



## Technical Data Sheet

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

**3384-15UTC/S400-X10**

#### 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.



#### 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.

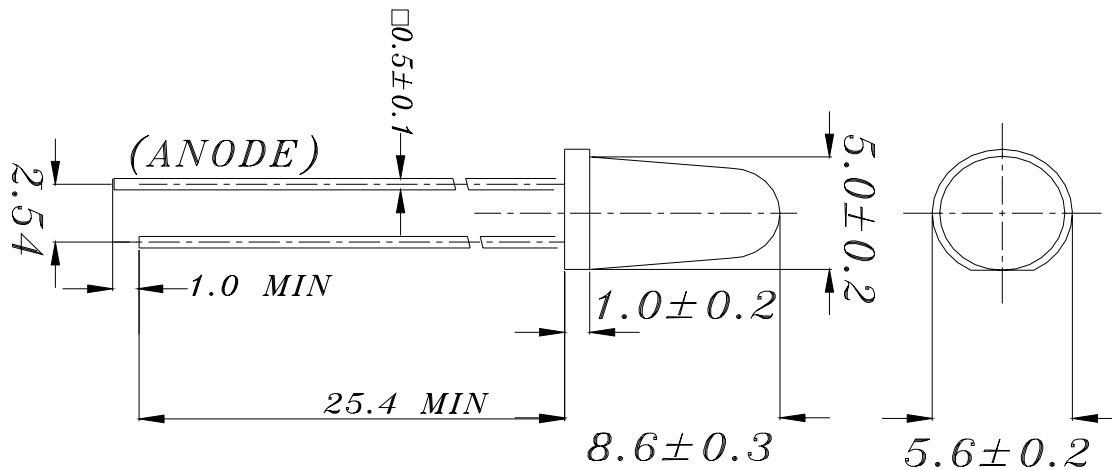
#### Applications

- Outdoor Displays
- Optical Indicators
- Backlighting
- Marker Lights

#### Device Selection Guide

PART NO.	Chip		Lens Color
	Material	Emitted Color	
3384-15UTC/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	$I_F$	25	mA
Reverse Voltage	$V_R$	5	V
Operating Temperature	$T_{opr}$	-30 ~ +85	°C
Storage Temperature	$T_{stg}$	-40 ~ +100	°C
Soldering Temperature (T=5 sec)	$T_{sol}$	260 ± 5	°C
Power Dissipation	$P_d$	110	mW
Electrostatic Discharge	ESD	150	V



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### 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	8000	10000	--	mcd
Viewing Angle	2θ <sub>1/2</sub>	I <sub>F</sub> =20mA	--	20	--	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	Z1	Z2	Z3
Min.	8000	10000	13000
Max.	10000	13000	17000

Measurement Uncertainty of Luminous Intensity: ±15%

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

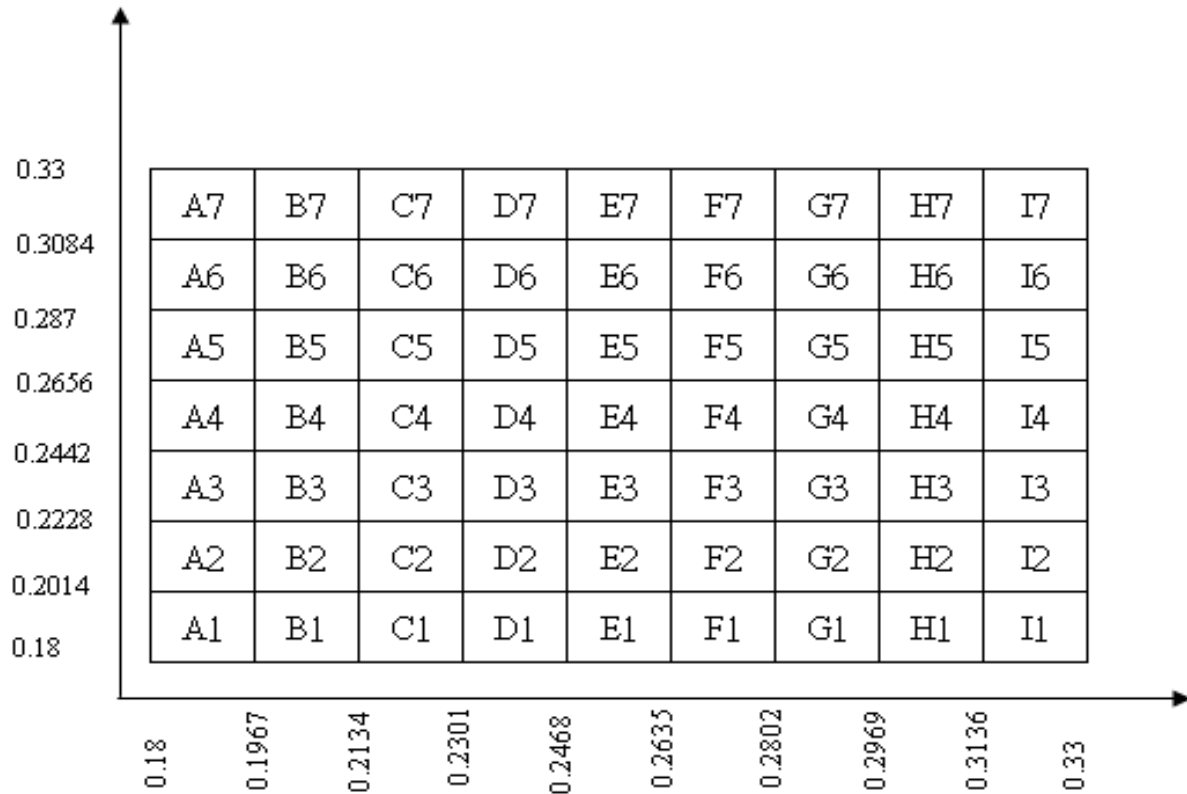
V <sub>F</sub> Ranks	1	2	3	4	5
Min.	3.0	3.2	3.4	3.6	3.8
Max.	3.2	3.4	3.6	3.8	4.0

Measurement Uncertainty of Forward Voltage : ±0.05V



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**CIE Chromaticity Diagram ( $I_F=20mA$  ,  $T_a=25^\circ C$ )**



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

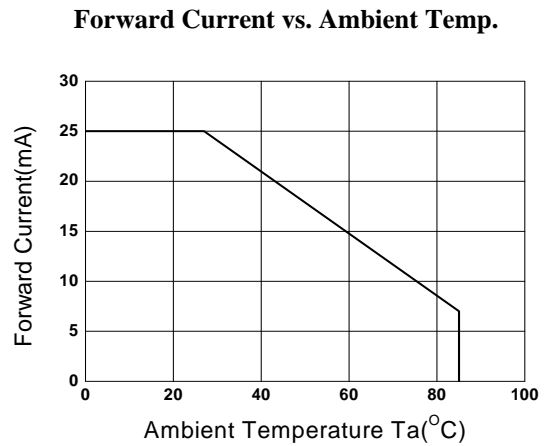
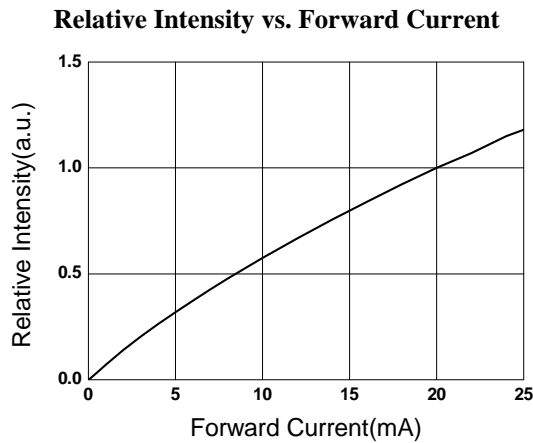
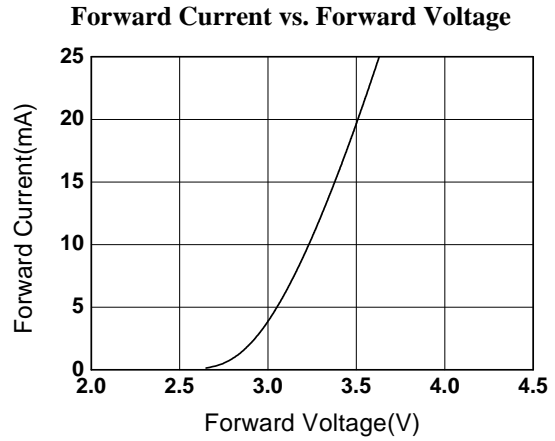
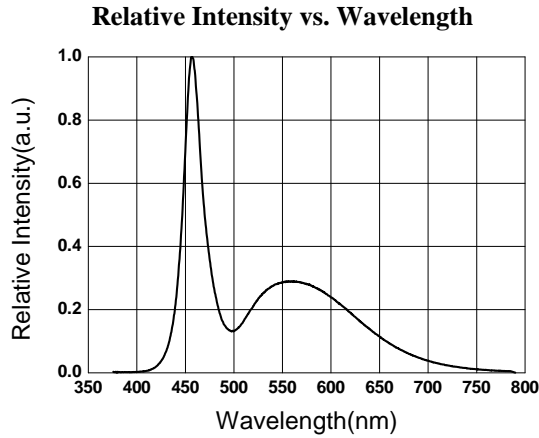
**Note:**

- 1.The setting and inspection for this device please flow the area of x y chromaticity diagram.
- 2.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 7 section, total is 63 bins.

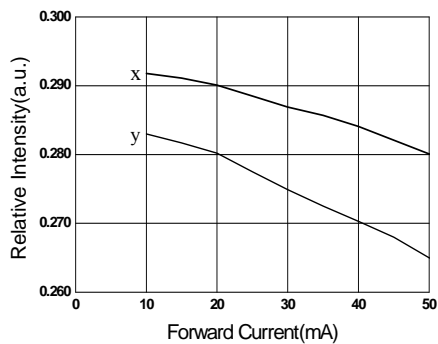


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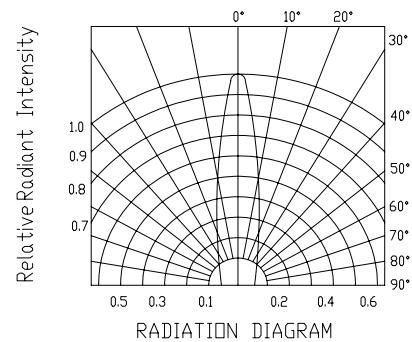
### Typical Electro-Optical Characteristics Curves



**Chromaticity Coordinate vs. Forward Current**



**Relative Intensity vs. Angle Dispacemen**





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### Label Form Specification

The diagram shows a rectangular label form with the following elements:

- Top left: A circle containing the letters "Pb".
- Top center: A rectangle containing the word "EVERLIGHT".
- Top right: A circle containing the letter "X".
- Bottom center: A rectangle containing the word "RoHS".
- Left side: Fields for "CPN:", "P/N:", "QTY:", and "LOT NO:", each followed by a barcode.
- Right side: Fields for "CAT:", "HUE:", and "REF:".
- Bottom left: A field for "REFERENCE:" followed by a barcode.

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

### 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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