

# 34-01/Y5C-ARTC

#### **Features**

- . High Flux Output.
- . Designed for High Current Operation.
- . Low Thermal Resistance.
- . Low Profile.
- . Packaged in Tubes for Use with Automatic Insertion Equipment.
- . 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 Lighting
- . Electronic Signs and Signals
- . Special Lighting application

#### **Device Selection Guide**

	C		
PART NO.	Material	<b>Emitted Color</b>	Lens Color
34-01/Y5C-ARTC	AlGaInP	Yellow	Water Clear

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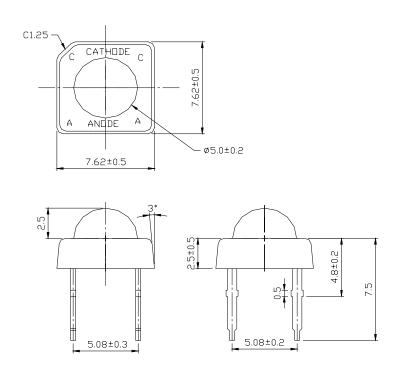
Device number:DLE-304-029

Established date: 05-10-2007



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## **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	$I_{\mathrm{F}}$	70	mA
Peak Forward Current(Duty 1/10 @ 1KHZ)	$I_{FP}$	160	mA
Reverse Voltage	$V_R$	5	V
Operating Temperature	$T_{opr}$	-40 ~ +100	$^{\circ}\!\mathbb{C}$
Storage Temperature	$T_{stg}$	-40 ~ +100	$^{\circ}\!\mathbb{C}$
Soldering Temperature(T=5 sec)	$T_{sol}$	$260 \pm 5$	$^{\circ}\!\mathbb{C}$
LED Junction Temperature	$T_{j}$	125	$^{\circ}\!\mathbb{C}$
Power Dissipation	$P_d$	220	mW
Electrostatic Discharge	ESD	2K	V

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# **Electro-Optical Characteristics (Ta=25°C)**

Parameter	Symbol	Min.	Тур.	Max.	Condition	Unit
Total Flux	Фv	4500	6600	9000	I <sub>F</sub> =70mA	mlm
Viewing Angle	2 0 1/2		90		I <sub>F</sub> =70mA	deg
Peak Wavelength	λр		591		I <sub>F</sub> =70mA	nm
<b>Dominant Wavelength</b>	λd	586	590	598	I <sub>F</sub> =70mA	nm
Spectrum Radiation Bandwidth	Δλ		15		I <sub>F</sub> =70mA	nm
Forward Voltage	VF	2.1	2.6	3.1	I <sub>F</sub> =70mA	V
Reverse Current	IR			10	V <sub>R</sub> =5V	μΑ

### Rank

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(1)

(2)

(3)

	(1) VF(V)	)	(2) $\lambda d(nm)$		$(3)\Phi v(mlm)$			
Bin	Min	Max	Bin	Min	Max	Bin	Min	Max
3	2.1	2.3	1	586	590	R	4500	5650
4	2.3	2.5	2	590	594	S	5650	7150
5	2.5	2.7	3	594	598	T	7150	9000
6	2.7	2.9						
7	2.9	3.1						

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<sup>\*</sup>Measurement Uncertainty of Forward Voltage: ±0.1V

<sup>\*</sup>Measurement Uncertainty of Luminous Intensity: ±15%

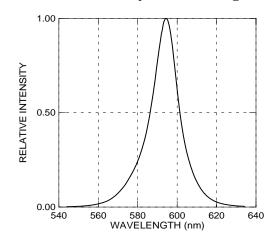
<sup>\*</sup>Measurement Uncertainty of Dominant Wavelength ±1.0nm



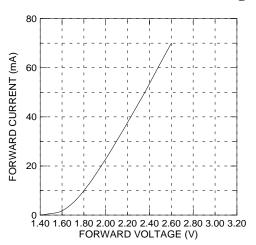
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## **Typical Electro-Optical Characteristics Curves**

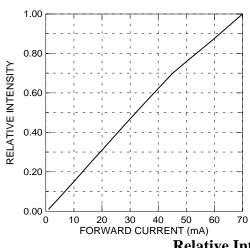
### Relative Intensity vs. Wavelength



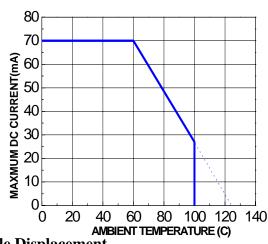
#### Forward Current vs. Forward Voltage



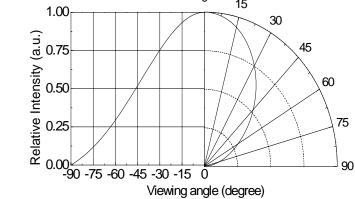
#### **Relative Intensity vs. Forward Current**



### Forward Current vs. Ambient Temp.



Relative Intensity vs. Angle Displacement



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### **Packing Quantity Specification**

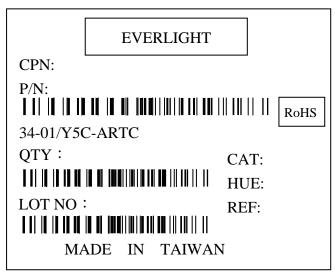
- (1) 60 pcs/1 tube, 20 tubes/1 small inside box, 12 small inside boxes/1 outside box
- (2) 60 pcs/1 tube, 80 tubes/1 big inside box, 4 big inside boxes/1 outside box

### **Label Form Specification**

(1) Tube Label Form

<b>EVERLIGHT</b>	<b>PART NO:</b> 34-01/Y5C-ARTC	QTY: 60
EVERLIUMI	LOT NO:	CAT:

(2)Box Label Form



PART NO: Everlgiht's Production Number

QTY: Packing Quantity LOT NO: Lot Number

CAT: Ranks of Forward Voltage, Dominant Wavelength and Total Flux

CPN: Customer's Production Number

P/N : Production Number

HUE: Reference REF: Reference

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MADE IN TAIWAN: Production Place

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#### **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.
- 3. These specification sheets include materials protected under copyright of EVERLIGHT corporation. Please don't reproduce or cause anyone to reproduce them without EVERLIGHT's consent.

#### 4. Soldering Condition

Careful attention should be paid during soldering. When soldering, leave more then 3mm from solder joint to case, and soldering beyond the base of the tie bar is recommended.

Avoiding applying any stress to the lead frame while the LEDs are at high temperature particularly when soldering.

Recommended soldering conditions:

Hand Soldering		DIP Soldering	
Temp. at tip of iron	400°C Max. (30W Max.)	Preheat temp.	100°C Max. (60 sec Max.)
Soldering time	3 sec Max.	Bath temp.	265 Max.
Distance	3mm Min.(From solder joint	Bath time.	5 sec Max.
	to case)		
		Distance	3mm Min.

EVERLIGHT ELECTRONICS CO., LTD.

Office: No 25, Lane 76, Sec 3, Chung Yang Rd, Tucheng, Taipei 236, Taiwan, R.O.C.

Tel: 886-2-2267-2000, 2267-9936 Fax: 886-2267-6244, 2267-6189, 2267-6306

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