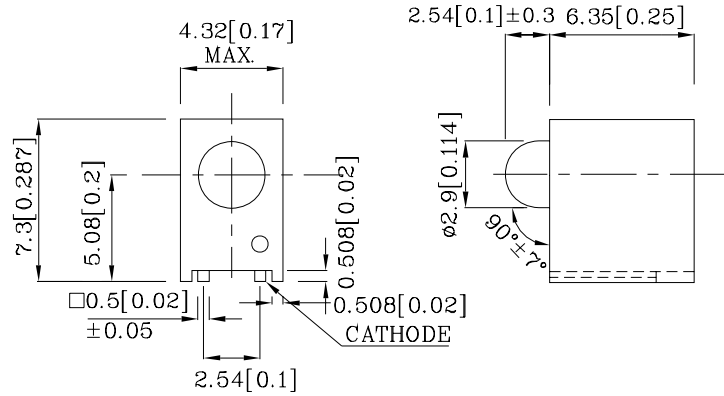


PRELIMINARY SPEC

Features

- PRE-TRIMMED LEADS FOR PC MOUNTING.
- I.C. COMPATIBLE.
- BLACK CASE ENHANCES CONTRAST RATIO.
- WIDE VIEWING ANGLE.
- HIGH RELIABILITY LIFE MEASURED IN YEARS.
- HOUSING MATERIAL: PPA
- PACKAGE : 500PCS / REEL.



ATTENTION
 OBSERVE PRECAUTIONS
 FOR HANDLING
 ELECTROSTATIC
 DISCHARGE
 SENSITIVE
 DEVICES

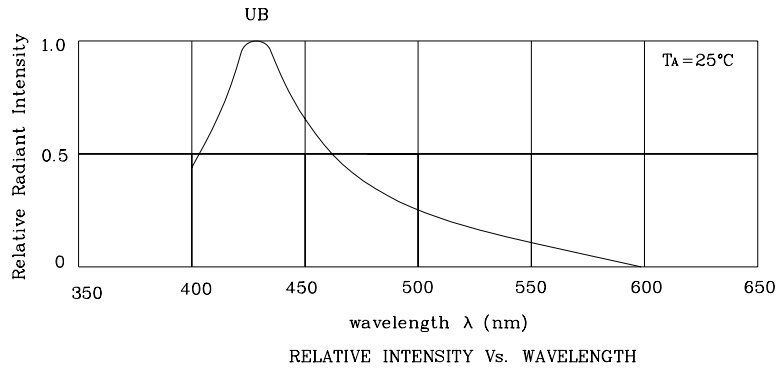
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ " unless otherwise noted.

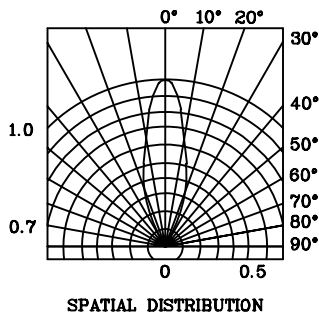
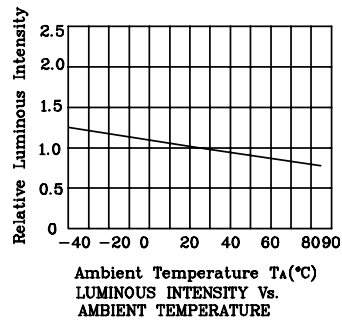
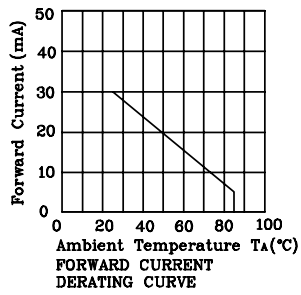
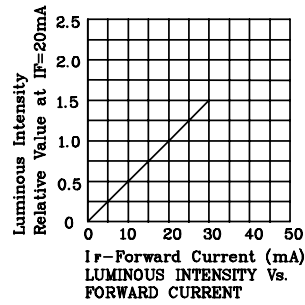
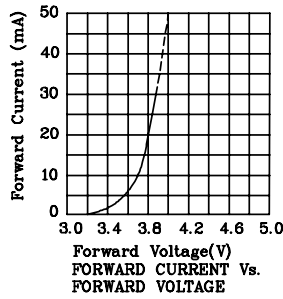
| Absolute Maximum Ratings (TA=25°C) | | UB (GaN) | Unit |
|--|------|-------------|------|
| Reverse Voltage | VR | 5 | V |
| Forward Current | IF | 30 | mA |
| Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width | iFS | 150 | mA |
| Power Dissipation | PT | 135 | mW |
| Operating Temperature | TA | -40 ~ +85 | °C |
| Storage Temperature | Tstg | -40 ~ +85 | |

| Operating Characteristics (TA=25°C) | | UB (GaN) | Unit |
|---|-----------------|-------------|------|
| Forward Voltage (Typ.) (IF=20mA) | VF | 3.8 | V |
| Forward Voltage (Max.) (IF=20mA) | VF | 4.5 | V |
| Reverse Current (Max.) (VR=5V) | IR | 10 | uA |
| Wavelength of Peak Emission (Typ.) (IF=20mA) | λP | 430 | nm |
| Wavelength of Dominant Emission (Typ.) (IF=20mA) | λD | 466 | nm |
| Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA) | $\Delta\lambda$ | 60 | nm |
| Capacitance (VF=0V, f=1MHz) | C | 100 | pF |

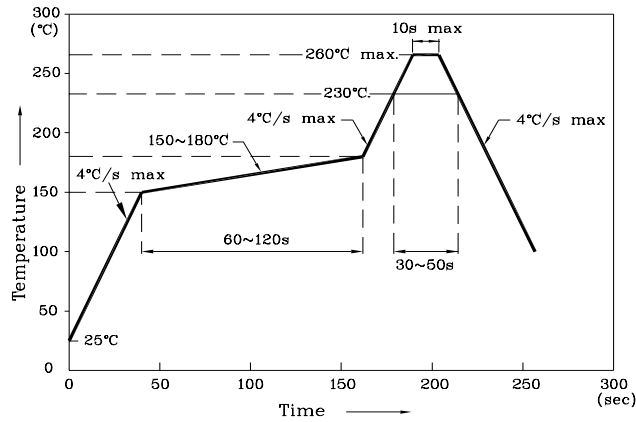
| Part Number | Emitting Color | Emitting Material | Lens-color | Luminous Intensity (IF=20mA) | | Wavelength nm λP | Viewing Angle 2 θ 1/2 |
|---------------|----------------|-------------------|---------------|---------------------------------|------|---------------------------------|---------------------------------|
| | | | | min. | typ. | | |
| NK1LUB32D/SMD | Blue | GaN | Blue Diffused | 18 | 49 | 430 | 30° |



❖ UB



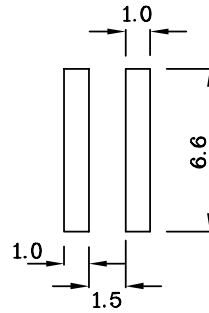
Reflow Soldering Profile For Lead-free SMT Process.



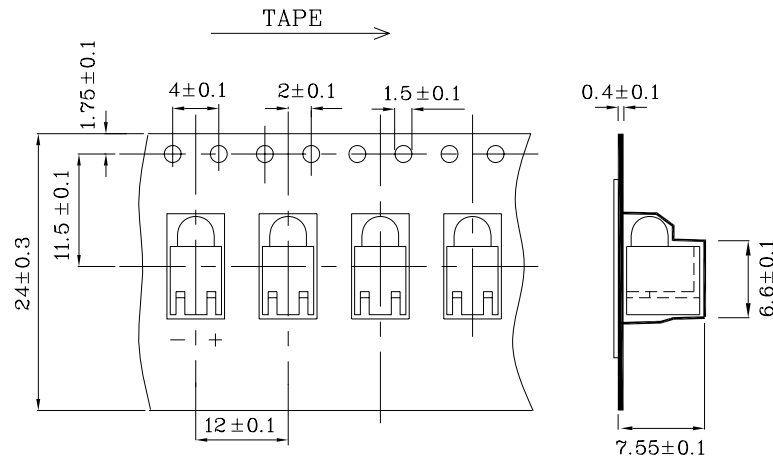
Notes:

1. Maximum soldering temperature should not exceed 260°C.
2. Recommended reflow temperature: 145°C-260°C.
3. Do not put stress to the epoxy resin during high temperatures conditions.

❖ Recommended Soldering Pattern (Units: mm)



❖ Tape Specification (Units : mm)



Remarks:

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity/ Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.