



YOlight™ Ultra Bright Blue LED Lamp YM-B Series

Y	M	-	B	V	5	S	15	Y
YOlight	Product Code		Color	I _v Ranks	Size	Shape	Angle 2θ ½	Stand-Off
			Blue	V Range	5 mm	Sharp	15°	Yes

FEATURES

- Highly Luminous Ultra Bright
- InGaN / Sapphire Technology Chip
- Super Luminous Intensity 7200 mcd
- High Luminous Flux
- Water Clear UV Resistance Epoxy Package
- Extremely Uniform Blue Light
- 3 Different Wavelength Chips
- I_v Ranks, Luminous Intensity Bin Limits P / Q / S / T / V
- Shape Options with Normal or Sharp
- Viewing Angles 2θ ½ = 15° / 30°
- Stand-Off Options

APPLICATIONS

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

BENEFITS

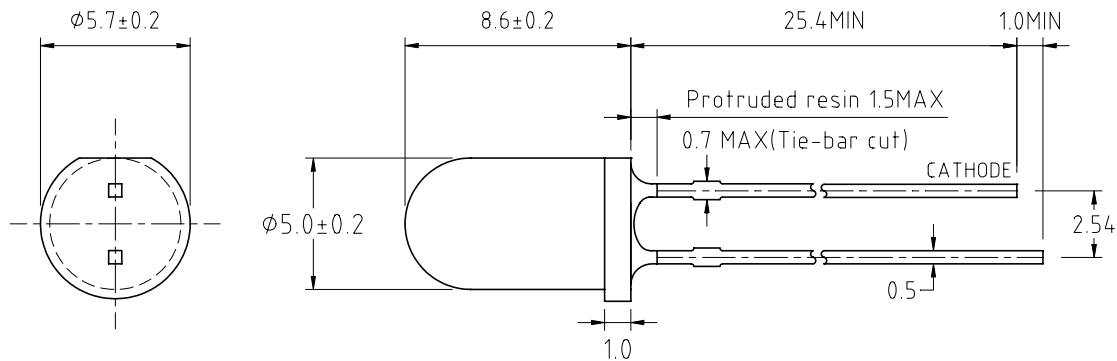
- Low Energy Consumptions
- Low Maintenance Costs
- High Application Design Flexibility
- High Reliability
- Prompt Shipment
- Very Competitive prices

Delivery

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

CAUTION: YM-B 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.

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 notice.



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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

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

Iv Ranks / Luminous Intensity Bin Limits

Bin Name	Min	Max
P	880	1150
Q	1150	1500
R	1500	1900
S	1900	2500
T	2500	3200
U	3200	4200
V	4200	5500
W	5500	7200

Notes:

- I_v Ranks Tolerance of each minimum and maximum is ± 15%
- Size:
5: 5mm / 3: 3mm Lens Size
- Shape:
N: Normal / S: Sharp Shape
- Angle 2θ ½:
15: 15°± 3° / 30: 30°± 3° / Other angles available upon special request
- Stand Off:
N: No Stand-Off / Y: With Stand-Off

Electrical / Optical Characteristics at Ta = 25°C

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	V _f		3.2	3.5	V	I _f = 20 mA
Spectrum Radiation Bandwidth	Δλ		20		nm	I _f = 20 mA
Reverse Current	I _r			100	μA	V _R = 5V

Grade	Emission Wavelength Range λ _p (nm)	I _v Ranks	Viewing Angle	Lens Shape	Luminous Intensity I _v (mcd)		
					Min	Typ	Max
YM-BS5S15Y	455nm ~ 465nm	S	15°	Sharp	1250	2100	3600
YM-BP5N30Y		P	30°	Normal	550	1020	1550
YM-BT5S15Y	465nm ~ 475nm	T	15°	Sharp	1800	3000	5000
YM-BQ5N30Y		Q	30°	Normal	780	1400	2200
YM-BV5S15Y	475nm ~ 485nm	V	15°	Sharp	2500	4200	7200
YM-BS5N30Y		S	30°	Normal	1100	1940	3100

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.