

The EL - 315 a high - power GaAs IRED mounted in a clear sidelooking package, is compact, low profile, and easy to mount.

### FEATURES

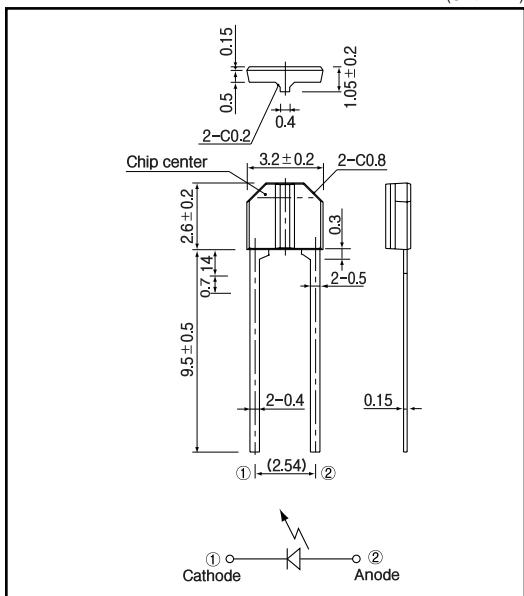
- Compact
- Low profile package
- Low - cost
- Sidelooking plastic package

### APPLICATIONS

- Photointerrupters
- Optical switches
- Toys

### DIMENSIONS

(Unit : mm)



### MAXIMUM RATINGS

(Ta=25 )

Item	Symbol	Rating	Unit
Reverse voltage	V <sub>R</sub>	5	V
Forward current	I <sub>F</sub>	50	mA
Pulse forward current <sup>*1</sup>	I <sub>FP</sub>	0.5	A
Power dissipation	P <sub>D</sub>	75	mW
Operating temp.	T <sub>opr.</sub>	- 25 ~ +85	
Storage temp.	T <sub>stg.</sub>	- 30 ~ +100	
Soldering temp. <sup>*2</sup>	T <sub>sol.</sub>	240	

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

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

### ELECTRO-OPTICAL CHARACTERISTICS

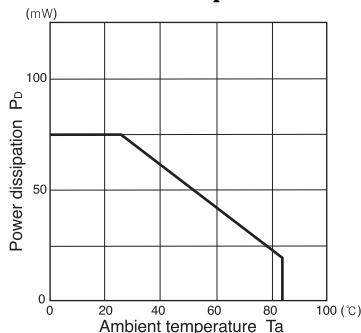
(Ta=25 )

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =50mA			1.6	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =5V			10	μA
Capacitance	C <sub>t</sub>	f=1MHz		25		pF
Radiant intensity	P <sub>O</sub>	I <sub>F</sub> =50mA		0.7		mW/sr
Peak emission wavelength	λ	I <sub>F</sub> =50mA		940		nm
Spectral bandwidth 50%		I <sub>F</sub> =50mA		50		nm
Half angle			± 30			deg.

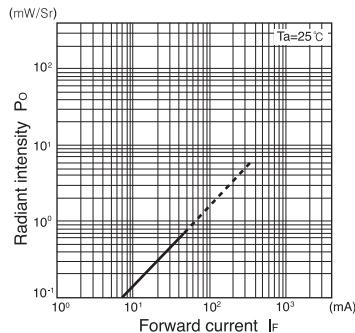
## Infrared Emitting Diodes(GaAs)

EL - 315

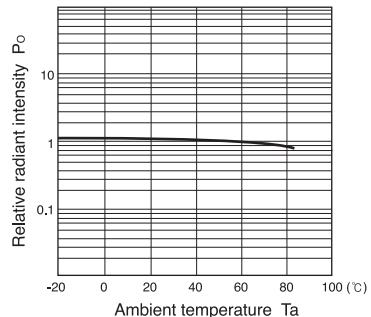
**Power dissipation Vs.  
Ambient temperature**



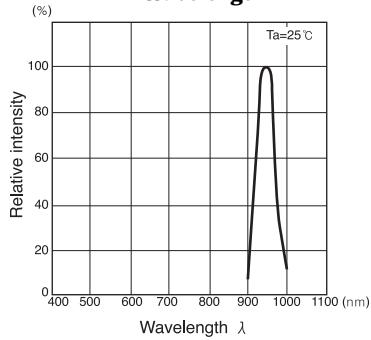
**Radiant intensity Vs.  
Forward current**



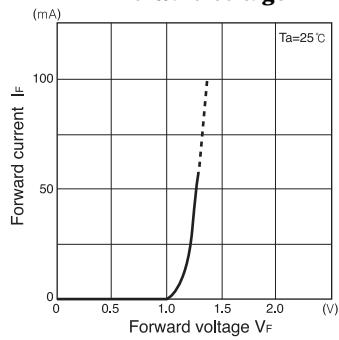
**Relative radiant intensity Vs.  
Ambient temperature**



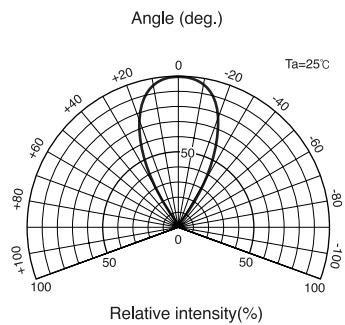
**Relative intensity Vs.  
Wavelength**



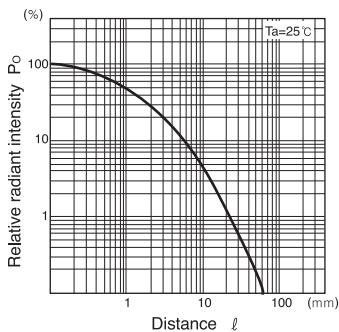
**Forward current vs.  
Forward voltage**



**Radiant Pattern**



**Relative radiant intensity Vs.  
Distance**



Relative radiant intensity Vs.  
Distance test method

