

FEATURES

- Highly Luminous Ultra Bright
- InGaN Technology Chip
- YAG Phosphor
- Super Luminous Intensity 6800 mcd
- High Luminous Flux 2.4 lm
- Extremely Uniform White Light
- Water Clear Resin Package
- Precise A, B, C Color Bin Selections
- 5mm Resin Mold with 3mm size option
- Wide Viewing Angles 23°, 30°, 60°

BENEFITS

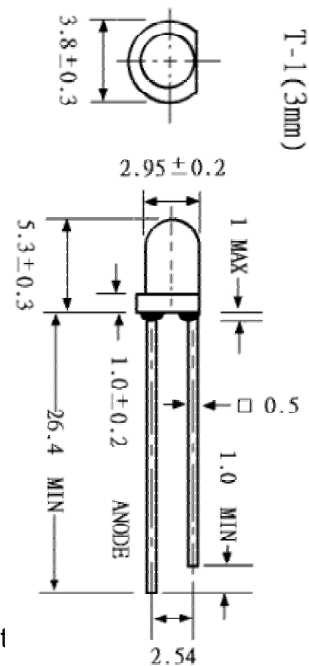
- Low Energy Consumptions
- Low Maintenance Costs
- High Application Design Flexibility
- High Reliability
- Prompt Shipment
- Very Competitive prices

APPLICATIONS

- Torch / Miniature Flash Lights
- Garden Lights
- Microscope Illuminators (Ring Lights)
- Electronic Displays and Signals
- Legend Back Lights
- Optical Indicator Lights
- Display / Decoration Lights
- Cavity Lights/ Effect Lights
- Desk Lamp Lights
- Channel Letter Lights

- Lantern Lights
- Solar Energy Lights
- Traffic Lights and Signals
- Automotive Interior Lights

Package Dimensions



Not

1. millimeters (inches).
2. Tolerance ± 0.25 (0.01") mm unless otherwise noted.
3. Protruded resin under flange is 1.0mm (0.04") max.
4. Lead spacing is measured where the leads emerge from the package
5. Specifications are subject to change without prior notice.

Delivery

- Bulk, 500 pieces per bag standard
- Ammo or Reel are available upon request

CAUTION: YZ-W 3series LEDs are *Class 1 ESD* sensitive. Static Electricity and surge damage the LEDs. It is recommended to use a wristband or anti-electrostatic glove when handling LEDs. All devices, equipment and machinery must be properly grounded.

Absolute Maximum Ratings at Ta = 25°C

Forward Voltage	V _f	3.2 ± 0.3 V
Continuous Forward Current	I _f	30 mA
Power Dissipation	P _d	120 mW
Peak Forward Current	I _{fp}	150 mA
Derating Factor		0.40 mA/°C
Reverse Voltage	V _r	5 V
Operating Temperature	T _{op}	-25 ~ +85°C
Storage Temperature	T _{stg}	-35 ~ +100°C
Soldering Temperature	T _{sd}	260°C / 5 Sec

Luminous Intensity I_v at I_f = 20 mA

Type	Rank T			Rank U		
Unit: mcd	Min.	Typ.	Max/Min.	Typ	Max	
YZ-WB3N23	4500	5500	5850	6800	7600	

Luminous Flux Φ_v at I_f = 20 mA

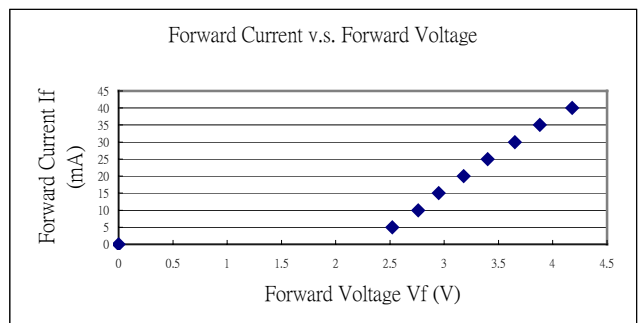
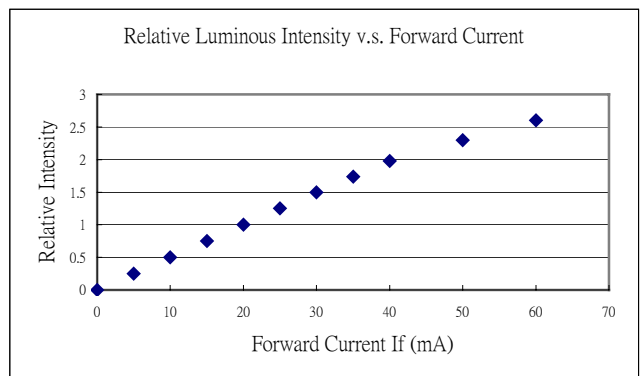
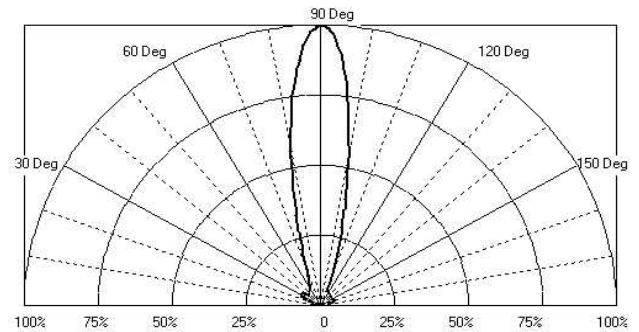
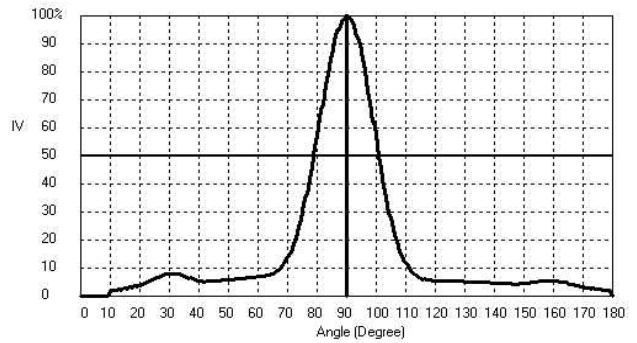
Type	Rank R			Rank S		
Unit: lm	Min.	Typ.	Max/Min.	Typ	Max	
YZ-WB3N23	1.8	2.0	2.2	2.4	2.6	

Color Bin Limits at I_f = 20 mA

Bin	Color Rendering Index	Approximate Color Temperature °K
A	50 ~ 65	6500 ~ 10000
B	70 ~ 95	5500 ~ 6500
C	85 ~ 100	4500 ~ 5500
D	70 ~ 85	3500 ~ 4500

Typical Electrical / Optical Characteristics Curves at Ta = 25°C

Beam Pattern



Color Ranks

Conventional A-Rank, Approximate Color Temperature = 6500 ~ 10000°K

	Rank A			
X	0.280	0.264	0.283	0.296
Y	0.248	0.267	0.305	0.276

Conventional B-Rank, Approximate Color Temperature = 5500 ~ 6500°K

	Rank B0			
X	0.287	0.283	0.330	0.330
Y	0.295	0.305	0.360	0.339

	Rank B1			
X	0.296	0.287	0.330	0.330
Y	0.276	0.295	0.339	0.318

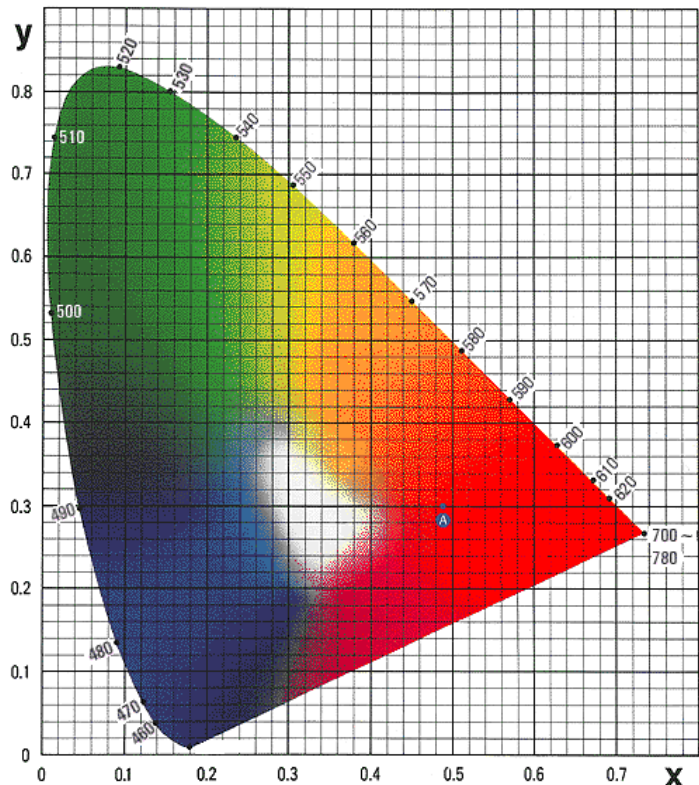
Conventional C-Rank, Approximate Color Temperature = 4500 ~ 5500°K

	Rank C			
X	0.330	0.330	0.361	0.356
Y	0.318	0.360	0.385	0.351

Conventional D-Rank, Approximate Color Temperature = 3500 ~ 4500°K

	Rank D			
X	0.350	0.382	0.443	0.393
Y	0.310	0.451	0.481	0.340

ICI Chromaticity Diagram



Notes:

1. The luminous intensity is measured by the CIE 1931 eye-response method with Tolerance $\pm 15\%$.
2. The chromaticity coordinates are derived from the CIE 1931 chromaticity diagram and represent the perceived colors of the device.
3. Color Note:
A: A Bin / B: B Bin / C: C Bin / D: D Bin
4. Lens Size:
5: 5mm standard / 3: 3mm Option
5. Lens Shape:
N: Normal Shape
6. Angle $2\theta \frac{1}{2}$:
23: $23^\circ \pm 3^\circ$
7. Stand Off:
N: Non Stand-Off

Note: All data showing in this product specification are measured by proper experiment conditions and instruments. However, those data may be different due to variations of testing instruments and conditions.