

# GL4910

# Side **Emission** Type Infrared **Emitting** Diode for Camera AF

## ■ Features

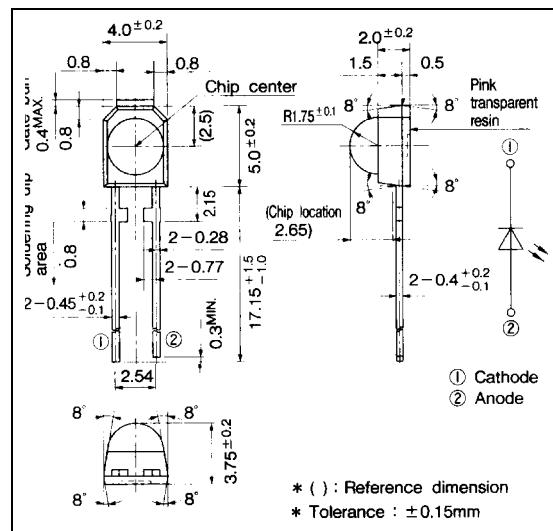
1. Current concentration type
  2. Small light spot diameter  
(Chip ; 4150pm)
  3. Uniform radiant intensity of  
light emitting surface
  4. Low peak forward voltage  
( $V_{FM}$  : TYP. 1.7V at  $I_{FM} = 300mA$ )

## ■ Applications

- ## 1. Cameras

## ■ Outline Dimensions

(Unit mm)

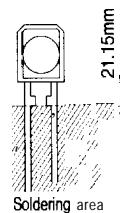


## ■ **Absolute** Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Rating	Unit
Forward current	I <sub>F</sub>	50	mA
* Peak forward current	I <sub>FM</sub>	1	A
Reverse voltage	V <sub>R</sub>	4	V
Operating temperature	T <sub>opr</sub>	-25 to +60	°C
Storage temperature	T <sub>stg</sub>	-40 to +85	°C
* Soldering temperature	T <sub>sol</sub>	260	°C

\*! Pulse width : 100  $\mu$ s, duty ratio :0.01

\*2 For MAX. 5 seconds at the position of 2. 15mm from the bottom face of resin package



## ■ Electro-optical Characteristics

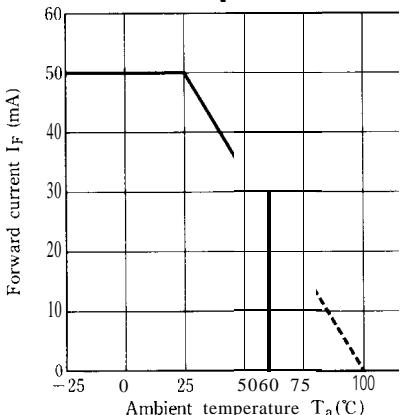
(Ta= 25°C)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX	Unit
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 50mA		1.55	1.7	V
Peak forward voltage	V <sub>FM</sub>	I <sub>FM</sub> = 300mA, t= 10ms	—	1.7	1.95	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =1V			100	μA
Radiant flux	*3Φ <sub>e</sub>	I <sub>FM</sub> = 300mA, t= 10ms	4.2	9	—	mW
Peak emission wavelength	λ <sub>p</sub>	I <sub>F</sub> = 50mA		850	—	nm
Spectrum radiation bandwidth	△λ	I <sub>F</sub> = 50mA	—	35	—	nm
Half intensity angle	△θ	I <sub>F</sub> = 50mA		±32	—	
Terminal capacitance	C <sub>t</sub>	V <sub>R</sub> =0, f=1MHz	—	80	—	pF

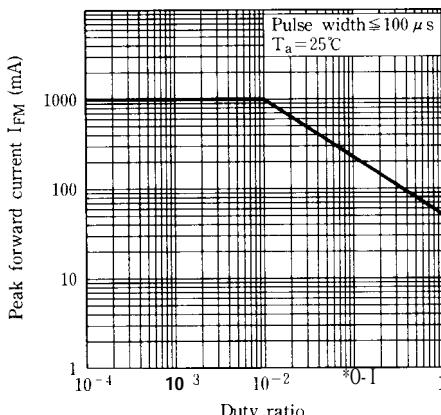
\*3 Radiation output to effective angle (±25°)

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**Fig. 1 Forward Current vs.  
Ambient Temperature**



**Fig. 2 Peak Forward Current vs. Duty Ratio**



Please refer to the chapter "Precautions for Use." (Page 78 to 93)