sub>Rd</sub> =10V
PD Dark Current	I <sub>D</sub>	Max	10	nA	V <sub>Rd</sub> =10V
Peak Wavelength	λ <sub>p</sub>	Typ	880	nm	I <sub>F</sub> = 50mA
Half width	Δ λ	Typ	80	nm	I <sub>F</sub> = 50mA
Viewing Half Angle	θ 1/2	Typ	±7	deg.	I <sub>F</sub> = 50mA

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External Dimension (unit: mm)

