

## Infrared Emitting Diodes(GaAs)

**KODENSHI**

# EL - 325

The EL - 325 is a GaAs IRED mounted in a low profile clear epoxy package. This IRED is both compact and easy to mount.

### FEATURES

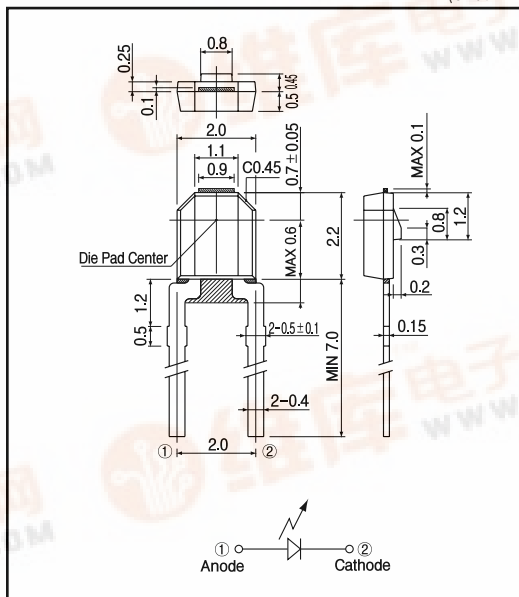
- Ultra compact
- Low profile
- Snap- in mount is possible

### APPLICATIONS

- Photointerrupters
- Optical equipment

### DIMENSIONS

(Unit : mm)



### MAXIMUM RATINGS

(Ta=25°C)

| Item                                | Symbol   | Rating  | Unit |
|-------------------------------------|----------|---------|------|
| Reverse voltage                     | $V_R$    | 5       | V    |
| Forward current                     | $I_F$    | 50      | mA   |
| Power dissipation                   | $P_D$    | 100     | mW   |
| Pulse forward current <sup>*1</sup> | $I_{FP}$ | 0.5     | A    |
| Operating temp.                     | Topr.    | -25 +85 | °C   |
| Storage temp.                       | Tstg.    | -30 +85 | °C   |
| Soldering temp. <sup>*2</sup>       | Tsol.    | 260     | °C   |

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

\*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                 | $V_F$            | $I_F=50\text{mA}$ |      |      | 1.6  | V     |
| Reverse current                 | $I_R$            | $V_R=5\text{V}$   |      |      | 10   | μA    |
| Peak emission wavelength        | $\lambda_p$      | $I_F=50\text{mA}$ |      | 940  |      | nm    |
| Spectral bandwidth              | $\Delta \lambda$ | $I_F=50\text{mA}$ |      | 50   |      | nm    |
| Radiant intensity <sup>*3</sup> | $P_0$            | $I_F=50\text{mA}$ |      | 0.7  |      | mW/sr |
| Half angle                      | $\Delta \theta$  |                   |      | ±50  |      | deg.  |

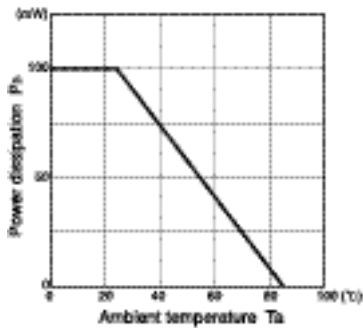
\*3. Measured by tester of KODENSHI CORP.



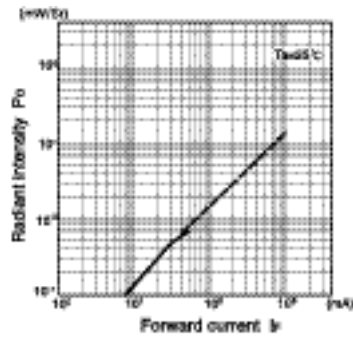
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**EL - 325**

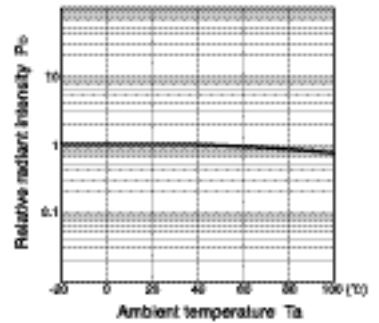
**Power dissipation Vs.  
Ambient temperature**



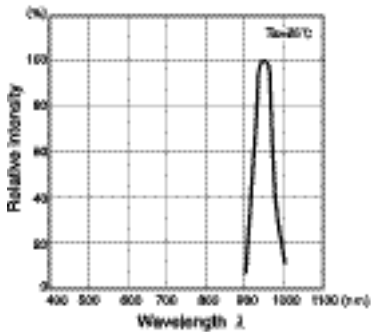
**Radiant intensity Vs.  
Forward current**



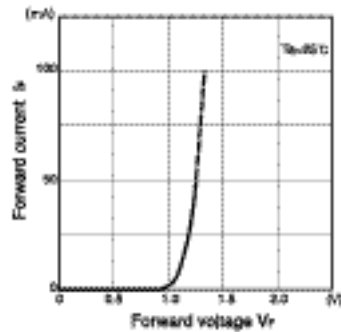
**Relative radiant intensity Vs.  
Ambient temperature**



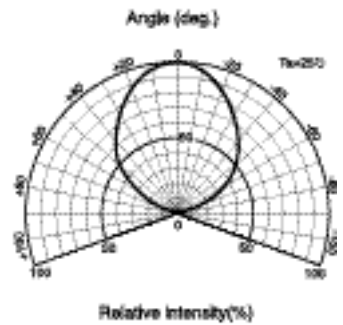
**Relative intensity Vs.  
Wavelength**



**Forward current vs.  
Forward voltage**



**Radiant Pattern**



**Relative radiant intensity Vs.  
Distance**

