



# 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.

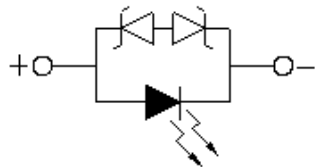
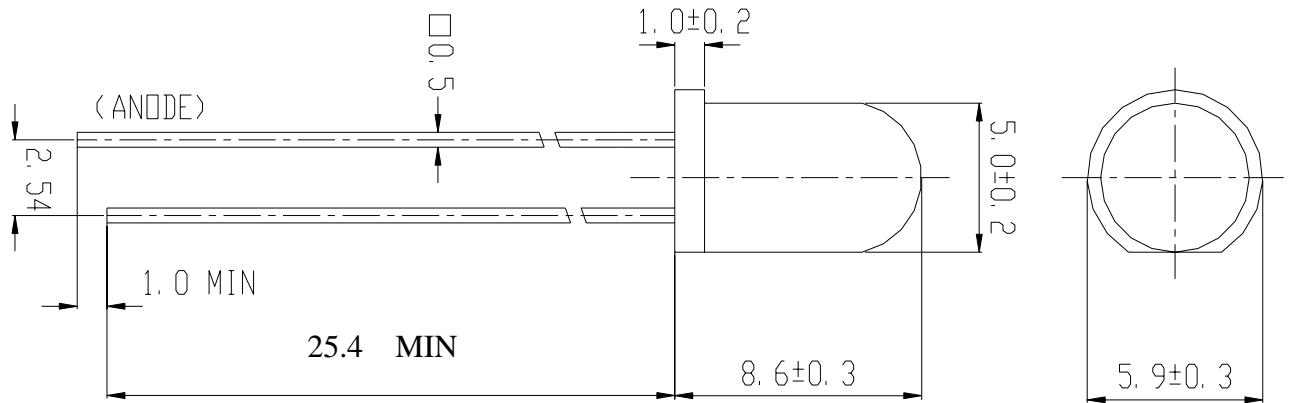
### Applications

- Outdoor Displays
- Optical Indicators
- Backlighting
- Marker Lights

### Device Selection Guide

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

**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 <sub>F</sub>	25	mA
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature	T <sub>opr</sub>	-30 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +100	°C
Soldering Temperature (T=5 sec)	T <sub>sol</sub>	260 ± 5	°C
Power Dissipation	P <sub>d</sub>	120	mW
Electrostatic Discharge	ESD	4500	V

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	--	3.2	4.0	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	--	--	50	uA
Luminous Intensity	I <sub>V</sub>	I <sub>F</sub> =20mA	630	1250	--	mcd
Viewing Angle	2θ 1/2	I <sub>F</sub> =20mA	--	35	--	deg
Chromaticity Coordinates	x	I <sub>F</sub> =20mA	--	0.29	--	
	y	-----	--	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)**

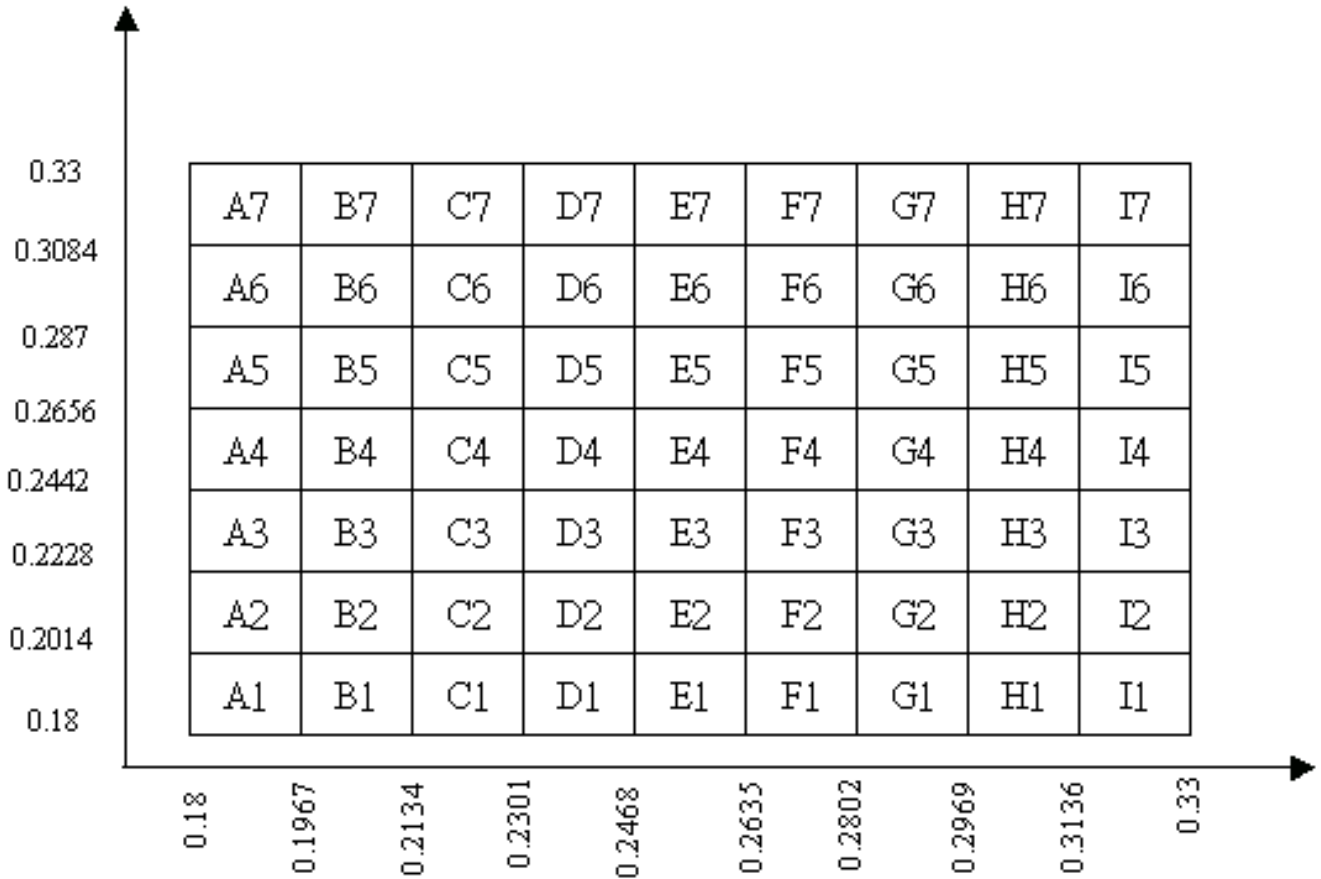
V <sub>F</sub> Rank	1	2	3	5	6
Min.	3.0	3.2	3.4	3.6	3.8
Max.	3.2	3.4	3.6	3.8	4.0

\*Measurement Uncertainty of Forward Voltage : ±0.1V

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

**CIE Chromaticity Diagram ]**

**Color Ranks (IF=20mA , Ta=25°C)**



Measurement uncertainty of the color coordinates :  $\pm 0.01$

Note:

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

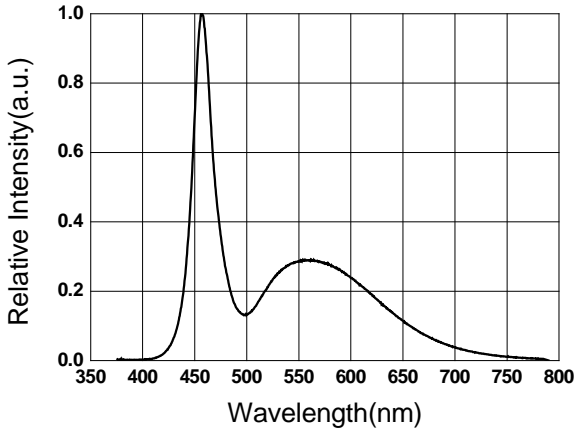
Take the upper and lower point for x-axis and y-axis and then put it same parts, x-axis divide into 9 section, y-axis divide into 6 section, total is 63 bins.



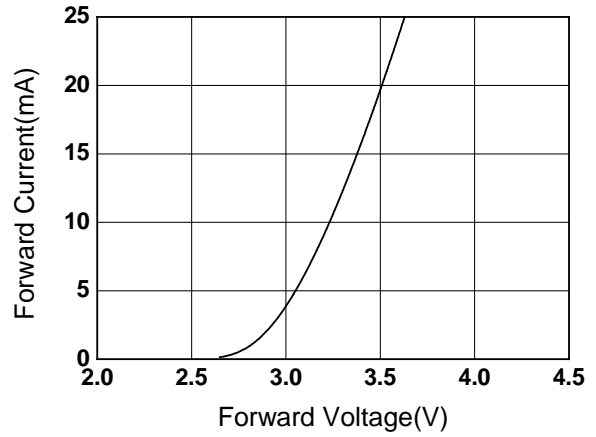
## 334-15AUTC/H3/S400-X10(NA)

### Typical Electro-Optical Characteristics Curves

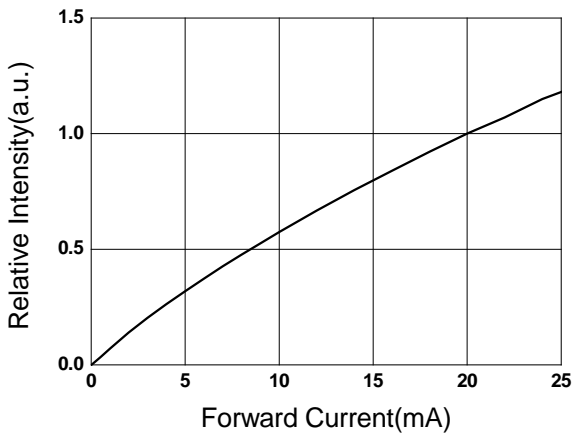
Relative Intensity vs. Wavelength



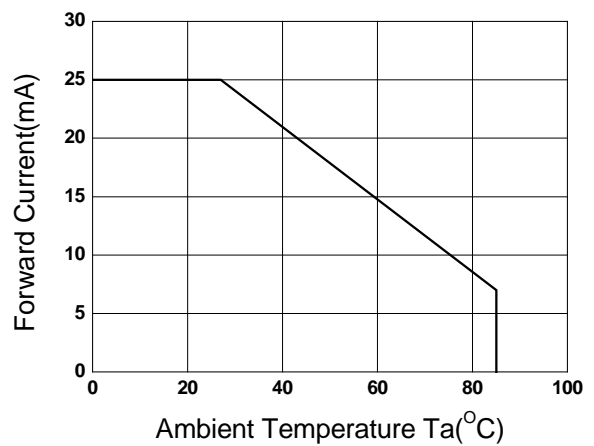
Forward Current vs. Forward Voltage



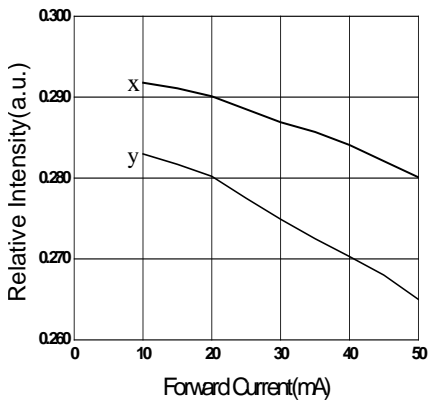
Relative Intensity vs. Forward Current



Forward Current vs. Ambient Temp.



Chromaticity Coordinate vs. Forward Current



Relative Intensity vs. Angle Dispacemen

