

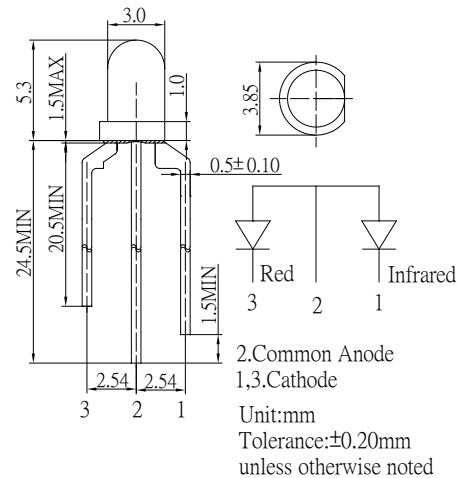
## ■Features

- High Luminous LEDs
- 3mm Round Standard Directivity
- UV Resistant Epoxy
- Water Clear Type

## ■Applications

- Toys
- Audio
- Data Communication
- General purposes

## ■Outline Dimension

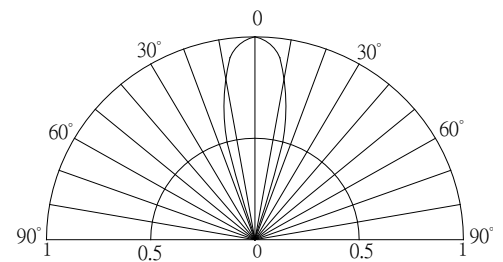


## ■Absolute Maximum Rating (Ta=25°C)

| Item                       | Symbol    | Value      |     | Unit |
|----------------------------|-----------|------------|-----|------|
|                            |           | Infrared   | Red |      |
| DC Forward Current         | $I_F$     | 100        | 50  | mA   |
| Pulse Forward Current#     | $I_{FP}$  | 1000       | 120 | mA   |
| Reverse Voltage            | $V_R$     | 5          | 5   | V    |
| Power Dissipation          | $P_D$     | 160        | 130 | mW   |
| Operating Temperature      | $T_{opr}$ | -30 ~ +85  |     | °C   |
| Storage Temperature        | $T_{stg}$ | -40 ~ +100 |     | °C   |
| Lead Soldering Temperature | $T_{sol}$ | 260°C/5sec |     | -    |

#Pulse width Max.10ms Duty ratio max 1/10

## ■Directivity



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

| Item                | NO.      | Symbol          | Condition     | Min. | Typ. | Max. | Unit  |
|---------------------|----------|-----------------|---------------|------|------|------|-------|
| DC Forward Voltage  | Infrared | $V_{F1}$        | $I_{F1}=50mA$ | -    | 1.4  | 1.6  | V     |
|                     | Red      | $V_{F2}$        | $I_{F2}=20mA$ | -    | 2.1  | 2.6  | V     |
| Peak Wavelength*    | Infrared | $\lambda_p$     | $I_{F1}=50mA$ | -    | 880  | -    | nm    |
| Peak Wavelength*    | Red      | $\lambda_p$     | $I_{F1}=20mA$ | 650  | 660  | 670  | nm    |
| Radiant Power*      | Infrared | $P_o$           | $I_{F1}=50mA$ | 25   | 30   | -    | mW    |
| Radiant Intensity*  | Infrared | $I_e$           | $I_F=50mA$    | 50   | 70   | -    | mW/Sr |
| Luminous Intensity* | Red      | $I_v$           | $I_{F2}=20mA$ | 3000 | 4200 | -    | mcd   |
| 50% Power Angle     | Infrared | $2\theta_{1/2}$ | $I_{F1}=50mA$ | -    | 30   | -    | deg   |
|                     | Red      | $2\theta_{1/2}$ | $I_{F2}=20mA$ | -    | 30   | -    | deg   |

\*1 Tolerance of measurements of peak wavelength is  $\pm 1nm$

\*2 Tolerance of measurements of Radiant Power is  $\pm 5\%$

\*3 Tolerance of measurements of luminous intensity is  $\pm 15\%$

\*4 Tolerance of measurements of forward voltage is  $\pm 0.1V$