

PRODUCT SPECIFICATION

Model No.: FYL-5044UBC1E

| Descriptions: |
|---|
| <ul style="list-style-type: none"> ■ Dice material: InGaN. ■ Emitting Color: Super Bright Blue. ■ Device Outline: Φ5mm cylinder type. ■ Lens Type: Water clear. |



| CUSTOMER APPROVED SIGNATURES | APPROVED BY | CHECKED BY | PREPARED BY |
|------------------------------|-------------|------------|-------------|
| | | | |

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Model No.: FYL-5044UBC1E

■ Absolute Maximum Ratings(Ta=25°C)

| Parameter | MAX. | Unit |
|---|---------------------|-------|
| Power Dissipation | 100 | mW |
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width) | 100 | mA |
| Continuous Forward Current | 30 | mA |
| Derating Linear From 50°C | 0.4 | mA/°C |
| Reverse Voltage | 5 | V |
| Operating Temperature Range | -40°C to +85°C | |
| Storage Temperature Range | -40°C to +100°C | |
| Lead Soldering Temperature[4mm(.157") From Body] | 260°C for 5 Seconds | |

■ Typical Electrical & Optical Characteristics(Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Test Condition |
|--------------------------|-----------------|------|------|------|---------|----------------|
| Luminous Intensity | I_V | 350 | 700 | 1380 | mcd | IF=20mA |
| Viewing Angle | $2\theta_{1/2}$ | --- | 75 | --- | Deg | |
| Peak Emission Wavelength | λ_p | --- | 470 | -- | nm | |
| Dominant Wavelength | λ_d | 461 | 467 | 473 | nm | |
| Spectral Line Half-Width | $\Delta\lambda$ | --- | 30 | -- | nm | |
| Forward Voltage | V_F | 2.6 | 3 | 3.4 | V | VR=5V |
| Reverse Current | I_R | --- | --- | 10 | μA | |

Note:

- 1.Luminous Intensity is based on the Foryard standards.
- 2.Pay attention about static for InGaN

■ Luminous Intensity Guide (Unit: mcd) @IF=20mA

| Code | N13 | N14 | N15 | N16 |
|-------------------------|---------|---------|----------|-----------|
| Luminous Intensity(mcd) | 350~500 | 500~700 | 700~1000 | 1000~1380 |

Tolerance of measurement of luminous intensity is $\pm 15\%$

■ Dominate Wavelength Guide (Unit: nm) @IF=20mA

| Code | B3 | B4 | B5 | B6 |
|-------------------------|---------|---------|---------|---------|
| Dominate Wavelength(nm) | 461~464 | 464~467 | 467~470 | 470~473 |

Tolerance for each Dominate Wavelength bin is $\pm 1\text{nm}$

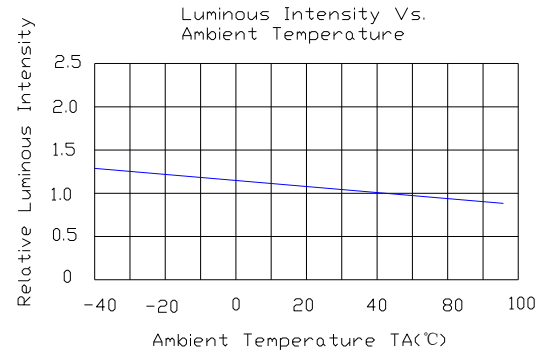
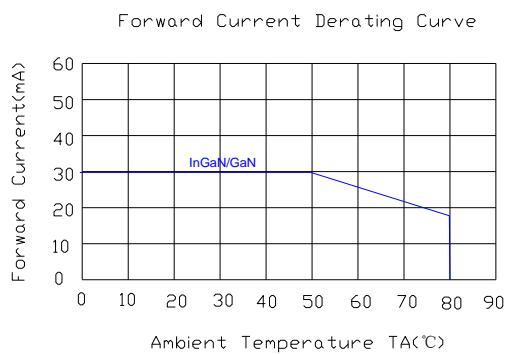
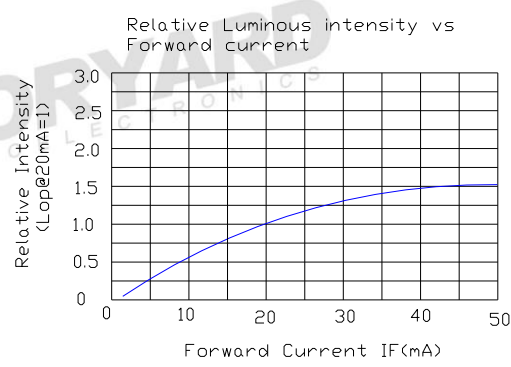
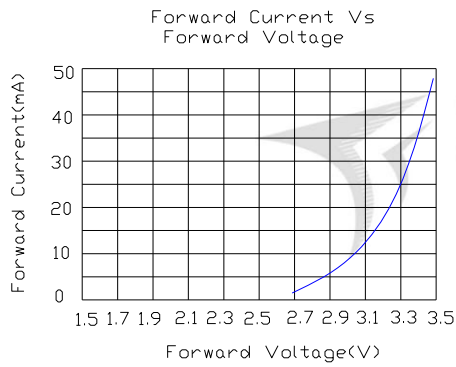
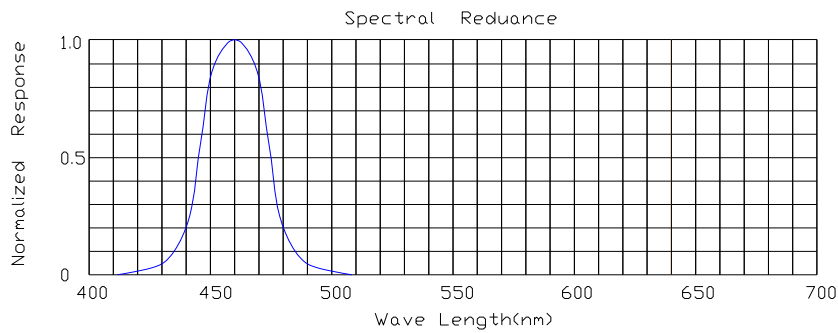
■ Forward Voltage Guide (Unit: V) @IF=20mA

| Code | V6 | V7 | V8 | V9 |
|--------------------|---------|---------|---------|---------|
| Forward Voltage(V) | 2.6~2.8 | 2.8~3.0 | 3.0~3.2 | 3.2~3.4 |

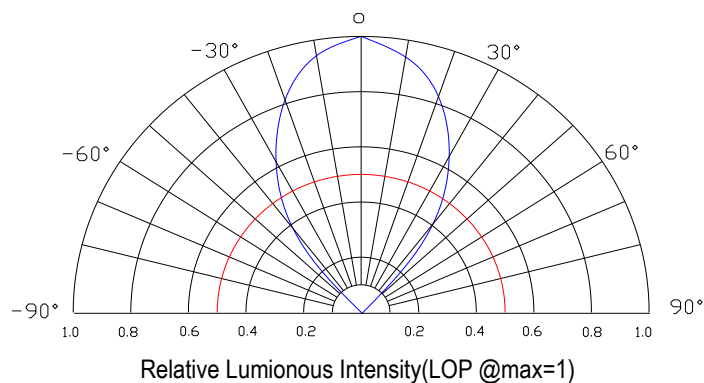
Tolerance of measurement of forward voltage is $\pm 0.1\text{V}$

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Typical Eletrical/Optical Characteristics Curves(Ta=25°C Unless Otherwise Noted)



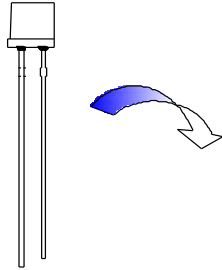
Radiation pattern



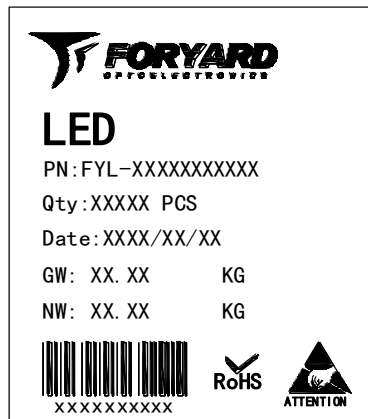
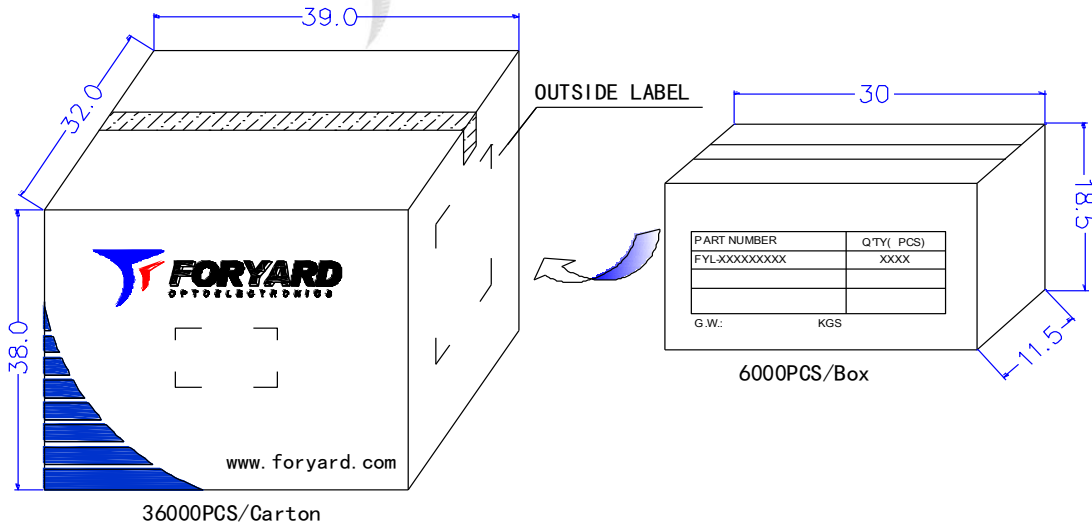
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|-------------|----------------|
| Model No. | FYL-5044UBC1E |
| Date / Rev. | 2020.04.30 / A |

Model No.: FYL-5044UBC1E

■ LAMP PACKING.



5mm 500PCS/Polybag



OUTSIDE LABEL

Note: The specifications are subject to change without notice. Please contact us for updated information.