



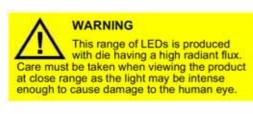
# MEGA BRIGHT LED BTL-52YEC-XX-X

#### **Product Features**

- Ultra Bright Yellow Color
- High Light Output
- 5mm Diameter Circular Package
- Water Clear Lens
- Highly Reliable
- IC Compatible
- Leads without Stand Off

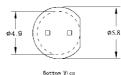
### **Applications**

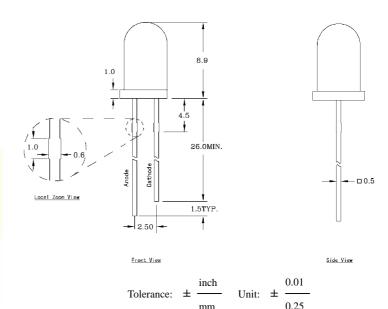
- Automotive
- Front Panel Indicator
- Special Lighting
- General Purpose LEDs



Note: Industry standard procedures regarding static must be observed when handling this product.

### Package Dimension





### Optical and Electrical Characteristics at T<sub>a</sub>=25℃

| Parameter              | Symbol           | Minimum | Typical | Maximum | Units | Conditions                        |
|------------------------|------------------|---------|---------|---------|-------|-----------------------------------|
| Luminous<br>Intensity  | l <sub>v</sub>   | _       | 1500    | _       | mcd   | I <sub>F</sub> = 20mA<br>(Note 1) |
| Viewing Angle          | <b>2θ</b> ½      | _       | 30      | _       | deg   | I <sub>F</sub> = 20mA             |
| Dominant<br>Wavelength | $\lambda_{ m D}$ | 585     | 590     | 595     | nm    | I <sub>F</sub> = 20mA<br>(Note 2) |
| DC Forward<br>Voltage  | V <sub>F</sub>   | _       | 1.9     | 2.5     | V     | I <sub>F</sub> = 20mA             |
| DC Reverse<br>Current  | I <sub>R</sub>   | 0       | _       | 10      | μΑ    | V <sub>R</sub> =5V                |

#### Notes:

- 1. Light intensity measures the light sensing response standard using chromatic meter. Refer to the CIE eye-response curve set by International Lighting committee. Tolerance of minimum and maximum intensity =  $\pm$  15%
- 2. Wavelength range can be slected from the bin selection table. Tolerance of minimum and maximum = ± 2nm
- These products are sensitive to static electricity and care must be fully taken when handling products



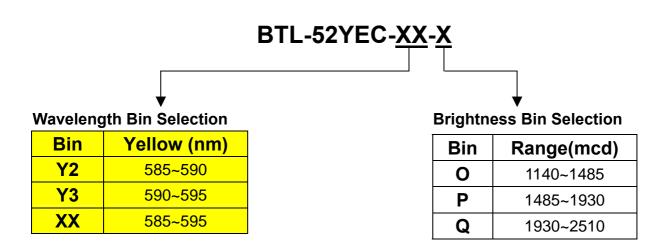


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### Absolute Maximum Ratings at T<sub>a</sub>=25 ℃

| Symbol           | Parameter                                      | Max.                     | Unit |  |
|------------------|--|--------------------------|------|--|
| P <sub>D</sub>   | Power Rating                                   | 100                      | mW   |  |
| $V_R$            | Reverse Voltage (I <sub>R</sub> =10μA)         | 5                        | V    |  |
| I <sub>F</sub>   | Continuous Forward Current                     | 30                       | mA   |  |
| I <sub>FP</sub>  | Peak Forward Current (0.1 duty cycle @ 1kHz)   | 100                      | mA   |  |
| T <sub>opr</sub> | Operating Temperature Range                    | <b>-35</b> ~ <b>+</b> 80 | C    |  |
| T <sub>stg</sub> | Storage Temperature Range                      | <b>-40</b> ~ + 100       | C    |  |
| Lead Solder      | ring Temperature [1.6mm (0.063inch) from body] | 260℃ - max 5 seconds     |      |  |

Wavelength and Brightness Selection



# **Packaging Options**

Standard: 1000 pc bulk pack

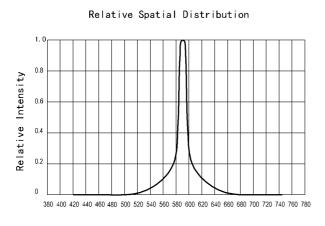
Optional: Tape and Reel (Please specify when order)



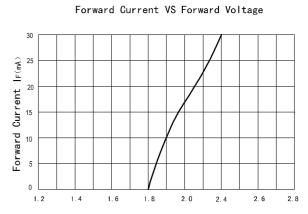


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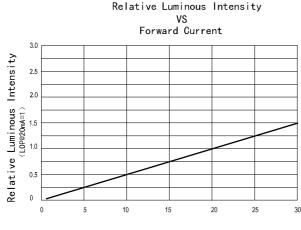
# Typical Electro-Optical Characteristics Curves at T<sub>a</sub>=25℃



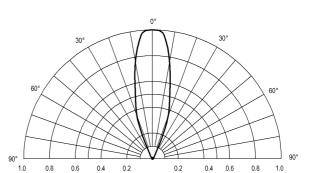




Forward Voltage  $V_F(v)$ 



Forward Current IF(mA)



Spatial Distribution

Relative Brightness(LOP@MAX.=1)

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