

Technical Data Sheet

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

484-10UTC/S400-A6

Features

- Popular T-1 colorless 3mm 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

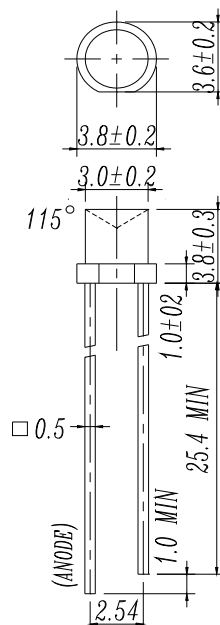
PART NO.	Chip		Lens Color
	Material	Emitted Color	
484-10UTC/S400-A6	InGaN/Sapphire	Warm White	Water Clear

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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)

Parameter	Symbol	Rating	Unit
Continuous Forward Current	I_F	25	mA
Reverse Voltage	V_R	5	V
Operating Temperature	T_{opr}	-30 ~ +85	
Storage Temperature	T_{stg}	-40 ~ +100	
Soldering Temperature (T=5 sec)	T_{sol}	260	
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 _F	I _F =20mA	2.75	--	3.85	V
Reverse Current	I _R	V _R =5V	--	--	50	uA
Luminous Intensity	I _V	I _F =20mA	39	--	332	mcd
Viewing Angle	2θ _{1/2}	I _F =20mA	--	120	--	deg
Chromaticity Coordinates	x	I _F =20mA	--	0.29	--	--
	y		--	0.28	--	--

Luminous Intensity Combination (mcd at 20mA)

I _V Ranks	T	U	V	W	X	Y
Min.	39	56	78	110	154	214
Max.	62	87	122	170	237	332

Measurement Uncertainty of Luminous Intensity: ±15%

Forward Voltage Combination (V at 20mA)

V _F Ranks	1	2	3	4	5
Min.	2.75	2.95	3.15	3.35	3.55
Max.	3.05	3.25	3.45	3.65	3.85

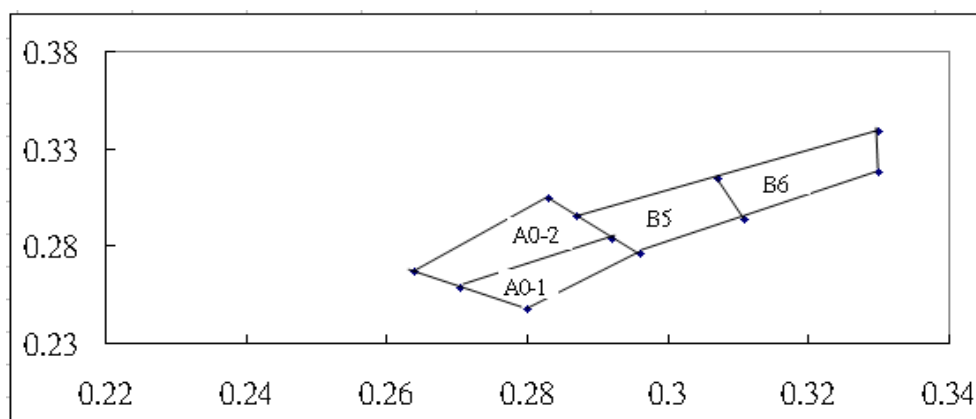
Measurement Uncertainty of Forward Voltage : ±0.1V

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



Color Ranks ($I_F=20\text{mA}$, $T_a=25^\circ\text{C}$)

A0-1	X	0.28	0.2705	0.2921	0.296
	Y	0.248	0.2583	0.2836	0.276
A0-2	X	0.2705	0.264	0.283	0.2921
	Y	0.2583	0.267	0.305	0.2836
B5	X	0.287	0.307	0.311	0.296
	Y	0.295	0.315	0.294	0.276
B6	X	0.307	0.33	0.33	0.311
	Y	0.315	0.339	0.318	0.294

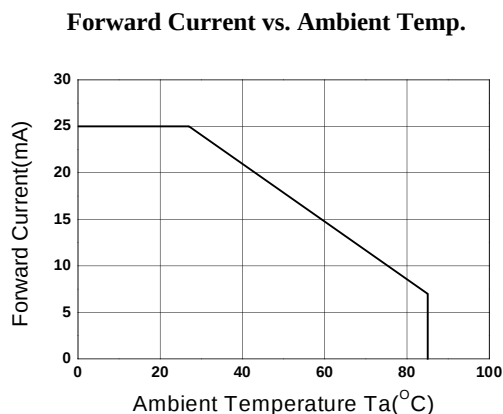
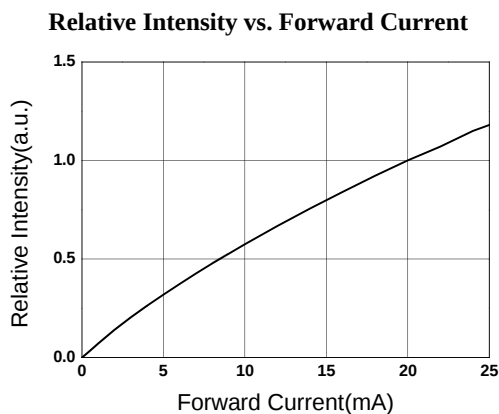
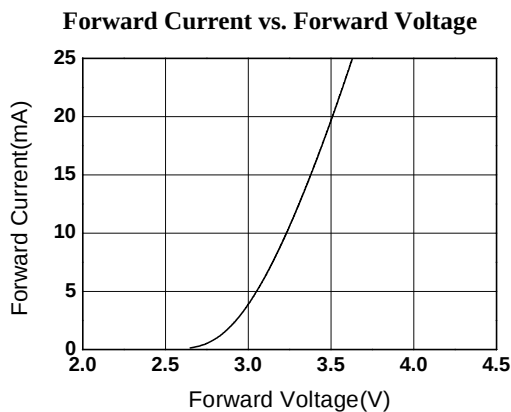
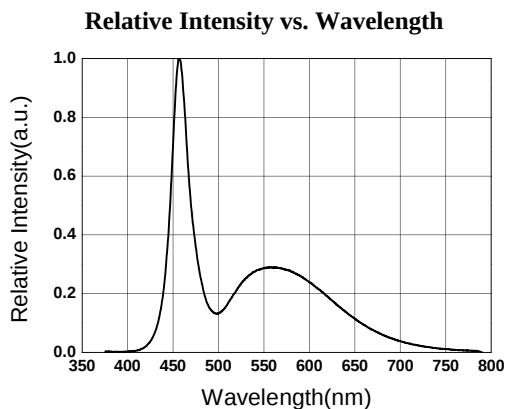
Measurement uncertainty of the color coordinates : ± 0.01

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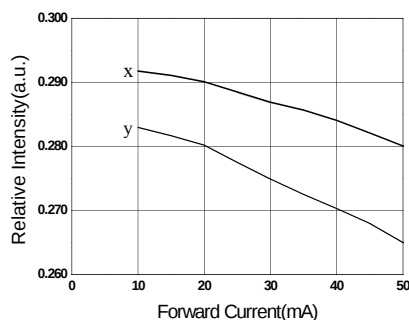
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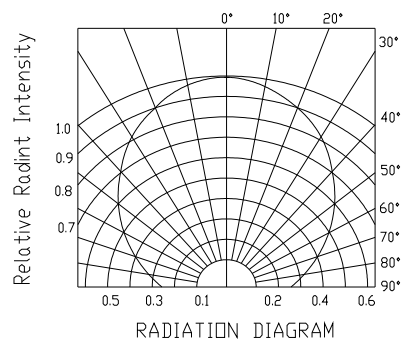
Typical Electro-Optical Characteristics Curves



Chromaticity Coordinate vs. Forward Current



Relative Intensity vs. Angle Dispacemen



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Label Form Specification

The diagram shows a rectangular label with the following elements:

- Top left: A circular logo with 'Pb' inside.
- Top center: A rectangular box containing the word 'EVERLIGHT'.
- Top right: A circular logo with an 'X' inside.
- Below 'Pb' logo: 'CPN:' followed by a blank line, 'P/N:' followed by a blank line, a barcode, '484-10UTC/S400-A6', 'QTY:' followed by a blank line, a barcode, 'LOT NO:' followed by a blank line, a barcode, and 'Reference:' followed by a blank line.
- Below 'EVERLIGHT' box: A rectangular box containing 'RoHS'.
- Below 'RoHS' box: 'CAT:' followed by a blank line, 'HUE:' followed by a blank line, and 'REF:' followed by a blank line.

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.
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.

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