# Technical Data Sheet
# HIGH POWER LED

## 32-01UYC/S1029

## Benefits

. Fewer LEDs Required
. Lower Lighting System Cost
. Wide viewing angle 140°

## Features

. High Flux Output.
. Low Profile.
. Low Thermal Resistance.
. Low Power Consumption.
. Pb free.

## Descriptions

This revolutionary package design allows the light designer to reduce the number of LEDs required and provide a more uniform and unique illuminated appearance than with other LED solutions. This is possible through the efficient optical package design and high-current capabilities.

The low profile package can be easily coupled with reflectors or lenses to efficiently distribute light and provide the desired light appearance.

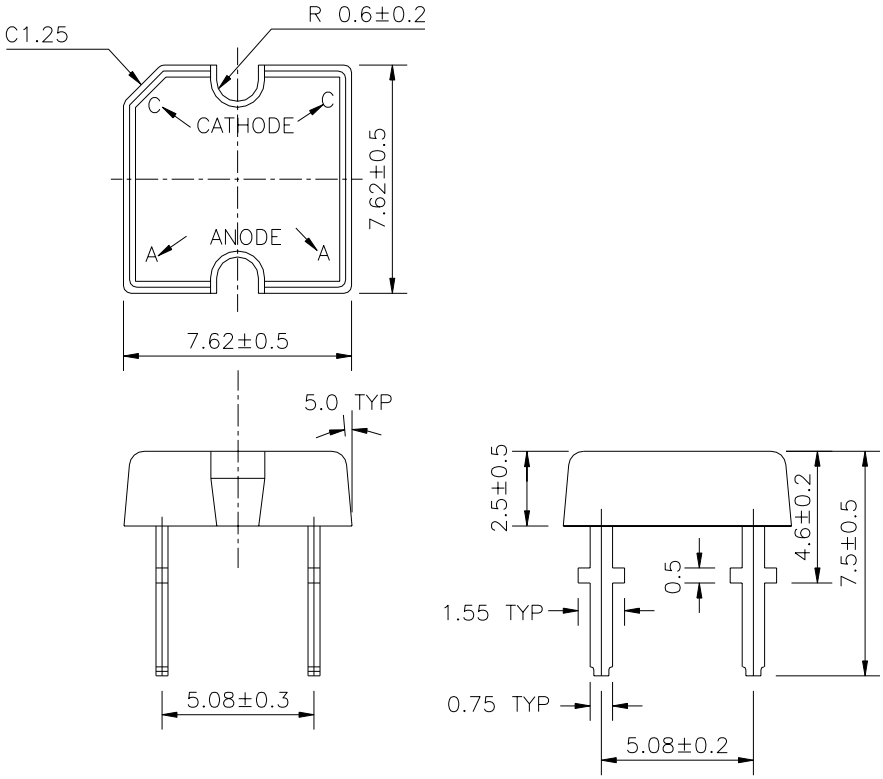
## Applications

. Automotive Exterior Lighting
. Electronic Signs and Signals
. Special Lighting application

## Device Selection Guide

| PART NO. | Chip | | Lens Color |
|---|---|---|---|
| | Material | Emitted Color | |
| 32-01UYC/S1029 | AlGaInP | Super Yellow | Water Clear |

## Package Dimensions




**Notes:** 1.All dimensions are in millimeters

2.An epoxy meniscus may extend about 1.5mm(0.059") down the leads

3.Tolerances unless dimensions ±0.25mm

## Absolute Maximum Ratings (Ta=25℃)

| Parameter | Symbol | Rating | Units |
|---|---|---|---|
| Continuous Forward Current | $I_F$ | 70 | mA |
| Peak Forward Current(Duty 1/10 @ 1KHZ) | $I_{FP}$ | 160 | mA |
| Reverse Voltage | $V_R$ | 5 | V |
| Operating Temperature | $T_{opr}$ | -40 ~ +85 | ℃ |
| Storage Temperature | $T_{stg}$ | -40 ~ +100 | ℃ |
| Soldering Temperature(T=5 sec) | $T_{sol}$ | 260 ± 5 | ℃ |
| LED Junction Temperature | $T_j$ | 125 | ℃ |
| Power Dissipation | $P_d$ | 239 | mW |
| Electrostatic Discharge | ESD | 2000 | V |

## Electro-Optical Characteristics (Ta=25℃)

| Parameter | Symbol | Min. | Typ. | Max. | Condition | Unit |
|---|---|---|---|---|---|---|
| **Total Flux** | Φv | 1500 | 2100 | ---- | IF=70mA | mlm |
| **Viewing Angle** | 2θ1/2 | ---- | 140 | ---- | IF=70mA | deg |
| **Peak Wavelength** | λp | ---- | 591 | ---- | IF=20mA | nm |
| **Dominant Wavelength** | λd | ---- | 589 | ---- | IF=20mA | nm |
| **Spectrum Radiation Bandwidth** | △λ | ---- | 15 | ---- | IF=20mA | nm |
| **Forward Voltage** | VF | ---- | 2.6 | ---- | IF=70mA | V |
| **Reverse Current** | IR | ---- | ---- | 10 | VR=5V | μA |

## Rank

32-01UYC/S1029 □ □ □

(1) (2) (3)

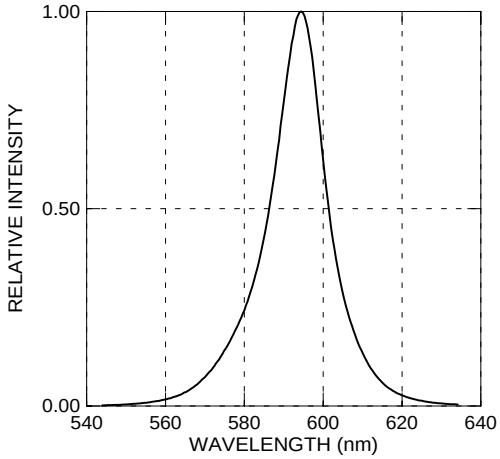
| (1) VF(V) | | | (2) λd(nm) | | | (3) Φv(lm) | | |
|---|---|---|---|---|---|---|---|---|
| Bin | Min | Max | Bin | Min | Max | Bin | Min | Max |
| 0 | 1.83 | 2.07 | 1 | 585 | 591 | E | 1500 | 2100 |
| 1 | 1.95 | 2.19 | 2 | 589 | 594 | F | 1800 | 2400 |
| 2 | 2.07 | 2.31 | 3 | 592 | 597 | G | 2100 | 3000 |
| 3 | 2.19 | 2.43 | | | | H | 2400 | 3600 |
| 4 | 2.31 | 2.55 | | | | | | |
| 5 | 2.43 | 2.67 | | | | | | |
| 6 | 2.55 | 2.79 | | | | | | |
| 7 | 2.67 | 2.91 | | | | | | |
| 8 | 2.79 | 3.09 | | | | | | |
| 9 | 2.97 | 3.41 | | | | | | |

*Measurement Uncertainty of Forward Voltage：±0.1V

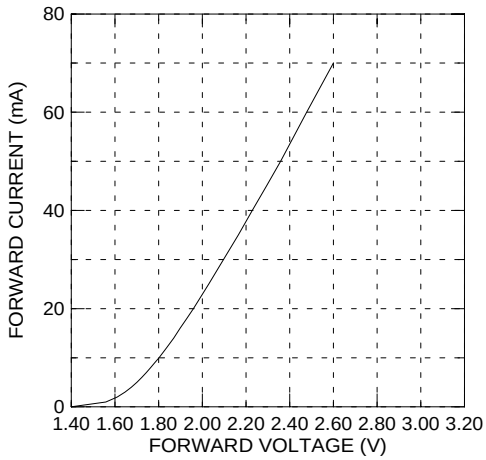
*Measurement Uncertainty of Luminous Intensity: ±15%

# Typical Electro-Optical Characteristics Curves

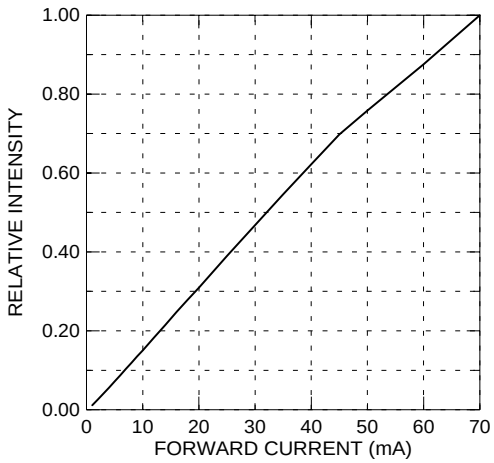
## Relative Intensity vs. Wavelength



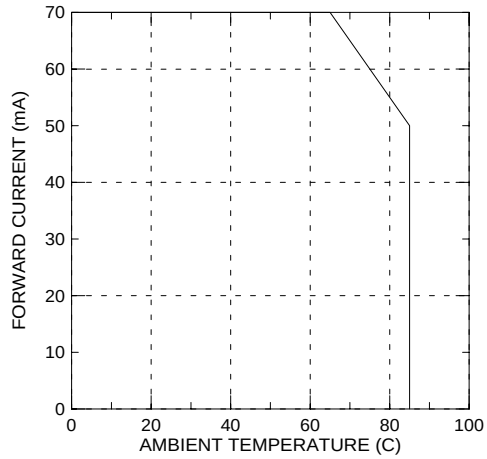

## Forward Current vs. Forward Voltage



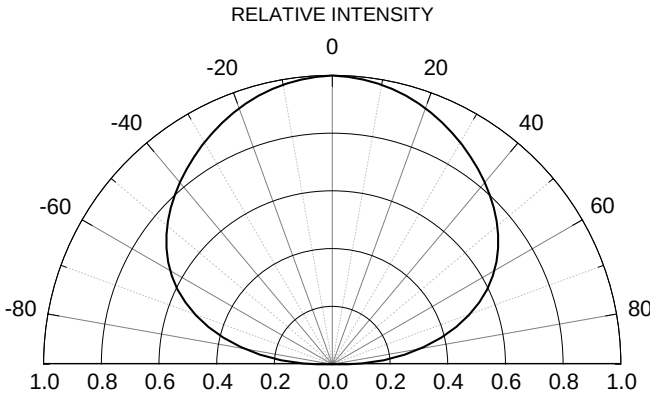

## Relative Intensity vs. Forward Current



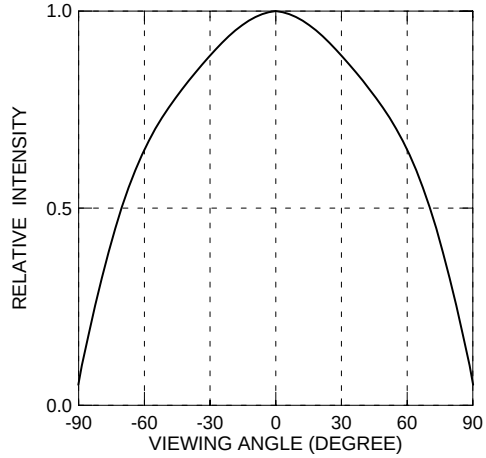

## Forward Current vs. Ambient Temp.



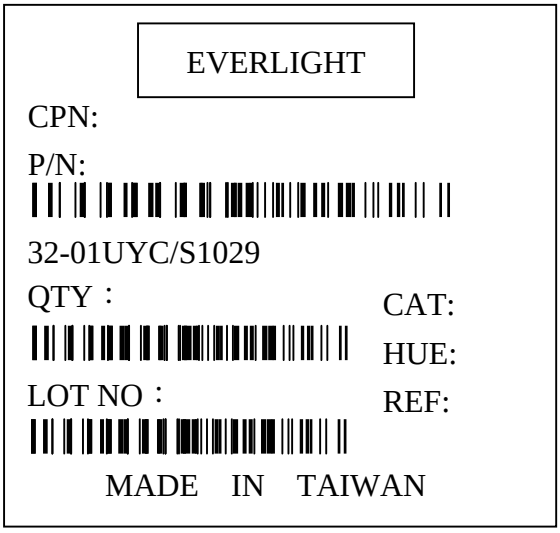

## Relative Intensity vs. Angle Dispacement




## Relative Intensity vs. Off Axis Angle



## Label Form Specification




CPN: Customer's Production Number
P/N : Production Number
QTY: Packing Quantity
CAT: Color Bin Grade
HUE: Space
REF: Reference
LOT No: Lot Number
MADE IN TAIWAN: Production Place

## Notes

1. Above specification may be changed without notice. EVERLIGHT will reserve authority on material change for above specification.
2. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. EVERLIGHT assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
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