



Y YOLight	Z Product Code	-	R Color Red	5 Size 5 mm	N Shape Normal	15 Angle 2θ ½ 15°
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FEATURES

- **Highly Luminous Ultra Bright Red**
- **AllnGaP / GaAs Technology Chip**
- **Super Luminous Intensity 9300 mcd**
- **Iv Ranks, Luminous Intensity Bin Limits T / U / V / W / X**
- **High Luminous Flux**
- **Dominate Wavelength 625 nm**
- **Water Clear UV Resistance Epoxy Package**
- **Extremely Uniform Red Light**
- **Lens Size 5mm with 3mm option**
- **Shape Options with Normal or Sharp**
- **Viewing Angles 2θ ½ = 30° , with 15° / 23° / 45° options**
- **Stand-Off Options**

BENEFITS

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

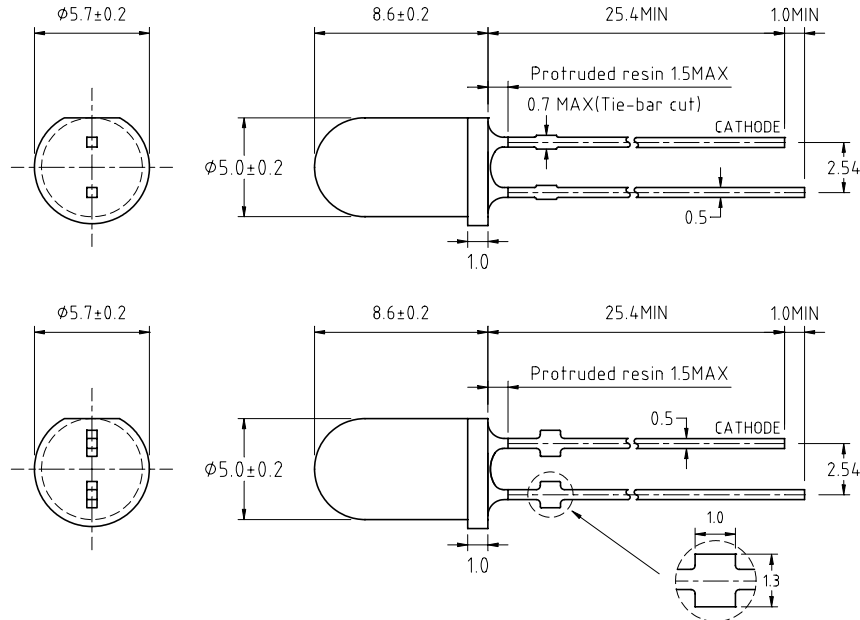
APPLICATIONS

- **Traffic Signals and Outdoor Signals**
- **Cavity Lights/ Effect Lights**
- **Legend Back Lights**
- **Automotive Lights**
- **Electronic Displays / Moving Signs**
- **Garden Lights**
- **Torch / Miniature Flash Lights**
- **Optical Indicator Lights**
- **Display / Decoration Lights**
- **Channel Letter Lights**
- **Lantern Lights**
- **Solar Energy Lights**



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			Red	5 mm	Normal	15°

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 1.0 mm (0.04") max.
4. Lead spacing is measured where the leads emerge from the package
5. Specifications are subject to change without notice.

Delivery

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

Absolute Maximum Ratings at Ta = 25°C

Forward Voltage	V _f	2.3 ± 0.3 V
Continuous Forward Current	I _f	50 mA
Power Dissipation	P _d	130 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

Remarks: Duty Ratio = 1/16, Pulse Width = 0.1ms



YOLight™ Ultra Bright Red LED Lamp

YZ-R 5 Series

Y Z -
YOLight Product Code

R
Color
Red

5
Size
5 mm

N
Shape
Normal

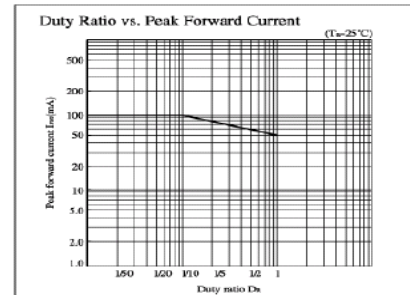
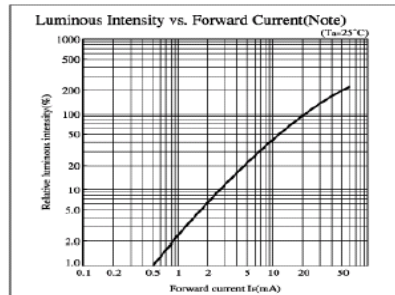
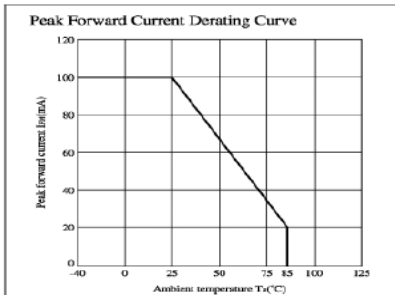
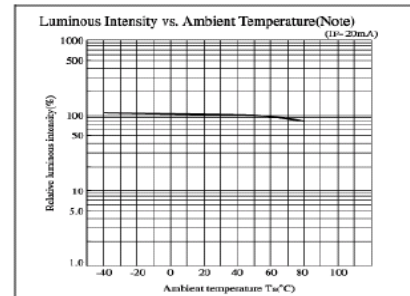
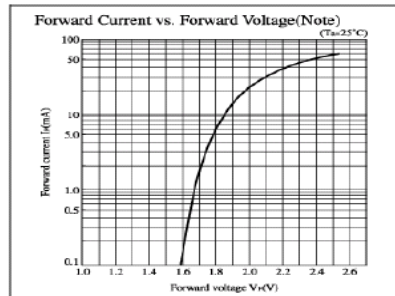
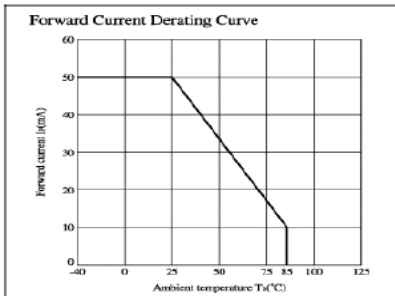
15
Angle 2θ ½
15°

Electrical / Optical Characteristics at Ta = 25°C

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	V_f	2.0	2.3	2.6	V	$I_f = 20 \text{ mA}$
Dominant Wavelength	λ_d		625		nm	$I_f = 20 \text{ mA}$
Luminous Intensity	I_v	3200	5500	9300	mcd	$I_f = 20 \text{ mA}$
Spectrum Radiation Bandwidth	$\Delta\lambda$		20		nm	$I_f = 20 \text{ mA}$
Reverse Current	I_r			10	mA	$V_R = 5V$

Grade	Emission Wavelength Range λ_p (nm)	Viewing Angle	Lens Shape	Luminous Intensity I_v (mcd)		
				Min	Typ	Max
YZ-R 5N15	620nm ~ 630nm	15°	Normal	4200		9300
YZ-R 5N30		30°	Normal	3200		7200

Electrical / Optical Characteristics Diagram at Ta = 25°C



Iv Ranks / Luminous Intensity Bin Limits

Bin Name	Min	Max
T	2500	3200
U	3200	4200
V	4200	5500
W	5500	7200
X	7200	9300



YOLight™ Ultra Bright Red LED Lamp

YZ-R 5 Series

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			Red	5 mm	Normal	15°

Notes:

1. YZ-R series can supply the above listed T/U/V/W I_v ranks.
2. I_v Ranks Tolerance of each minimum and maximum is ± 15%
3. Size: 5: 5mm / 3: 3mm Lens Size
4. Shape: N: Normal / S: Sharp Shape
5. Angle 2θ ½: 30: 30°± 3°; options include 15: 15°± 3° / 23: 23°± 3° / 45: 45°± 3°
6. Stand Off: N: No Stand-Off / Y: With 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.