

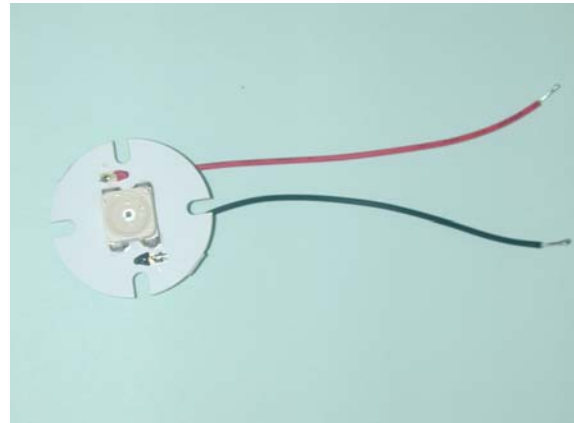
### PRELIMINARY SPEC

Part Number : LT-001-05

BLUE

### Features

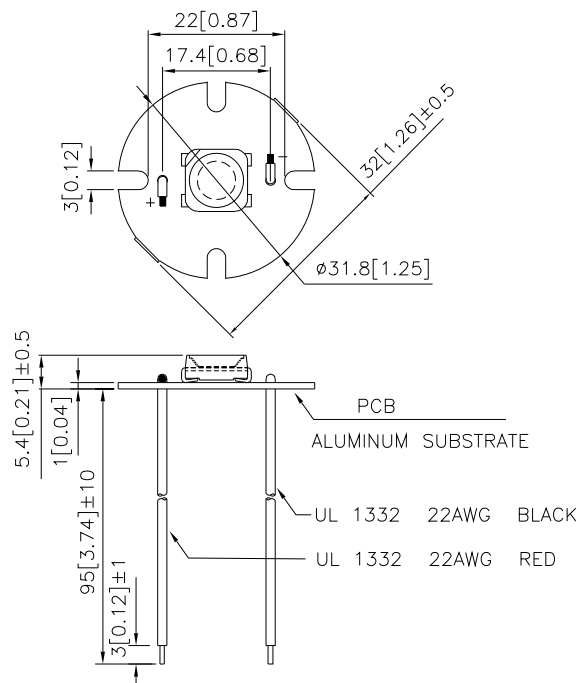
- \*RELEASING HEAT WITH ALUMINUM SUBSTRATE.
- \*SINGLE COLOR.
- \*HIGH LUMINANCE.
- \*THE LED PART NO : KA-1010QB9ZC
- \*MOISTURE SENSITIVITY LEVEL : LEVEL 6.
- \*RoHS COMPLIANT.



### Applications

- \*Display backlighting where high brightness is required.
- \*substitution of micro incandescent lamps.
- \*portable light source(e.g. bicycle flashlight).
- \*signal and symbol luminaire for orientation.
- \*marker lights(e.g. steps, exit ways, etc).
- \*decorative and entertainment lighting.
- \*indoor and outdoor commercial and residential architectural lighting.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
3. Specifications are subject to change without notice.



## Selection Guide

| Part No.  | Dice           | luminous Intensity [2]<br>Iv(cd) @350mA |      | $\Phi_v$ (lm) [2]<br>@ 350mA |      | Viewing<br>Angle[1] |
|-----------|----------------|-----------------------------------------|------|------------------------------|------|---------------------|
|           |                | Min.                                    | Typ. | Min.                         | Typ. |                     |
| LT-001-05 | BLUE (AlInGaN) | 0.9                                     | 1.4  | 2.9                          | 4.5  | 120°                |

Notes:

- 01/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
- Luminous Intensity / Luminous Flux: +/-15%.

## Absolute Maximum Ratings at TA=25°C

| Parameter                | Symbol | Value                              | Unit |
|--------------------------|--------|------------------------------------|------|
| Power dissipation        | Pt     | 1.45                               | W    |
| Reverse Voltage          | VR     | Not Designed For Reverse Operation | V    |
| Junction temperature     | TJ     | 110                                | °C   |
| Operating Temperature    | Top    | -40 To +85                         | °C   |
| Storage Temperature      | Tstg   | -40 To +85                         | °C   |
| DC Forward Current       | IF     | 400                                | mA   |
| Peak Forward Current [1] | IFM    | 700                                | mA   |
| Thermal resistance       | Rth    | 45                                 | °C/W |

Note:

- 1.1/10 Duty Cycle, 0.1ms Pulse Width.

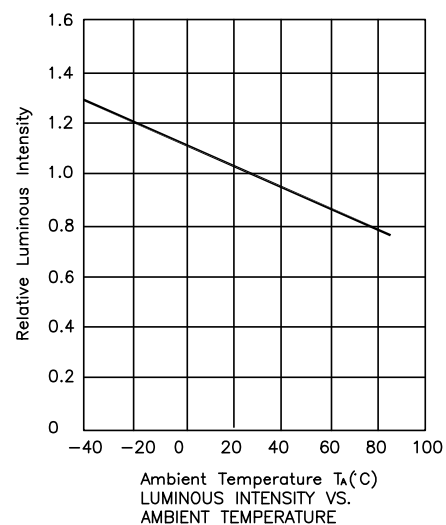
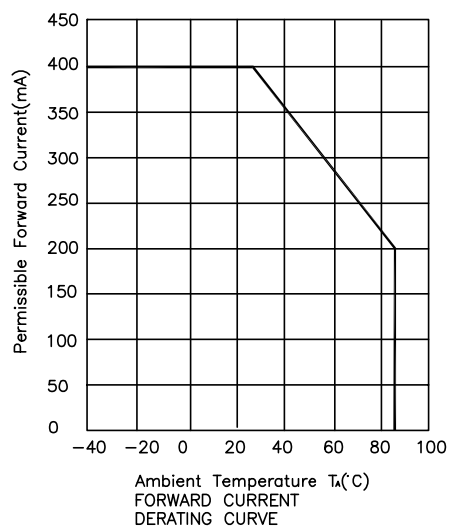
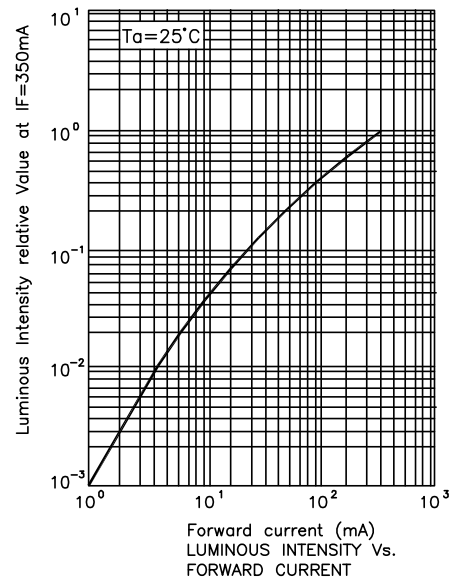
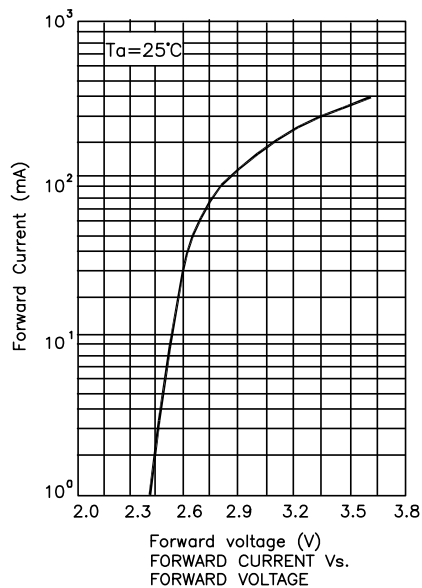
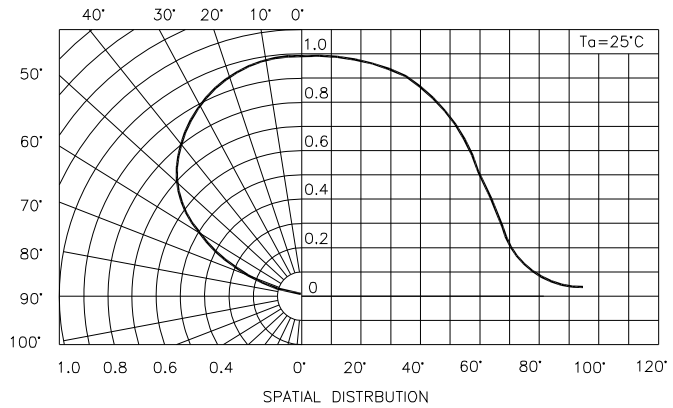
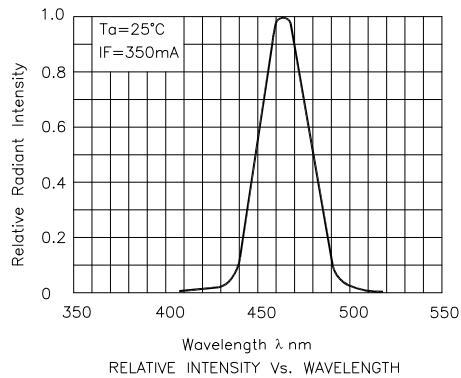
## Electrical / Optical Characteristics at TA=25°C

| Parameter                                                                         | Symbol              | Value                              | Unit  |
|-----------------------------------------------------------------------------------|---------------------|------------------------------------|-------|
| Wavelength at peak emission IF=350mA [Typ.]                                       | $\lambda_{peak}$    | 464                                | nm    |
| Dominant Wavelength IF=350mA [Typ.]                                               | $\lambda_{Dom}$ [1] | 466                                | nm    |
| Spectral bandwidth at 50% $\Phi_{REL MAX}$ IF=350mA [Typ.]                        | $\Delta\lambda$     | 30                                 | nm    |
| Forward Voltage IF=350mA [Min.]                                                   | VF [2]              | 2.7                                | V     |
| Forward Voltage IF=350mA [Typ.]                                                   |                     | 3.5                                |       |
| Forward Voltage IF=350mA [Max.]                                                   |                     | 3.8                                |       |
| Reverse Current (VR=5V) [Max.]                                                    | IR                  | Not Designed For Reverse Operation | μA    |
| Temperature coefficient of $\lambda_{peak}$<br>IF=350mA, -10°C ≤ T ≤ 100°C [Typ.] | TC $\lambda_{peak}$ | 0.14                               | nm/°C |
| Temperature coefficient of $\lambda_{dom}$<br>IF=350mA, -10°C ≤ T ≤ 100°C [Typ.]  | TC $\lambda_{dom}$  | 0.12                               | nm/°C |
| Temperature coefficient of VF<br>IF=350mA, -10°C ≤ T ≤ 100°C [Typ.]               | TCv                 | -2.0                               | mV/°C |

Notes:

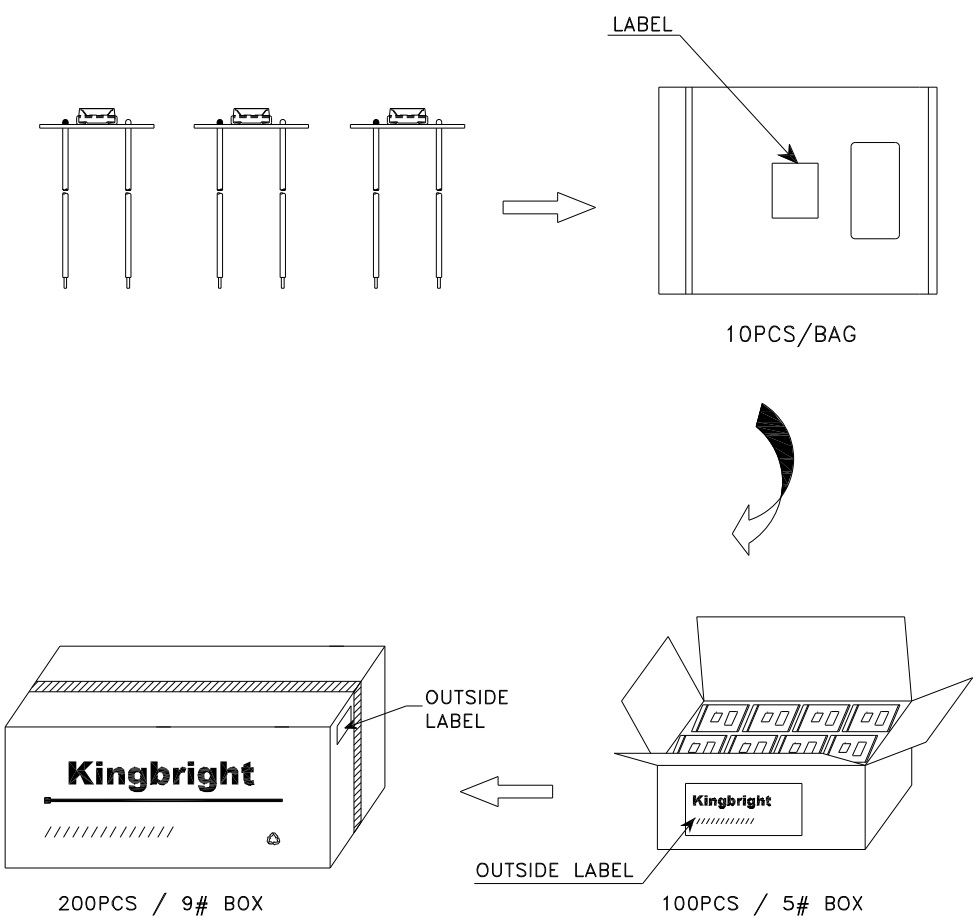
- Wavelength: +/-1nm.
- Forward Voltage: +/-0.1V.

## LT-001-05



PACKING & LABEL SPECIFICATIONS

LT-001-05



|                                                                                             |           |
|---------------------------------------------------------------------------------------------|-----------|
| <b>Kingbright</b>                                                                           |           |
| Q.C.                                                                                        |           |
| TYPE NO : LT-001-XXX                                                                        |           |
| QUANTITY : 10 pcs                                                                           |           |
| S/N : XXXX                                                                                  | CODE: XXX |
| LOT NO:  |           |
| RoHS Compliant                                                                              |           |