

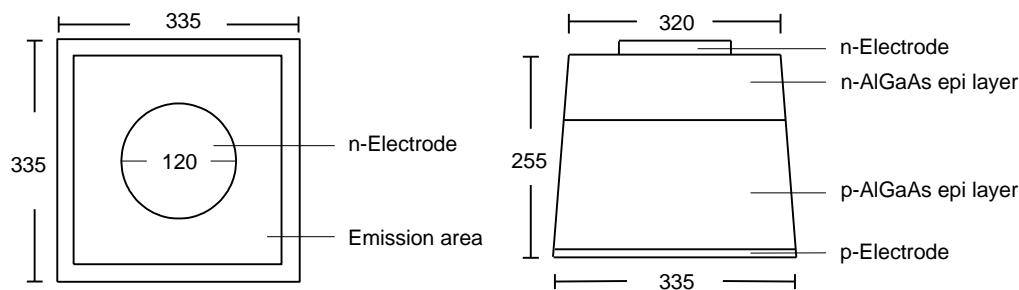
### ■ Features :

- N Side Up

### ■ Typical Applications :

- Industrial Infrared Equipment

### ■ Outline Dimensions : (Unit: um)



### ■ Physical Structure :

|                   |                     |                          |
|-------------------|---------------------|--------------------------|
| Chip dimension    | Chip size           | 335 um x 335 um          |
|                   | Thickness           | 255 um                   |
|                   | Emission area       | 320 um                   |
|                   | Bonding pad         | 120 um                   |
| Electrode         | Top: N (cathode)    | Gold (Aluminum optional) |
|                   | Backside: P (anode) | Gold alloy               |
| Surface condition | Smooth              |                          |

### ■ Electro-Optical Characteristics : (Ta = 25°C)

| Parameter                     | Symbol           | Condition              | Min. | Typ. | Max. | Unit |
|-------------------------------|------------------|------------------------|------|------|------|------|
| Forward Voltage               | $V_F$            | $I_F = 20 \text{ mA}$  | -    | 1.36 | 1.60 | V    |
|                               |                  | $I_F = 100 \text{ mA}$ | -    | 1.75 | 2.0  |      |
| Reverse Voltage               | $V_R$            | $I_R = 10 \mu\text{A}$ | 5    | -    | -    | V    |
| Wavelength                    | $\lambda_p$      | $I_F = 20 \text{ mA}$  | 870  | 890  | 910  | nm   |
| Spectral width at half height | $\Delta \lambda$ | $I_F = 20 \text{ mA}$  | -    | 70   | -    | nm   |
| Radiant Power                 | $P_o$            | $I_F = 20 \text{ mA}$  | 0.40 | -    | -    | mW   |

## ■ Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

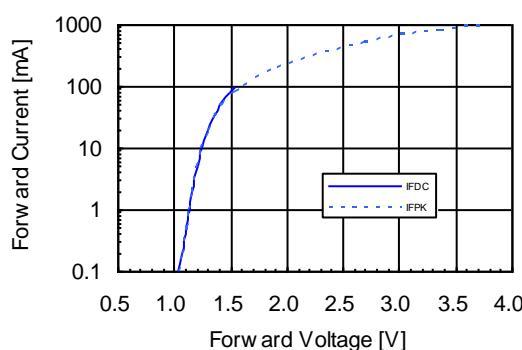


Fig 2. Relative Radiant Power vs. Wavelength

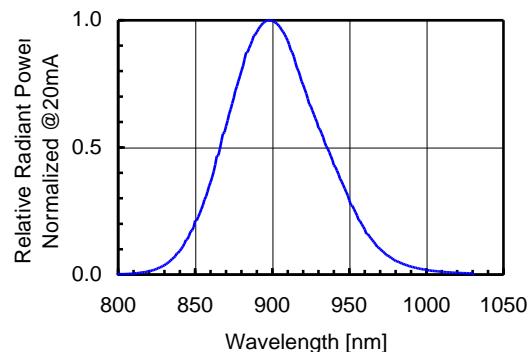
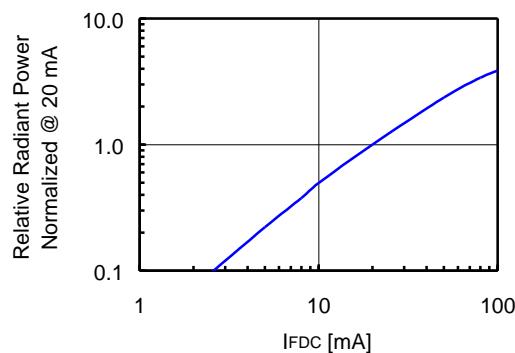
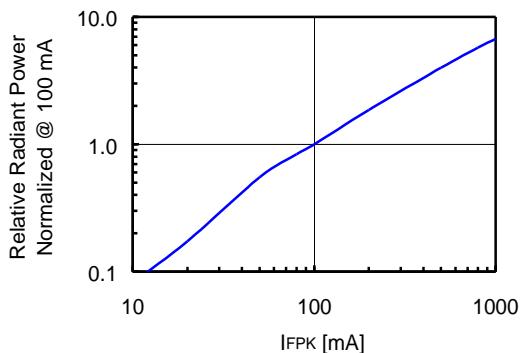
Fig 3. Relative Radiant Power  
vs. Forward DC CurrentFig 4. Relative Radiant Power  
vs. Forward Peak Current

Fig 5. Forward DC Voltage vs. Temperature

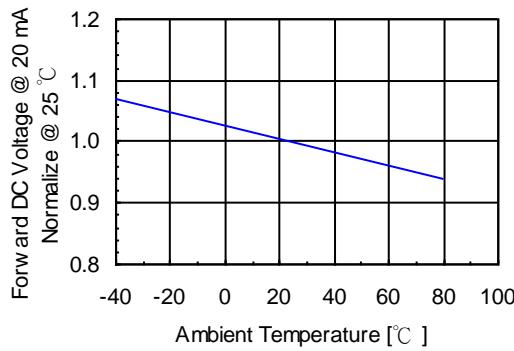


Fig 6. Relative Radiant Power vs. Temperature

