YI-WS 3 series

FEATURES

- Highly Luminous Ultra Bright
- InGaN Technology Chip
- YAG Phosphor
- Super Luminous Intensity 4500 mcd
- High Luminous Flux 2.4 lm
- Extremely Uniform Warm White Light
- Water Clear Resin Package
- 5mm Resin Mold with 3mm size option
- Wide Viewing Angles 23°, 30°, 60°

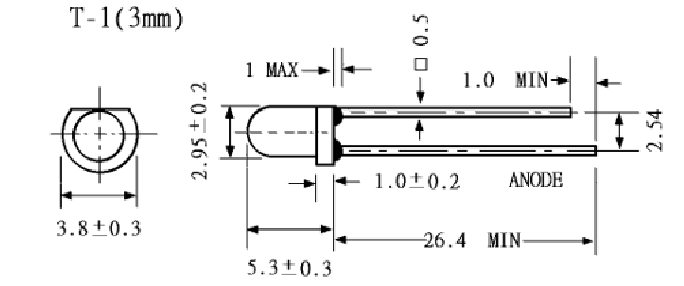
BENEFITS

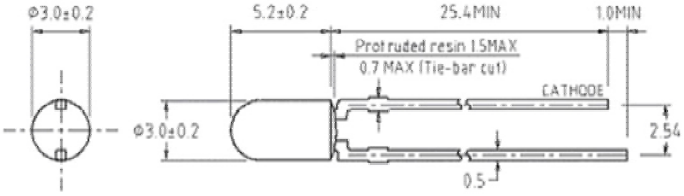
- Low Energy Consumptions
- Low Maintenance Costs
- High Application Design Flexibility
- High Reliability
- Prompt Shipment
- Very Competitive prices

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





Notes:

1. All dimensions are in 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: ***YI-WS3*** series 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.

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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

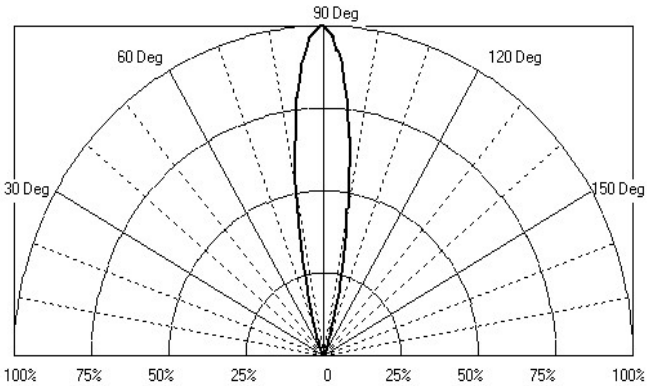
Type	Rank R			Rank S	
Unit: mcd	*Min.*	*Typ.*	*Max/Min.*	*Typ*	*Max*
YI-WS3N23	2700	3200	3500	4000	4500
YI-WS3D30	1700	2000	2400	2900	3500
YI-WS3D60	850	1000	1200	1500	1800

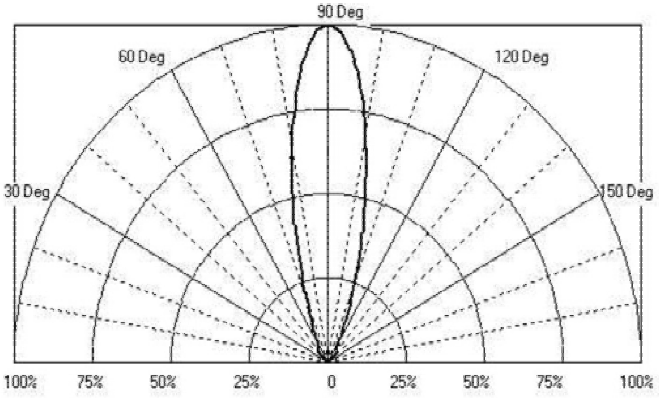
Luminous Flux Φv at I_f = 20 mA

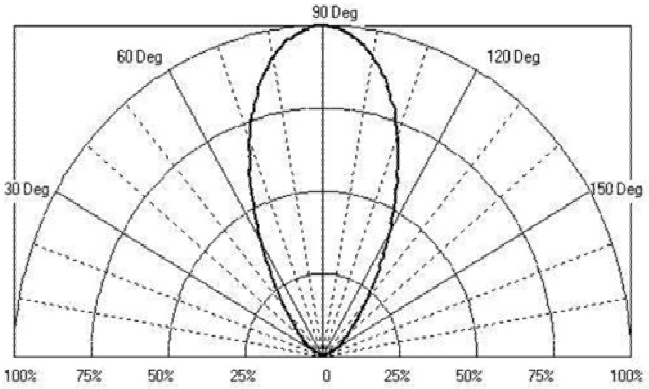
Type	Rank R			Rank S	
Unit: lm	*Min.*	*Typ.*	*Max/Min.*	*Typ*	*Max*
YI-WS3N23	1.8	2.0	2.2	2.4	2.6
YI-WS3D30	1.8	2.0	2.2	2.4	2.6
YI-WS3D60	1.8	2.0	2.2	2.4	2.6

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

Beam Pattern







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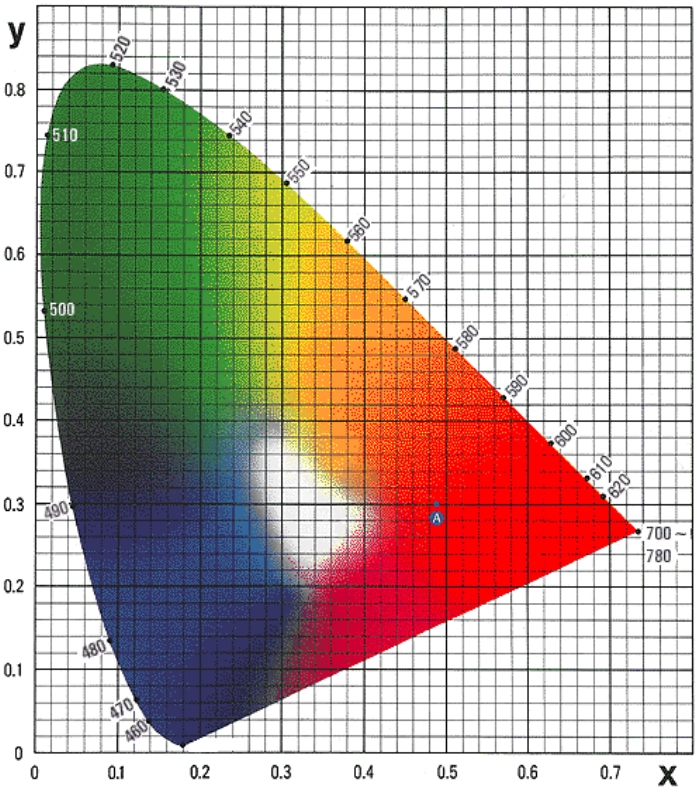
Golden White Color Coordinates

X	0.46	0.46	0.50	0.50
Y	0.41	0.46	0.50	0.45

ICI Chromaticity Diagram



1. The luminous intensity is measured by the CIE 1931 eye-response method with Tolerance ±15%.
2. The chromaticity coordinates are derived from the CIE 1931 chromaticity diagram and represent the perceived colors of the device.
3. Color Note:
   Sunny White
4. Lens Size:
   3: 3mm Option
5. Lens Shape:
   N: Round Shape with Flange
   D: Round Shape Flangeless
6. Angle 2θ ½:
   23: 23±3° / 30: 30°±3° / 60: 60°±3°
7. Stand Off:
   N: Non Stand-Off

Notes:

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.

