

# EL - 305

The EL - 305 a high - power GaAs IRED mounted in a clear sidelooking package, is compact, low profile, and easy to mount.

## FEATURES

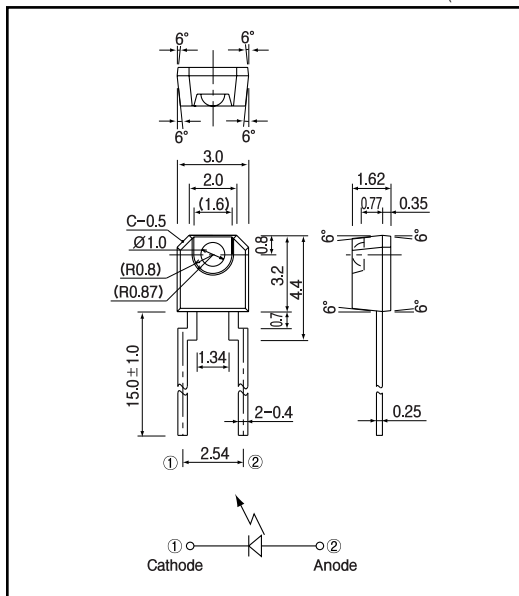
- Compact
- Low profile package
- Low - cost
- Sidelooking plastic package

## APPLICATIONS

- Photointerrupters
- Optical switches
- Toys

## DIMENSIONS

(Unit : mm)



## MAXIMUM RATINGS

(Ta=25 )

Item	Symbol	Rating	Unit
Reverse voltage	$V_R$	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 ~ +85	
Soldering temp. *2	$T_{sol.}$	240	

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

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

## ELECTRO-OPTICAL CHARACTERISTICS

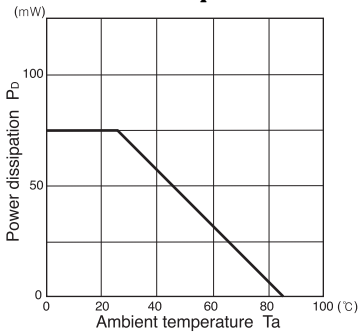
(Ta=25 )

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Forward voltage	$V_F$	$I_F=20$ mA		1.2	1.5	V
Reverse current	$I_R$	$V_R=5$ V			10	$\mu$ A
Capacitance	$C_t$	$f=1$ MHz		25		pF
Radiant intensity	$P_o$	$I_F=20$ mA		1.0		mW/sr
Peak emission wavelength	$\lambda$	$I_F=20$ mA		940		nm
Spectral bandwidth 50%		$I_F=20$ mA		50		nm
Half angle				$\pm 20$		deg.

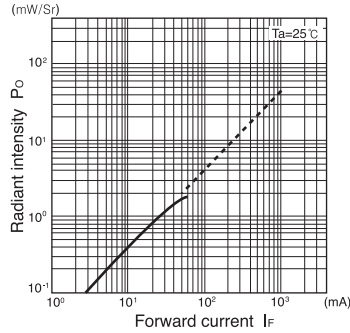
# Infrared Emitting Diodes(GaAs)

EL - 305

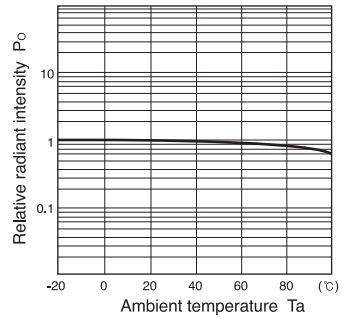
**Power dissipation Vs. Ambient temperature**



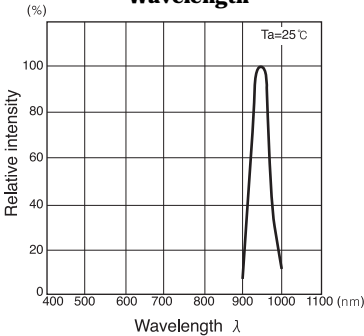
**Radiant intensity Vs. Forward current**



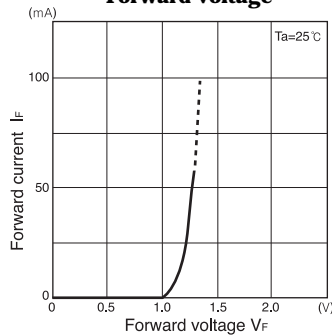
**Relative radiant intensity Vs. Ambient temperature**



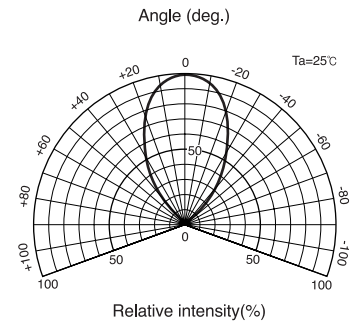
**Relative intensity Vs. Wavelength**



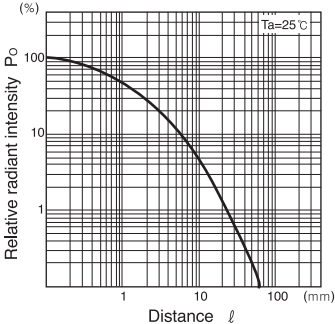
**Forward current vs. Forward voltage**



**Radiant Pattern**



**Relative radiant intensity Vs. Distance**



**Relative radiant intensity Vs. Distance test method**

