

## EL - 314

The EL - 314 a high - power GaAs IRED mounted in a clear sidelooking package, is compact, low profile, and easy to mount.

**FEATURES**

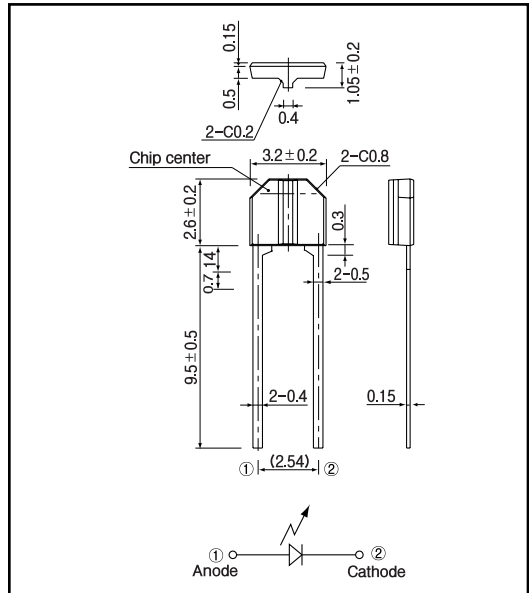
- Compact
- Low profile package
- Low - cost
- Sidelooking plastic package

**APPLICATIONS**

- Photointerrupters
- Optical switches
- Toys

**DIMENSIONS**

(Unit : mm)

**MAXIMUM RATINGS**

(Ta=25 °C)

Item	Symbol	Rating	Unit
Reverse voltage	$V_R$	5	V
Forward current	$I_F$	50	mA
Pulse forward current *1	$I_{FP}$	0.5	A
Power dissipation	$P_D$	75	mW
Operating temp.	$T_{opr.}$	- 25 ~ +85	
Storage temp.	$T_{stg.}$	- 30 ~ +100	
Soldering temp. *2	$T_{sol.}$	240	

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

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

**ELECTRO-OPTICAL CHARACTERISTICS**

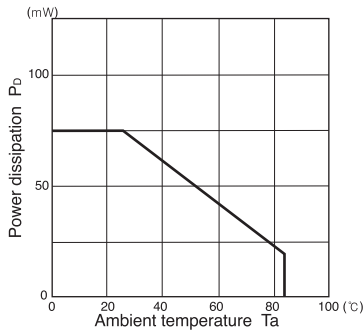
(Ta=25 °C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Forward voltage	$V_F$	$I_F$ = 50mA			1.6	V
Reverse current	$I_R$	$V_R$ = 5V			10	$\mu$ A
Capacitance	$C_t$	$f$ = 1MHz		25		pF
Radiant intensity	$P_o$	$I_F$ = 50mA		0.7		mW/sr
Peak emission wavelength	$\lambda_p$	$I_F$ = 50mA		940		nm
Spectral bandwidth 50%		$I_F$ = 50mA		50		nm
Half angle				$\pm 30$		deg.

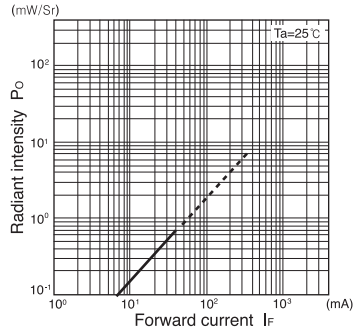
# Infrared Emitting Diodes(GaAs)

EL - 314

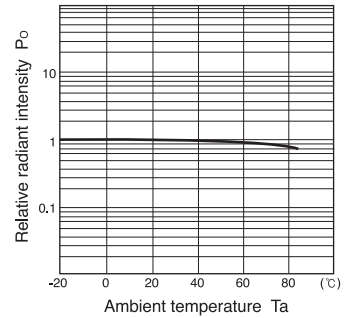
**Power dissipation Vs. Ambient temperature**



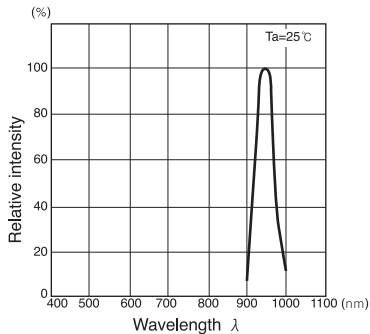
**Radiant intensity Vs. Forward current**



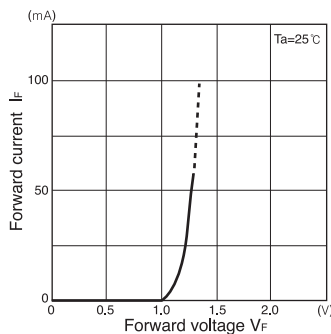
**Relative radiant intensity Vs. Ambient temperature**



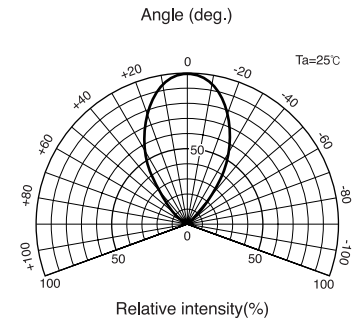
**Relative intensity Vs. Wavelength**



**Forward current vs. Forward voltage**



**Radiant Pattern**



**Relative radiant intensity Vs. Distance**

