

## **Infrared Emitting Diodes(GaAs)**

KODENSHI

EL - 6F11

The EL - 6F11 is a high - power GaAs IRED mounted in a clear epoxy package. This IRED is both compact and easy to mount.

FEATURES

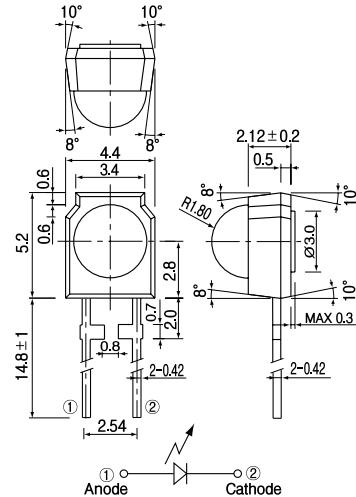
- Plastic mold package with a large caliber lens
  - High output power

## APPLICATIONS

- Optical switches

# **DIMENSIONS**

(Unit : mm)



## **MAXIMUM RATINGS**

(Ta=25 )

Item	Symbol	Rating	Unit
Reverse voltage	V <sub>R</sub>	4	V
Forward current	I <sub>F</sub>	50	mA
Power dissipation	P <sub>D</sub>	80	mW
Pulse forward current <sup>**1</sup>	I <sub>FP</sub>	1	A
Operating temp.	To pr.	- 25    + 85	
Storage temp.	T <sub>stg.</sub>	- 40    + 85	
Soldering temp. <sup>**2</sup>	T <sub>sol.</sub>	260	

\*1. pulse width : tw 100 sec. period : T = 10 msec.

\*2. For MAX.5 seconds at the position of 2 mm from the package

## ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25 °C)

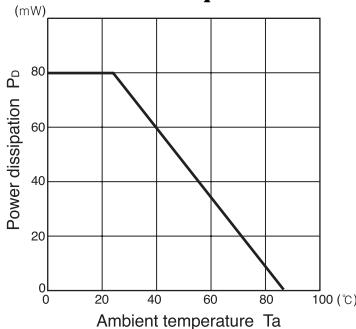
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Forward voltage	$V_F$	$I_F = 50\text{mA}$		1.3	1.65	V
Reverse current	$I_R$	$V_R = 4\text{V}$			10	mA
Peak emission wavelength	$\lambda$	$I_F = 20\text{mA}$		940		nm
Spectral bandwidth		$I_F = 20\text{mA}$		50		nm
Radiant intensity <sup>-3</sup>	$P_0$	$I_F = 50\text{mA}$	2.5	6.0		V
Half angle		$I_F = 20\text{mA}$		$\pm 25$		deg.

\*3. Measured by tester of KODENSHI CORP.

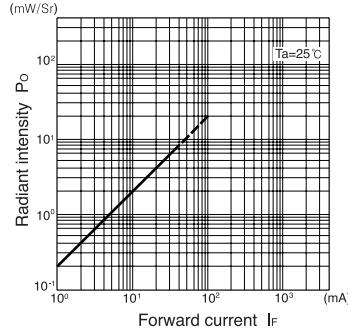
## Infrared Emitting Diodes(GaAs)

EL - 6F11

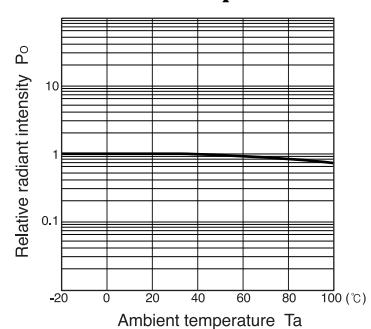
**Power dissipation Vs.  
Ambient temperature**



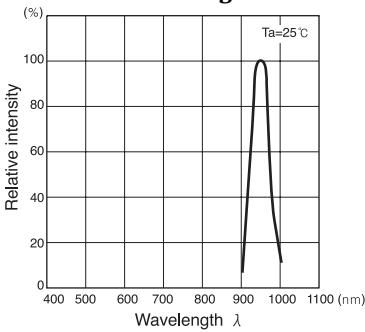
**Radiant intensity Vs.  
Forward current**



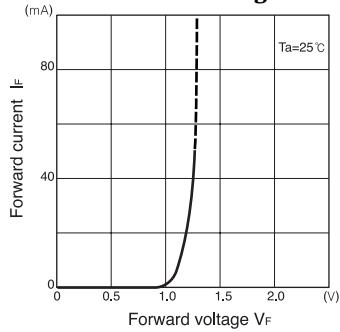
**Relative radiant intensity Vs.  
Ambient temperature**



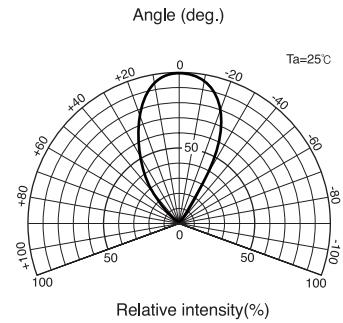
**Relative intensity Vs.  
Wavelength**



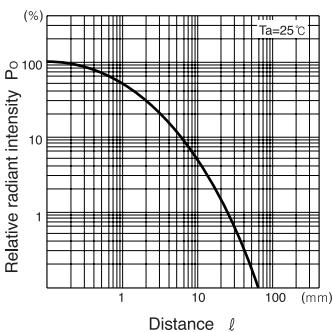
**Forward current vs.  
Forward voltage**



**Radiant Pattern**



**Relative radiant intensity Vs.  
Distance**



Relative radiant intensity Vs.  
Distance test method

