

# Technical Data Sheet 5.0 mm Round LED (T-1 3/4)

# 334-15AUTC/H0/S400-X10(NA)

#### **Features**

- Popular T-1 colorless 5mm package.
- High luminous power.
- Typical chromaticity coordinates x=0.29, y=0.28 according to CIE1931.
- Bulk, available taped on reel.
- Pb free.
  - The product itself will remain within RoHS compliant version.

ESD-withstand voltage: up to 4KV

#### **Descriptions**

- The series is designed for application required high luminous intensity.
- The phosphor filled in the reflector converts the blue emission of InGaN chip to ideal white.

### **Applications**

- Outdoor Displays
- Optical Indicators
- Backlighting
- Marker Lights

### **Device Selection Guide**

	Cł		
PART NO.	Material	Emitted Color	Lens Color
334-15AUTC/H0/S400-X10	InGaN/Sapphire	White	Water Clear

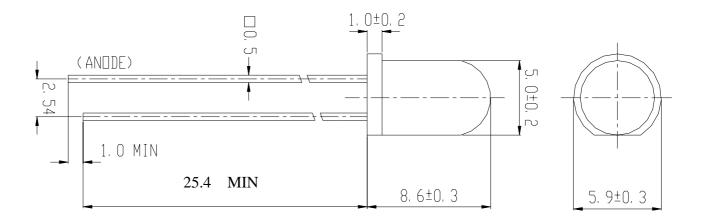
Everlight Electronics Co., Ltd. http\\:www.everlight.com Rev: 1 Page: 1 of 6

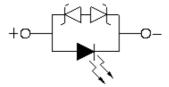
Device Number: CDLE-033-1691 Established date: 2006/4/6 Established by: GuangXiu Yuan



# 334-15AUTC/H0/S400-X10(NA)

### **Package Dimensions**





#### **Notes:**

- 1.All dimensions are in millimeters, and tolerance is 0.25mm except being specified.
- 2.Lead spacing is measured where the lead emerges from the package.
- 3. Protruded resin under flange is 1.5mm Max. LED.

## **Absolute Maximum Ratings (Ta=25°C)**

Parameter	Symbol	Rating	Unit
Continuous Forward Current	$I_{F}$	25	mA
Reverse Voltage	$V_R$	5	V
Operating Temperature	$T_{ m opr}$	-30 ~ +85	$^{\circ}\! \mathbb{C}$
Storage Temperature	$T_{ m stg}$	-40 ~ +100	$^{\circ}\!\mathbb{C}$
Soldering Temperature (T=5 sec)	$T_{\rm sol}$	260 ± 5	$^{\circ}\!\mathbb{C}$
Power Dissipation	$P_d$	120	mW
Electrostatic Discharge	ESD	4500	V

Everlight Electronics Co., Ltd.

Device Number: CDLE-033-1691

 $http \hspace{-0.05cm} \mid \hspace{-0.05cm} : www.everlight.com$ 

Established date: 2006/4/6

Rev: 1 Page: 2 of 6

Established by: GuangXiu Yuan



# 334-15AUTC/H0/S400-X10(NA)

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

Parameter	Symbol	Condition	Min.	Тур.	Max.	Units
Forward Voltage	$V_{\mathrm{F}}$	I <sub>F</sub> =20mA		3.2	4.0	V
Reverse Current	$I_R$	$V_R=5V$			50	uA
Luminous Intensity	$I_{V}$	I <sub>F</sub> =20mA	630	1250		mcd
Viewing Angle	2 0 1/2	I <sub>F</sub> =20mA		35		deg
Chromaticity Coordinates	X	I <sub>F</sub> =20mA		0.29		
	у			0.28		

### **Luminous Intensity Combination (mcd at 20mA)**

I <sub>V</sub> Ranks	X	Y	Z	Z1
Min.	630	945	1418	2127
Max.	945	1418	2127	

Measurement Uncertainty of Luminous Intensity: ±15%

### Forward Voltage Combination (V at 20mA)

V <sub>F</sub> Rank	1	2	3	5	6
Min.	3.0	3.2	3.4	3.6	3.8
Max.	3.2	3.4	3.6	3.8	4.0

\*Measurement Uncertainty of Forward Voltage: ±0.1V

Everlight Electronics Co., Ltd.

Device Number: CDLE-033-1691

http\\:www.everlight.com Established date:2006/4/6 Rev: 1

Page: 3 of 6

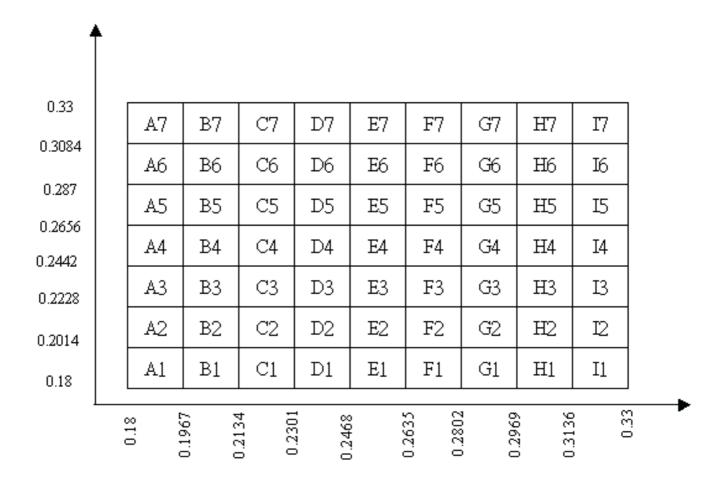
Established by: GuangXiu Yuan



## 334-15AUTC/H0/S400-X10(NA)

#### **CIE Chromaticity Diagram**]

Color Ranks (IF=20mA, Ta=25 $^{\circ}$ C)



Measurement uncertainty of the color coordinates: ±0.01

#### Note:

The setting and inspection for this device please flow the area of x y chromaticity diagram.

Take the upper and lower point for x-axis and y-axis and then put it same parts, x-axis divide into 9 section, y-axis divide into 6 section, total is 63 bins.

Everlight Electronics Co., Ltd.

Device Number: CDLE-033-1691

http\\:www.everlight.com Established date:2006/4/6 Rev: 1

Page: 4 of 6

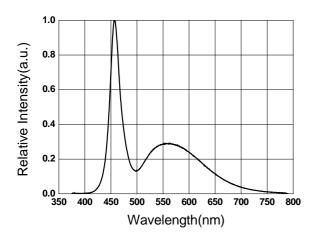
Established by: GuangXiu Yuan



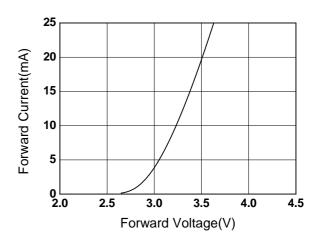
## 334-15AUTC/H3/S400-X10(NA)

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

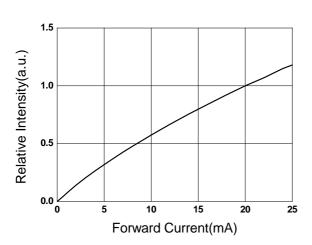
#### Relative Intensity vs. Wavelength



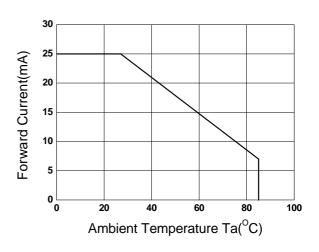
#### Forward Current vs. Forward Voltage



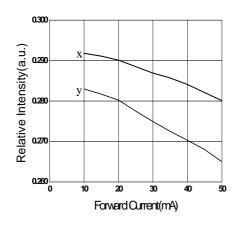
#### **Relative Intensity vs. Forward Current**



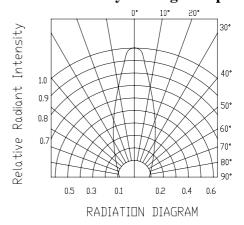
Forward Current vs. Ambient Temp.



#### **Chromaticity Coordinate vs. Forward Current**



#### Relative Intensity vs. Angle Dispacemen



Rev: 1

Everlight Electronics Co., Ltd. http\\:www.everlight.com Device Number: CDLE-033-1691 Established date: 2006/4/6

Page: 5 of 6 Established by: GuangXiu Yuan



### **Label Form Specification**

### 

## 334-15AUTC/H0/S400-X10(NA)

CPN: Customer's Production Number

P/N : Production Number QTY: Packing Quantity

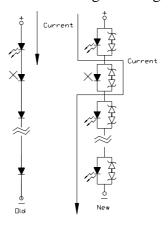
CAT: IV&VF Rank HUE: Color Rank REF: Reference

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.
- 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. When the LED is connected using serial circuit, if either piece of LED is no light up but current can't flow through causing others to light down. In new design, the LED is parallel with zener diode. if either piece of LED is no light up but current can flow through causing others to light up



Everlight Electronics Co., Ltd. http\\:www.everlight.com Rev: 1 Page: 6 of 6

Device Number: CDLE-033-1691 Established date: 2006/4/6 Established by: GuangXiu Yuan