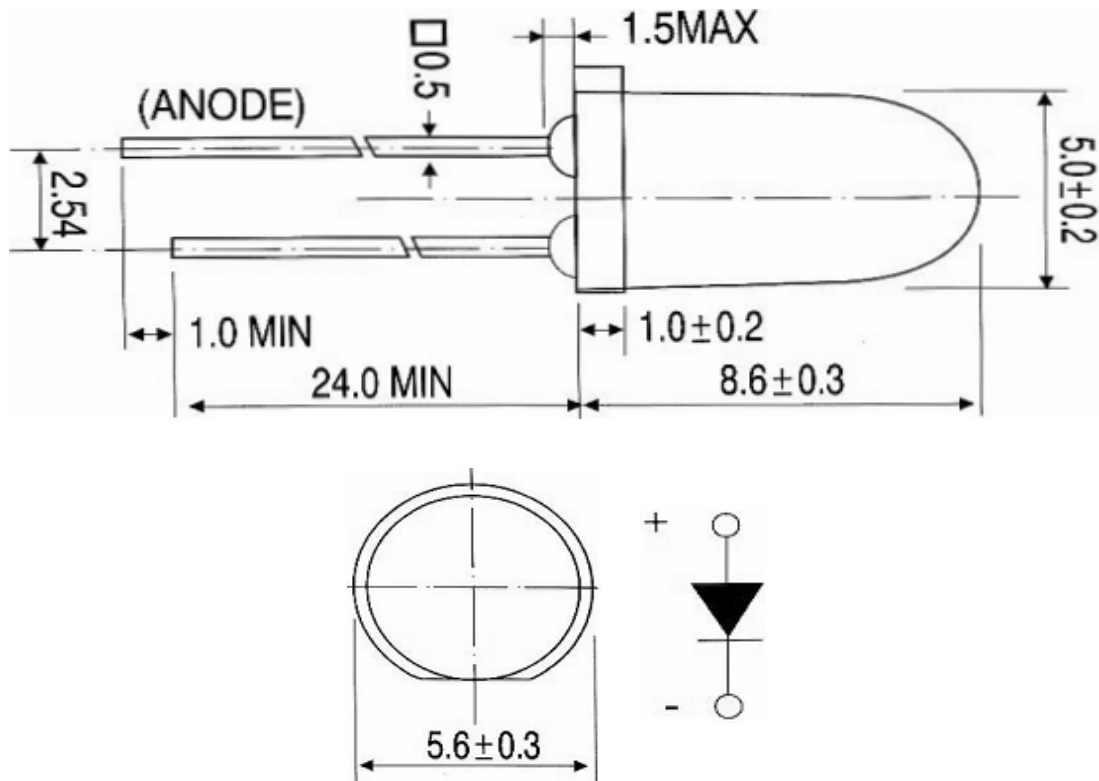




**Applications**

- Electronic Signs and Signals
- Small Area Illuminations
- Back Lighting
- Other Lighting

**Technical Drawing**



**Notes :**

All dimensions in mm tolerance is  $\pm 0.1\text{mm}$  unless otherwise noted.

|                            |                 |
|----------------------------|-----------------|
| <b>Round LED<br/>Green</b> |                 |
| Part No.:                  | <b>M13E5044</b> |
| Customer:                  |                 |

|       |      |      |       |        |      |       |            |
|-------|------|------|-------|--------|------|-------|------------|
| DRW:  | Dong | CHKD | Chang | MATL:  | Chui | DATE  | 28.06.2010 |
| APPD: | Ping |      |       | FINISH | Hui  | Sheet | 1 from 6   |



**Absolute Maximum Ratings**

| Item                   | Symbol            | InGaN      | Unit |
|------------------------|-------------------|------------|------|
| Power Dissipation      | P <sub>D</sub>    | 140        | mW   |
| DC Forward Current     | I <sub>F</sub>    | 30         | mA   |
| Pulsed Forward Current | I <sub>FP</sub> * | 70         | mA   |
| Reverse Voltage        | V <sub>R</sub>    | 5          | V    |
| Operating Temperature  | T <sub>OP</sub>   | -40 to 80  | °C   |
| Storage Temperature    | T <sub>ST</sub>   | -40 to 100 | °C   |

\* 0.1 msec pulse, 10% duty cycle

**Electrical / Optical Characteristics**

| Ermitting Color      | Green          |        |                |
|----------------------|----------------|--------|----------------|
| Material             | InGaN          |        |                |
| Forward Voltage      | typ.           | 2.9    | V <sub>F</sub> |
|                      | max.           | 3.3    | V <sub>F</sub> |
| Wavelength<br>typ.   | λ <sub>D</sub> | 520    | nm             |
|                      | λ <sub>P</sub> | 530    | nm             |
|                      | Δλ             | ---    | nm             |
| Color Temperature    | min.           | ---    | K              |
|                      | max.           | ---    | K              |
| Luminous Intensity * | min.           | 8000   | mcd            |
|                      | typ.           | 13000  | mcd            |
| Reverse Current      | max.           | ---    | μA             |
| Viewing Angle        | 2Θ1/2          | 6 ~ 10 |                |

\* Per NIST standards

|                            |                 |
|----------------------------|-----------------|
| <b>Round LED<br/>Green</b> |                 |
| Part No.:                  | <b>M13E5044</b> |
| Customer:                  |                 |

|       |      |      |       |        |      |       |            |
|-------|------|------|-------|--------|------|-------|------------|
| DRW:  | Dong | CHKD | Chang | MATL:  | Chui | DATE  | 28.06.2010 |
| APPD: | Ping |      |       | FINISH | Hui  | Sheet | 2 from 6   |



### Directive Characteristics

**Round LED  
Green**

Part No.: **M13E5044**

Customer:

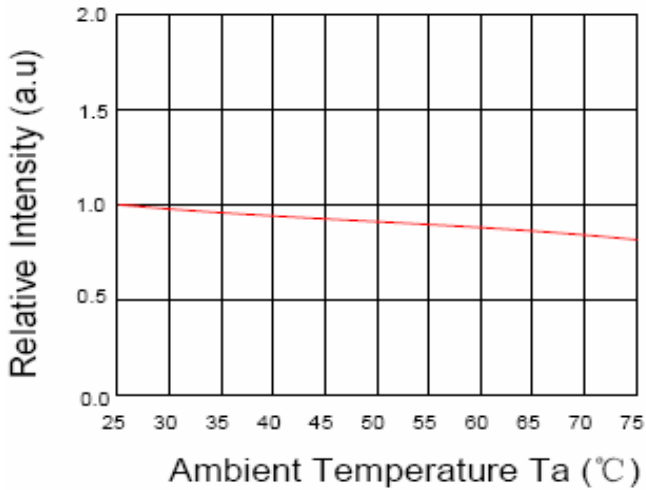
|       |      |      |       |        |      |       |            |
|-------|------|------|-------|--------|------|-------|------------|
| DRW:  | Dong | CHKD | Chang | MATL:  | Chui | DATE  | 28.06.2010 |
| APPD: | Ping |      |       | FINISH | Hui  | Sheet | 3 from 6   |

Copyright by EDCON-COMPONENTS

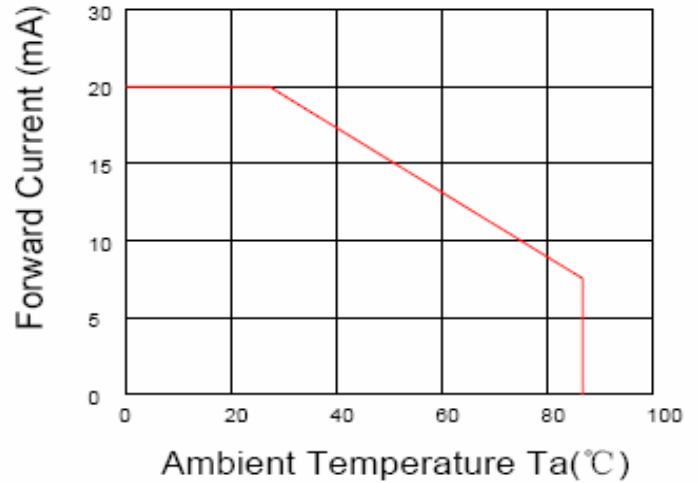


**Curve**

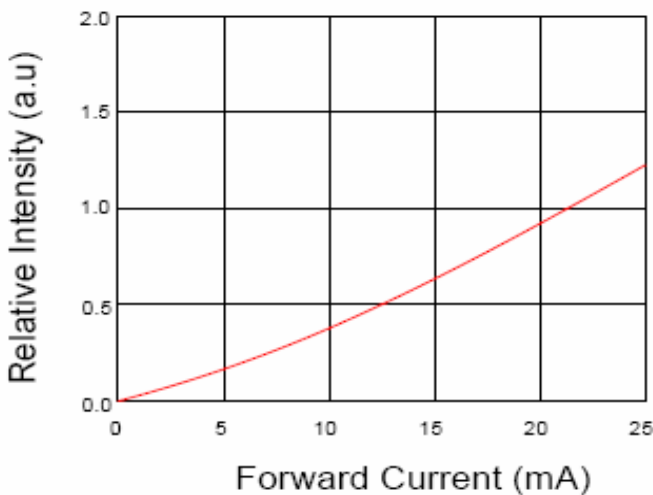
Relative Intensity VS. Ambient Temp



Forward Current VS. Ambient Temp



Forward Current VS. Relative Intensity



**Round LED  
 Green**

Part No.: **M13E5044**

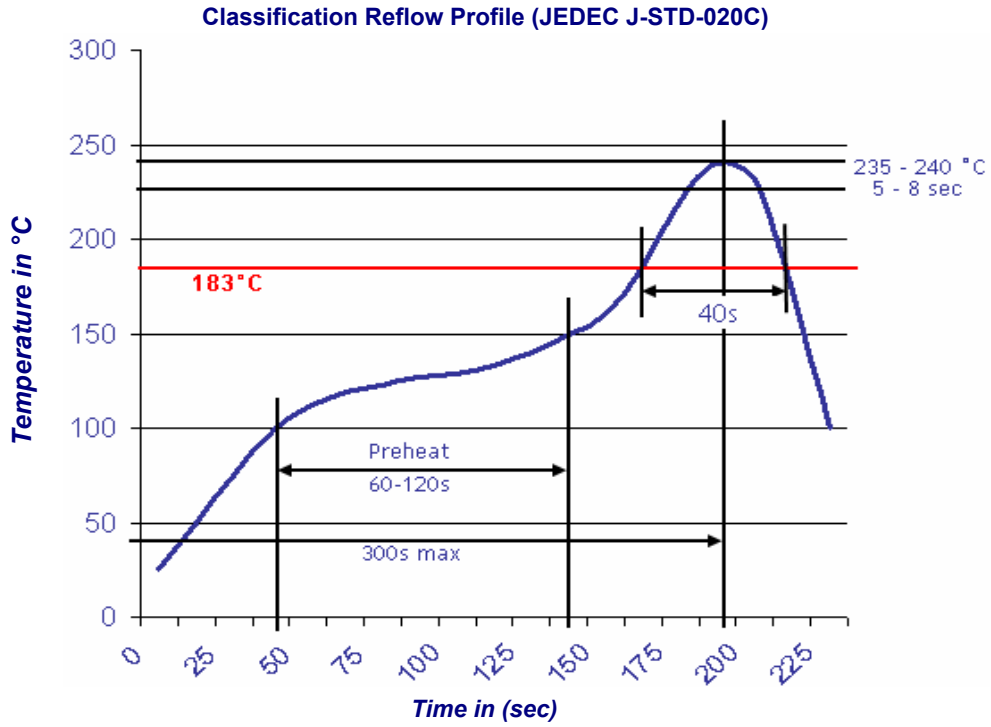
Customer:

|       |      |      |       |        |      |       |            |
|-------|------|------|-------|--------|------|-------|------------|
| DRW:  | Dong | CHKD | Chang | MATL:  | Chui | DATE  | 28.06.2010 |
| APPD: | Ping |      |       | FINISH | Hui  | Sheet | 4 from 6   |



**Solder Condition**

**Lead Free Solder**

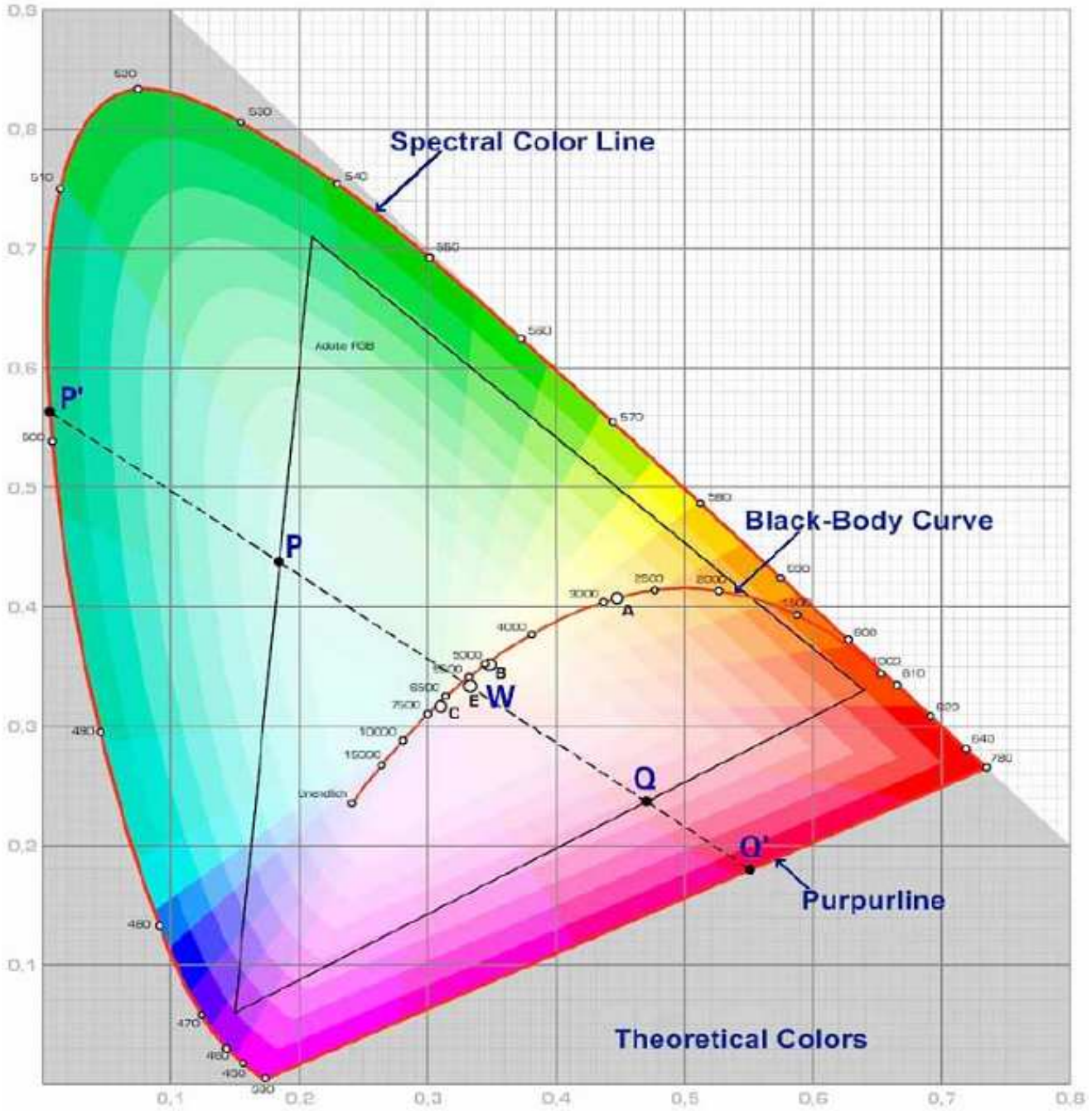


|                            |                 |
|----------------------------|-----------------|
| <b>Round LED<br/>Green</b> |                 |
| Part No.:                  | <b>M13E5044</b> |
| Customer:                  |                 |

|       |      |      |       |        |      |       |            |
|-------|------|------|-------|--------|------|-------|------------|
| DRW:  | Dong | CHKD | Chang | MATL:  | Chui | DATE  | 28.06.2010 |
| APPD: | Ping |      |       | FINISH | Hui  | Sheet | 5 from 6   |



**Color table curve**



|                            |                 |
|----------------------------|-----------------|
| <b>Round LED<br/>Green</b> |                 |
| Part No.:                  | <b>M13E5044</b> |
| Customer:                  |                 |

|       |      |      |       |        |      |       |            |
|-------|------|------|-------|--------|------|-------|------------|
| DRW:  | Dong | CHKD | Chang | MATL:  | Chui | DATE  | 28.06.2010 |
| APPD: | Ping |      |       | FINISH | Hui  | Sheet | 6 from 6   |

Copyright by EDCON-COMPONENTS