

Technical Data Sheet

3 mm Round LED (T-1)

264-15UWC/S400-A6

Features

- Popular T-1 colorless 3mm package.
- High luminous power.
- Typical chromaticity coordinates $x=0.29$, $y=0.28$ according to CIE1931.
- ESD-withstand voltage: up to 4KV
- Pb free .



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

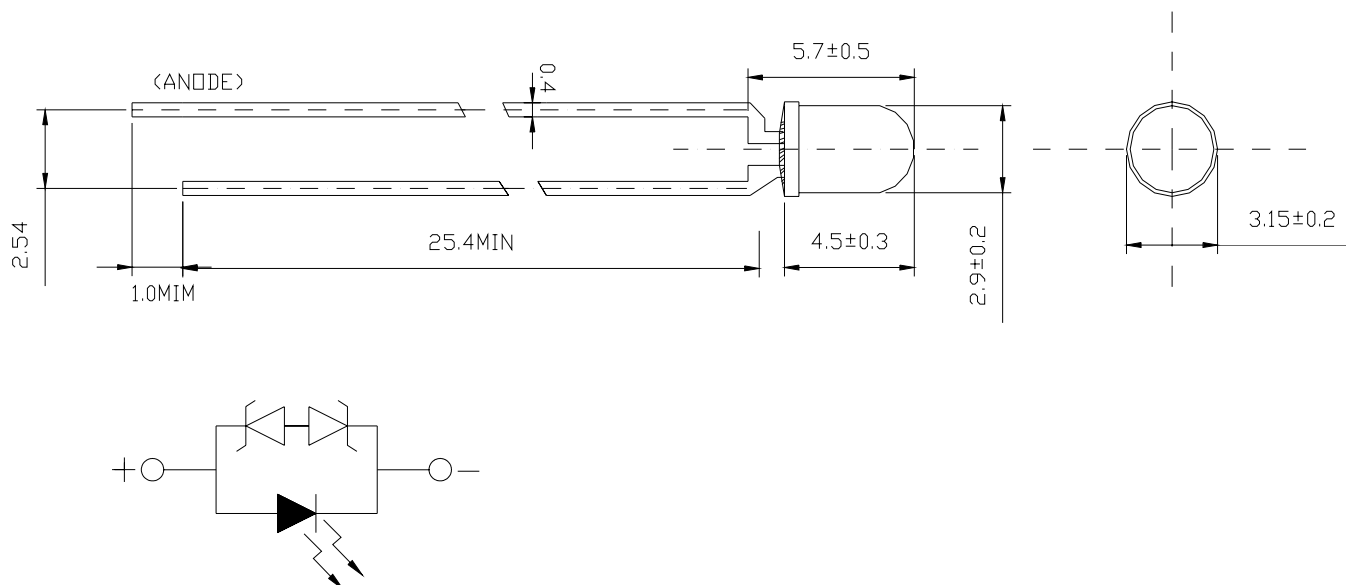
PART NO.	Chip		Lens Color
	Material	Emitted Color	
264-15UWC/S400-A6	InGaN/Sapphire	White	Water Clear

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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°C)

Parameter	Symbol	Rating	Unit
Continuous Forward Current	I_F	25	mA
Peak Forward Current(Duty /10 @ 1KHZ)	I_{FP}	100	mA
Reverse Voltage	V_R	5	°C
Operating Temperature	T_{opr}	-40 ~ +85	°C
Storage Temperature	T_{stg}	-40 ~ +100	V
Soldering Temperature (T=5 sec)	T_{sol}	260 ± 5	°C
Power Dissipation	P_d	100	mW
Reverse Voltage	V_R	5	V
Electrostatic Discharge	ESD	4K	V

Technical Data Sheet

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264-15UWC/S400-A6**Electro-Optical Characteristics (Ta=25°C)**

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Forward Voltage	V _F	I _F =20mA	--	3.5	4.0	V
Reverse Current	I _R	V _R =5V	--	--	50	uA
Luminous Intensity	I _V	I _F =20mA	630	1900	--	mcd
Viewing Angle	2 θ 1/2	I _F =20mA	--	35	--	deg
Chromaticity Coordinates	x	I _F =20mA	--	0.29	--	
	y	-----	--	0.28	--	

Luminous Intensity Combination (mcd at 20mA)

I _V Ranks	H	J	K	L	M	N
Min.	715	900	1125	1425	1800	2250
Max.	900	1125	1425	1800	2250	2850

*Measurement Uncertainty of Luminous Intensity: ±15%

Forward Voltage Combination (V at 20mA)

V _F Rank	1	2	3	4	5
Min.	3.00	3.20	3.40	3.60	3.80
Max.	3.20	3.40	3.60	3.80	4.00

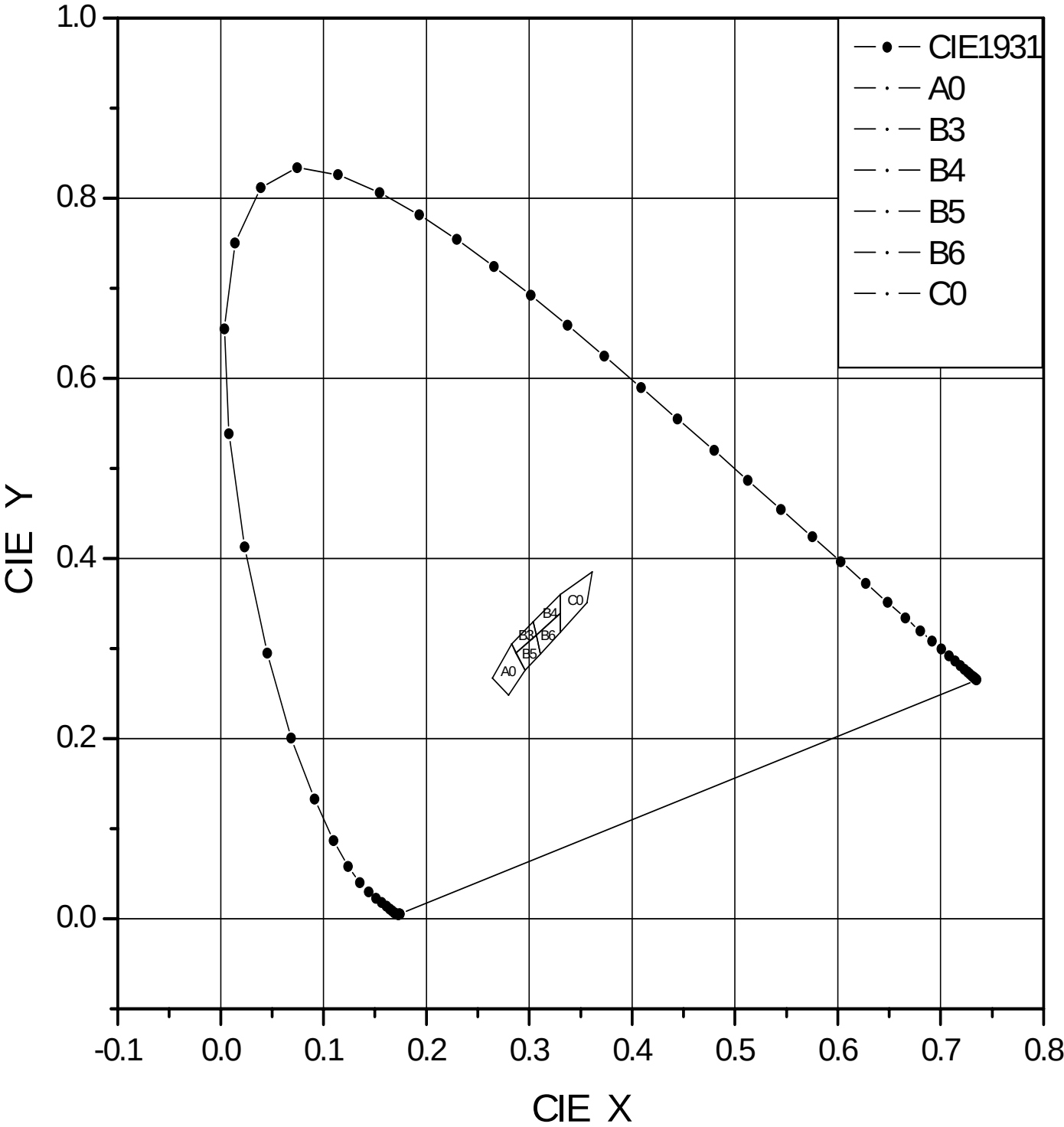
*Measurement Uncertainty of Forward Voltage : ±0.1V



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CIE Chromaticity Diagram





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Color Ranks (IF=20mA , Ta=25°C)

Color Ranks		CIE Rank			
A0	X	0.280	0.264	0.283	0.296
	Y	0.248	0.267	0.305	0.276
B3	X	0.283	0.304	0.307	0.287
	Y	0.305	0.33	0.315	0.295
B4	X	0.304	0.33	0.33	0.307
	Y	0.33	0.36	0.339	0.315
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
C0	X	0.330	0.330	0.361	0.356
	Y	0.318	0.360	0.385	0.351

Measurement uncertainty of the color coordinates : ± 0.01



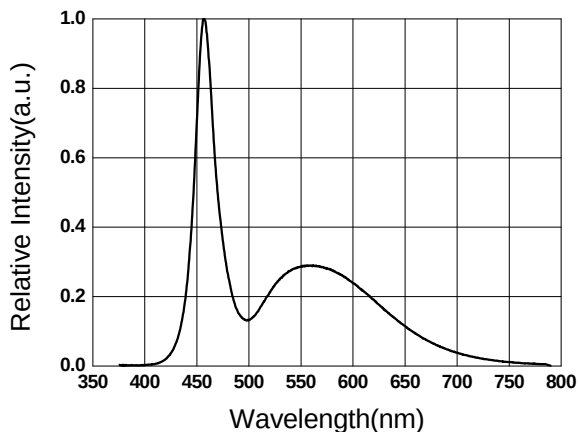
Technical Data Sheet

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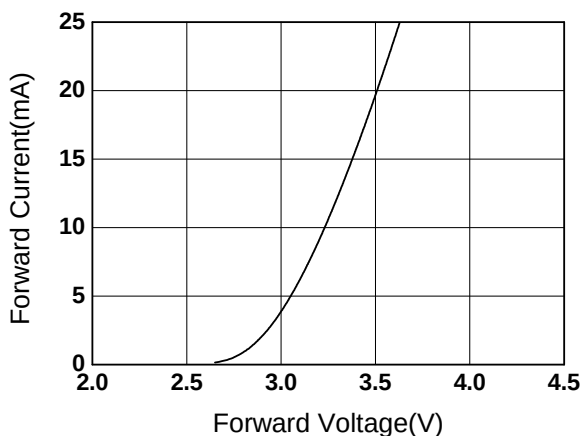
264-15UWC/S400-A6

Typical Electro-Optical Characteristics Curves

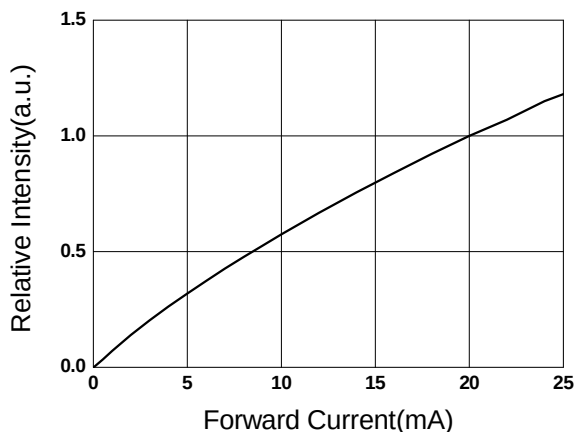
Relative Intensity vs. Wavelength



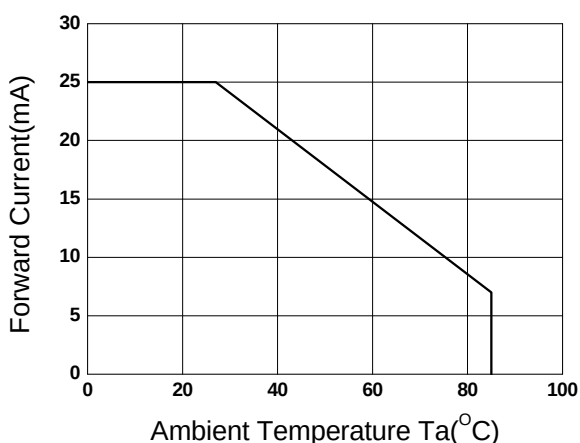
Forward Current vs. Forward Voltage



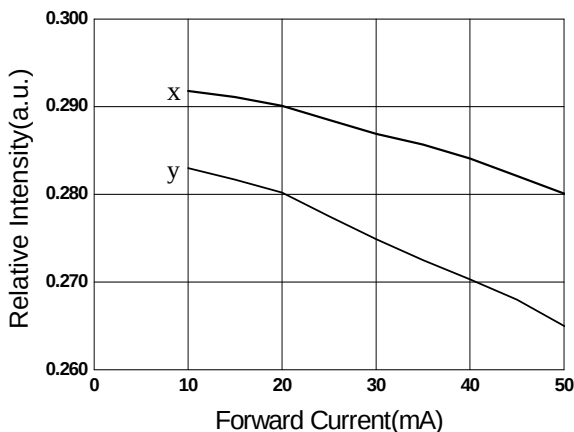
Relative Intensity vs. Forward Current



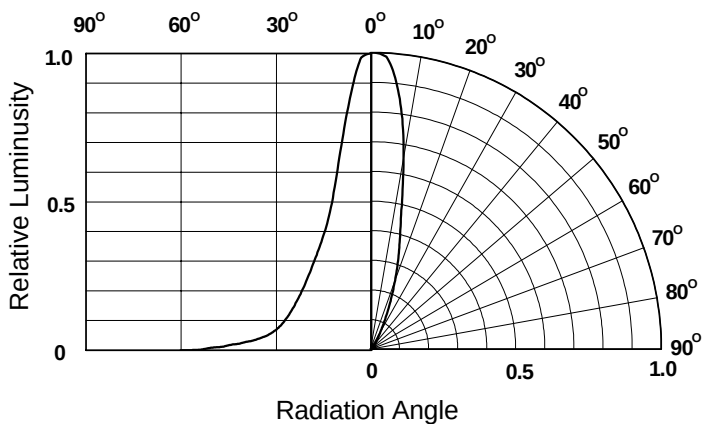
Forward Current vs. Ambient Temp.



Chromaticity Coordinate vs. Forward Current



Relative Intensity vs. Angle Displacement





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Label Form Specification

EVERLIGHT

CPN:

P/N:



264-15UWC/S400-A6

QTY :

CAT:



HUE:

LOT NO :

REF:



MADE IN TAIWAN

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

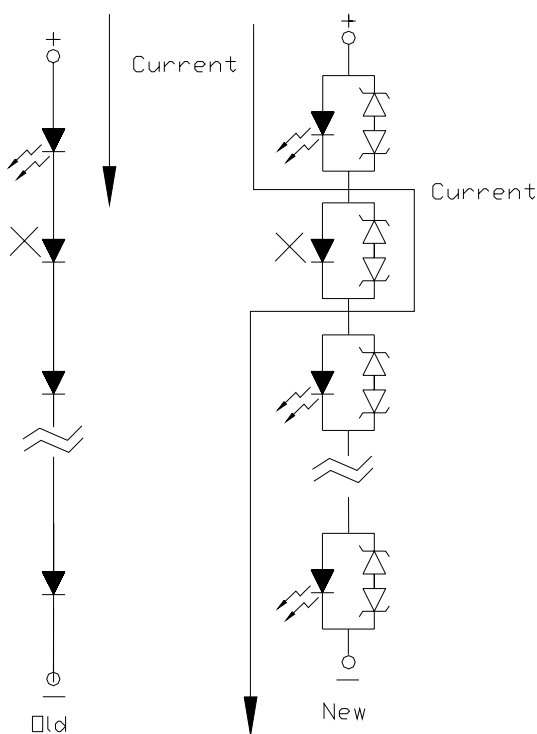
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Notes

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. 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

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