

Technical Data Sheet

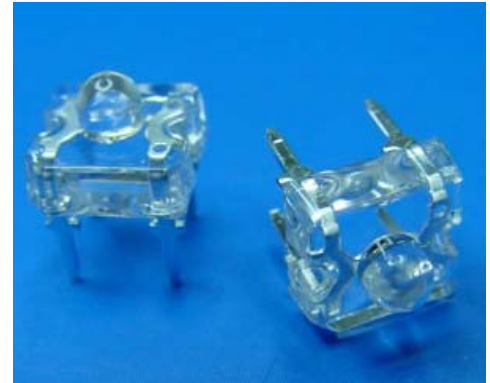
HIGH POWER LED

31-01UYC/OMA**Benefits**

- . Fewer LEDs Required
- . Lowers Lighting System Cost
- . Viewing angle 50°

Features

- . High Flux Output.
- . Designed for High Current Operation.
- . Low Thermal Resistance.
- . Low Profile.
- . Packaged in Tubes for Use with Automatic Insertion Equipment.
- . Pb free
- . The product itself will remain within RoHS compliant version.

**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.

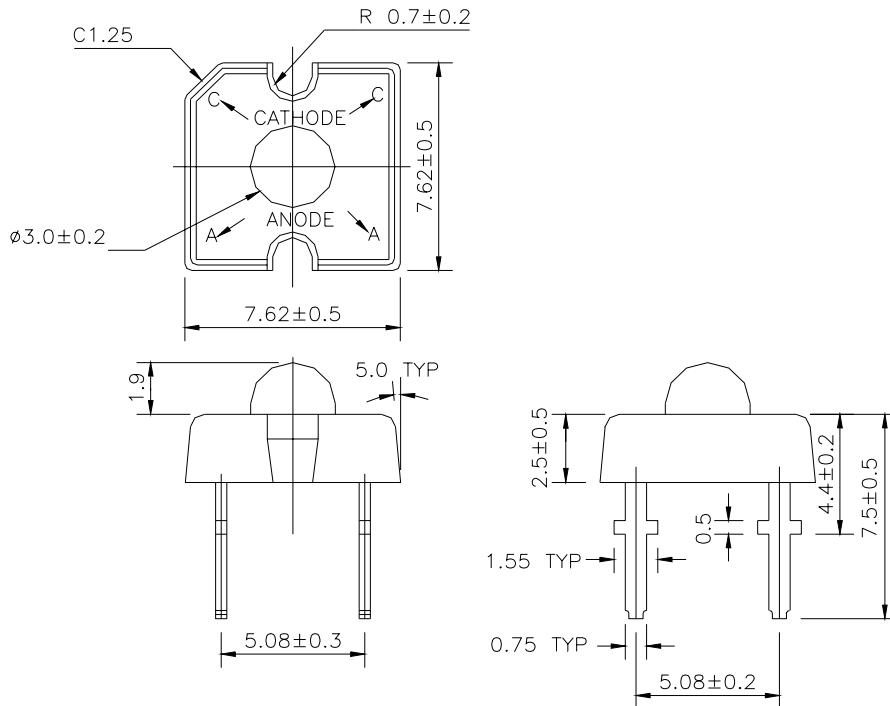
Applications

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

Device Selection Guide

PART NO.	Chip		Lens Color
	Material	Emitted Color	
31-01UYC/OMA	AlGaInP/Si	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°C)

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	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C
Soldering Temperature(T=5 sec)	T _{sol}	260 ± 5	°C
LED Junction Temperature	T _j	115	°C
Power Dissipation	P _d	220	mW
Electrostatic Discharge	ESD	2000	V

Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Condition	Unit
Total Flux	Φ_v	4000	----	----	I _F =70mA	mlm
Viewing Angle	$2\theta_{1/2}$	----	50	----	I _F =70mA	deg
Peak Wavelength	λ_p	----	591	----	I _F =20mA	nm
Dominant Wavelength	λ_d	----	589	----	I _F =20mA	nm
Spectrum Radiation Bandwidth	$\Delta\lambda$	----	15	----	I _F =20mA	nm
Forward Voltage	V _F	----	2.6	----	I _F =70mA	V
Reverse Current	I _R	----	----	10	V _R =5V	uA

Rank

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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(1)	(2)	(3)

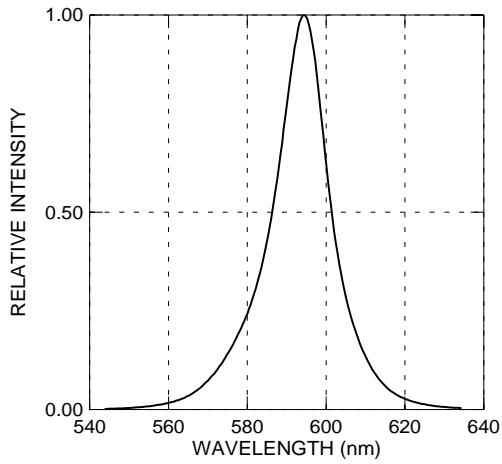
(1) V _F (V)			(2) λ_d (nm)			(3) Φ_v (mlm)		
Bin	Min	Max	Bin	Min	Max	Bin	Min	Max
0	1.95	2.19	1	585	591	H	4000	6100
1	2.07	2.31	2	589	594	J	5000	7300
2	2.19	2.43	3	592	597			
3	2.31	2.55						
4	2.43	2.67						
5	2.55	2.79						
6	2.67	2.91						
7	2.79	3.03						
8	2.91	3.15						

*Measurement Uncertainty of Forward Voltage : ±0.1V

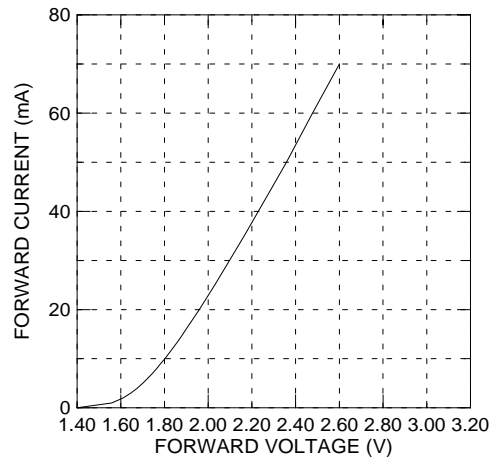
*Measurement Uncertainty of Luminous Intensity: ±15%

Typical Electro-Optical Characteristics Curves

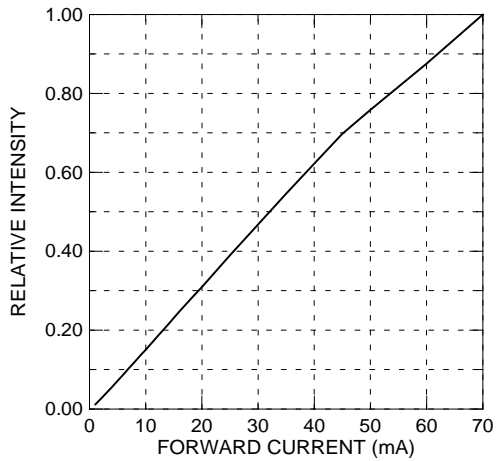
Relative Intensity vs. Wavelength



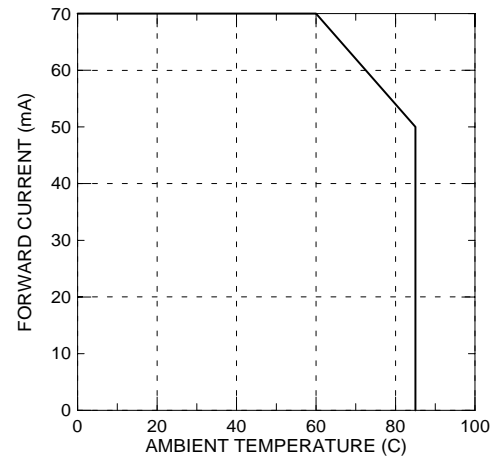
Forward Current vs. Forward Voltage



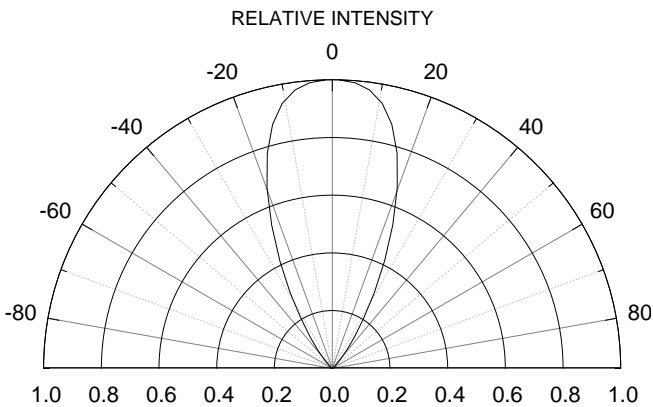
Relative Intensity vs. Forward Current



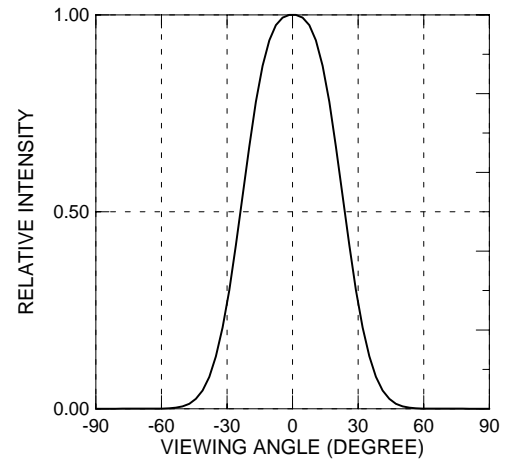
Forward Current vs. Ambient Temp.



Relative Intensity vs. Angle Displacement



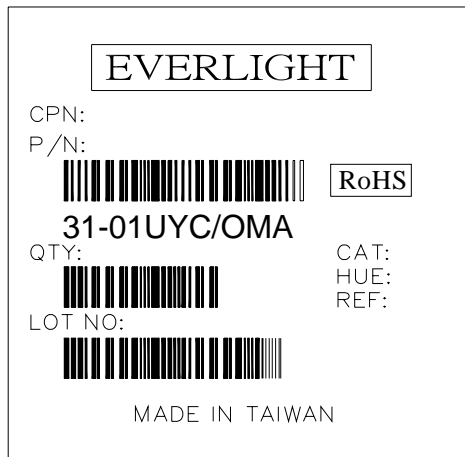
Relative Intensity vs. Off Axis Angle





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Label Form Specification



CPN: Customer's Production Number
P/N : Production Number
QTY: Packing Quantity
CAT: Ranks
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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