



# LED SPECIFICATION

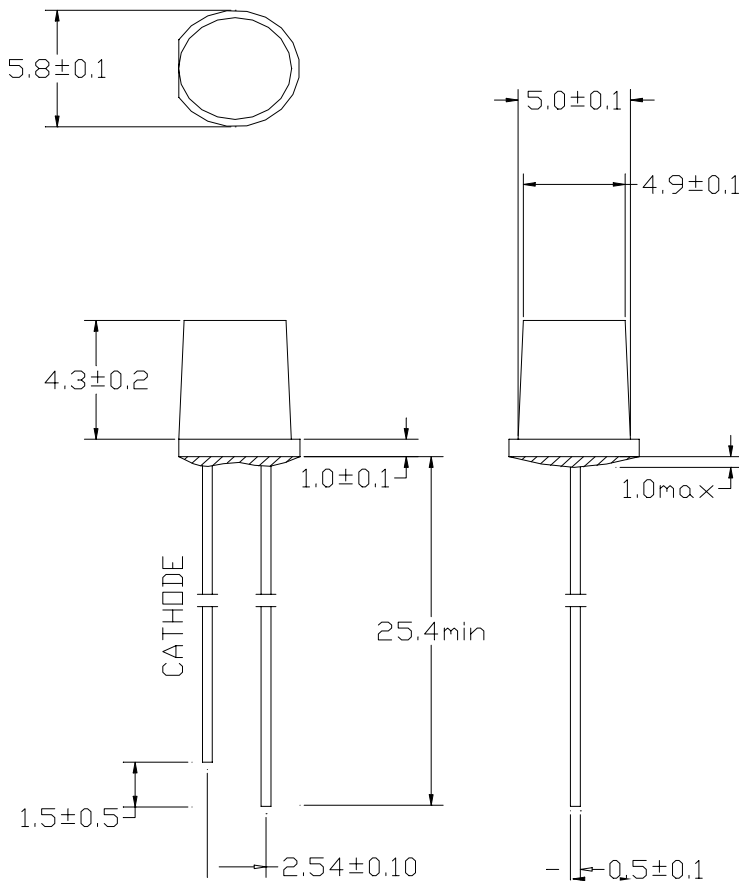
## 599MR2C

### ➤ Features:

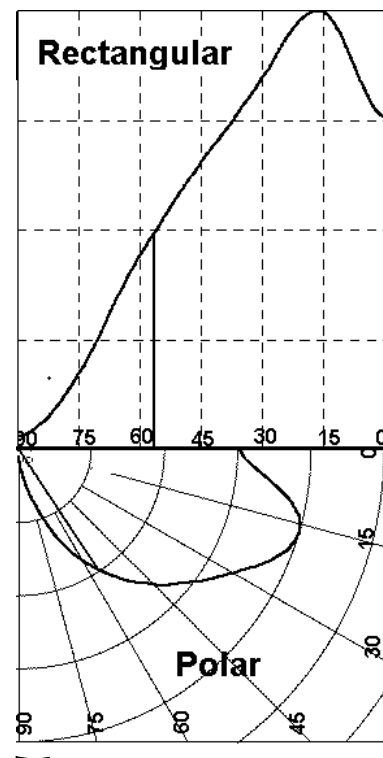
- Single color
- High bright output
- Large view angle
- Low power consumption
- High reliability and long life

### ➤ Descriptions:

- Dice material: AlGaInP
- Emitting Color: Super Bright Red
- Device Outline:  $\phi 5\text{mm}$  Round Flat Top
- Lens Type: Water Clear



## HALF LIGHT PATTERN:



1. All dimensions are millimeters: mm.
2. Tolerance is  $\pm 0.25\text{mm}$  unless otherwise noted.



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### ➤ Absolute maximum ratings (Ta = 25°C)

| Parameter             | Symbol            | Test Condition          | Values |      | Unit |
|-----------------------|-------------------|-------------------------|--------|------|------|
|                       |                   |                         | Min.   | Max. |      |
| Reverse Voltage       | V <sub>R</sub>    | I <sub>R</sub> = 30 μ A | 5      | --   | V    |
| Forward Current       | I <sub>F</sub>    | ----                    | ----   | 30   | mA   |
| Power Dissipation     | P <sub>d</sub>    | ----                    | ----   | 75   | mW   |
| Pulse Current         | I <sub>peak</sub> | Duty=0.1mS, 1kHz        | ----   | 100  | mA   |
| Operating Temperature | T <sub>opr</sub>  | ----                    | -20    | +85  | °C   |
| Storage Temperature   | T <sub>str</sub>  | ----                    | -25    | +100 | °C   |

### ➤ Electrical and optical characteristics (Ta = 25°C)

| Parameter                | Symbol         | Test Condition       | Values |      |      | Unit |
|--------------------------|----------------|----------------------|--------|------|------|------|
|                          |                |                      | Min.   | Typ. | Max. |      |
| Forward Voltage          | V <sub>F</sub> | I <sub>F</sub> =20mA | ----   | 2.0  | 2.5  | V    |
| Reverse Current          | I <sub>R</sub> | V <sub>R</sub> =5V   | ----   | ---- | 30   | μ A  |
| Dominate Wavelength      | λ <sub>d</sub> | I <sub>F</sub> =20mA | 620    | 624  | 630  | nm   |
| Peak Wavelength          | λ <sub>p</sub> | I <sub>F</sub> =20mA | ----   | 632  | ---- | nm   |
| Spectral Line half-width | Δ λ            | I <sub>F</sub> =20mA | ----   | 20   | ---- | nm   |
| Luminous Intensity       | I <sub>v</sub> | I <sub>F</sub> =20mA |        | BIN  | ---- | mcd  |
| Viewing Angle            | 2 θ 1/2        | I <sub>F</sub> =20mA | ----   | 100  | ---- | deg. |

### ➤ Luminous Intensity Bins (Ta = 25°C)

Unit:mcd

| Bin | N   | P   | Q   | R   |
|-----|-----|-----|-----|-----|
| Min | 200 | 280 | 390 | 550 |
| Max | 280 | 390 | 550 | 770 |



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### ➤ Typical electrical/optical characteristic curves:

