

## MT1303-UHR

### Features

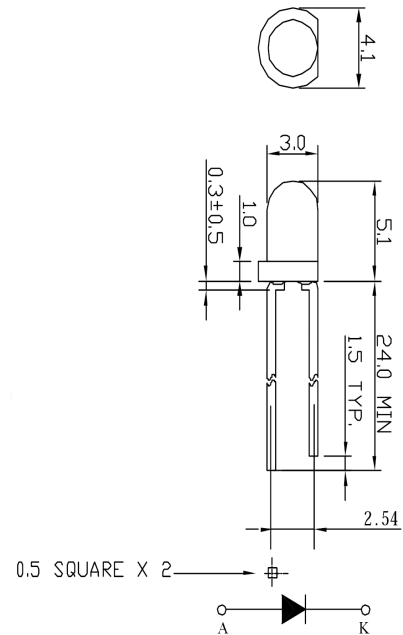
High Intensity  
 Reliable Rugged  
 Low Current Requirements  
 IC Compatible

### Maximum Ratings (Ta=25°C)

| Characteristic        | Symbol           | Max.           | Unit |
|-----------------------|------------------|----------------|------|
| Forward Current       | I <sub>F</sub>   | 30             | mA   |
| Reverse Voltage       | V <sub>R</sub>   | 5              | V    |
| Power Dissipation     | P <sub>D</sub>   | 78.00          | mW   |
| Operating Temperature | T <sub>opr</sub> | -25 ~ +85      | °C   |
| Storage Temperature   | T <sub>stg</sub> | -40 ~ +100     | °C   |
| Soldering Temperature | T <sub>sol</sub> | 260            | °C   |
| Soldering Time        | -                | for 5 sec. max | -    |

### Opto-Electrical Characteristics (Ta=25°C)

| Characteristic           | Symbol            | Test Condition       | Min     | Typ     | Max  | Unit |
|--------------------------|-------------------|----------------------|---------|---------|------|------|
| Forward Voltage          | V <sub>F</sub>    | I <sub>F</sub> =20mA | -       | 2.20    | 2.60 | V    |
| Reverse Current          | I <sub>R</sub>    | V <sub>R</sub> =5V   | -       | -       | 100  | μ A  |
| Luminous Intensity       | I <sub>v</sub>    | I <sub>F</sub> =20mA | 1000.00 | 1800.00 | -    | mcd  |
| Viewing Angle            | 2θ <sup>1/2</sup> | -                    | -       | 36°     | -    | deg. |
| Peak Wavelength          | λ <sub>p</sub>    | I <sub>F</sub> =20mA | -       | 642     | -    | nm   |
| Dominant Wavelength      | λ <sub>d</sub>    | I <sub>F</sub> =20mA | -       | 630     | -    | nm   |
| Spectral Line Half Width | Δλ                | I <sub>F</sub> =20mA | -       | 20      | -    | nm   |

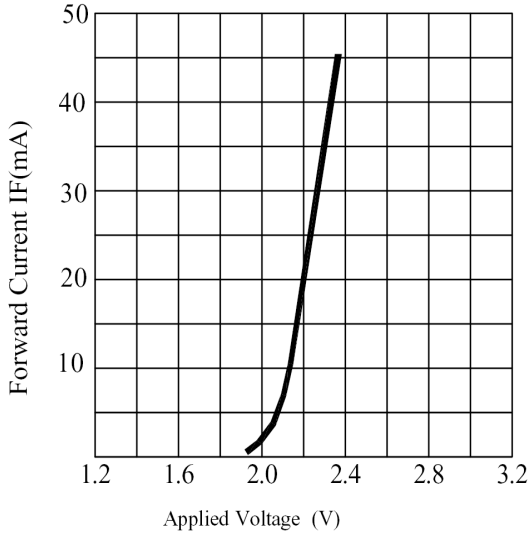


Notes:

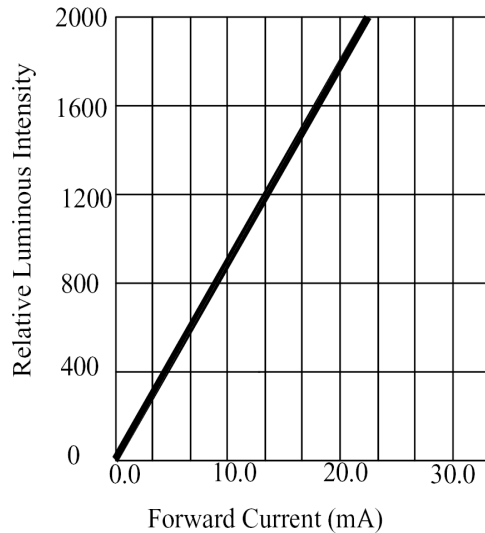
1. All dimensions are in millimeters.
2. Tolerance is ±0.25mm unless otherwise noted.

**MT1303-UHR Graphs**

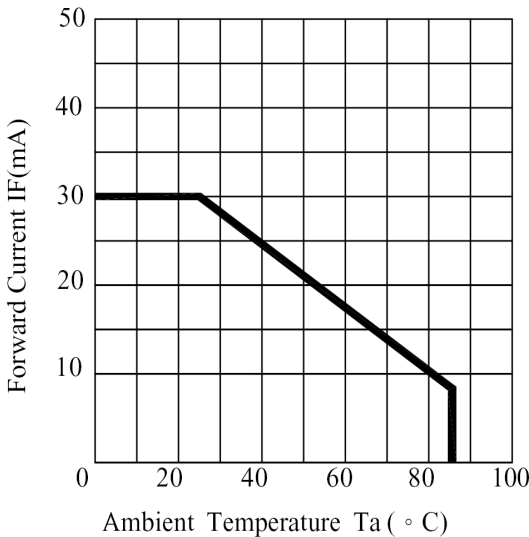
**Typical Electrical / Optical Characteristics Curves :**



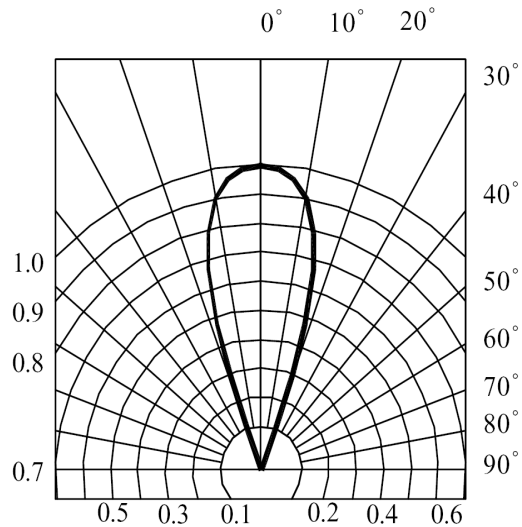
**FORWARD CURRENT VS. APPLIED VOLTAGE**



**FORWARD CURRENT VS. LUMINOUS INTENSITY**



**AMBIENT TEMPERATURE VS. FORWARD CURRENT**



**RADIATION DIAGRAM**