

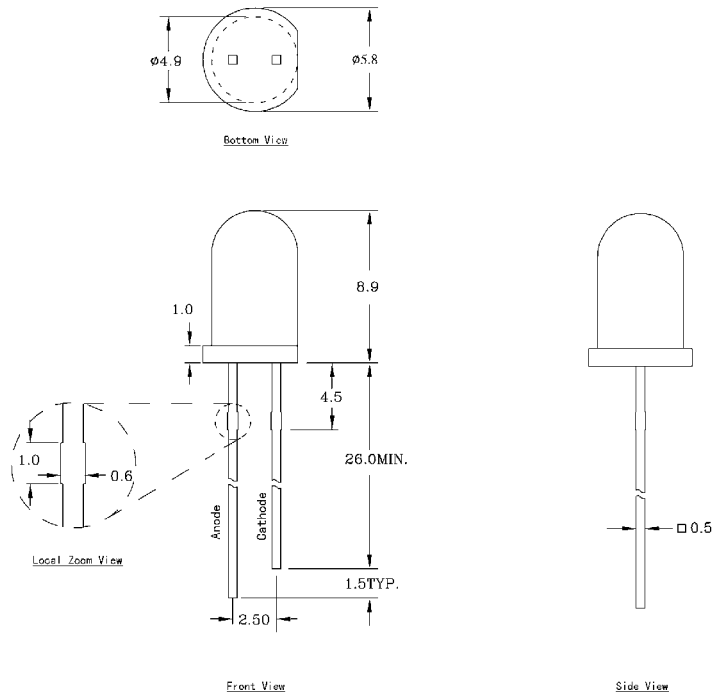
# MEGA BRIGHT LED

## 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

### Package Dimension



### Applications

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



#### WARNING

This range of LEDs is produced with die having a high radiant flux. Care must be taken when viewing the product at close range as the light may be intense enough to cause damage to the human eye.

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

Tolerance:  $\pm \frac{\text{inch}}{\text{mm}}$  Unit:  $\pm \frac{0.01}{0.25}$

### Optical and Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Minimum	Typical	Maximum	Units	Conditions
Luminous Intensity	$I_v$	—	1500	—	mcd	$I_F = 20\text{mA}$ (Note 1)
Viewing Angle	$2\theta_{1/2}$	—	30	—	deg	$I_F = 20\text{mA}$
Dominant Wavelength	$\lambda_D$	585	590	595	nm	$I_F = 20\text{mA}$ (Note 2)
DC Forward Voltage	$V_F$	—	1.9	2.5	V	$I_F = 20\text{mA}$
DC Reverse Current	$I_R$	0	—	10	$\mu\text{A}$	$V_R=5\text{V}$

#### 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 selected from the bin selection table. Tolerance of minimum and maximum =  $\pm 2\text{nm}$
3. These products are sensitive to static electricity and care must be fully taken when handling products



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COMPOSANTS ÉLECTRONIQUES  
ELECTRONIC COMPONENTS

## MEGA BRIGHT LED

### BTL-52YEC-XX-X

Absolute Maximum Ratings at  $T_a=25^\circ\text{C}$

Symbol	Parameter	Max.	Unit
$P_D$	Power Rating	100	mW
$V_R$	Reverse Voltage ( $I_R=10\mu\text{A}$ )	5	V
$I_F$	Continuous Forward Current	30	mA
$I_{FP}$	Peak Forward Current (0.1 duty cycle @ 1kHz)	100	mA
$T_{opr}$	Operating Temperature Range	$-35 \sim +80$	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	$-40 \sim +100$	$^\circ\text{C}$
Lead Soldering Temperature [1.6mm (0.063inch) from body]		260 $^\circ\text{C}$ - max 5 seconds	

Wavelength and Brightness Selection

### BTL-52YEC-XX-X

Wavelength Bin Selection

Bin	Yellow (nm)
Y2	585~590
Y3	590~595
XX	585~595

Brightness Bin Selection

Bin	Range(mcd)
O	1140~1485
P	1485~1930
Q	1930~2510

Packaging Options

Standard: 1000 pc bulk pack

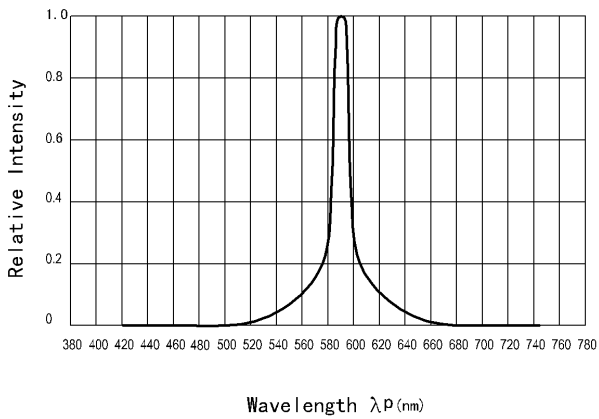
Optional: Tape and Reel (Please specify when order)

# MEGA BRIGHT LED

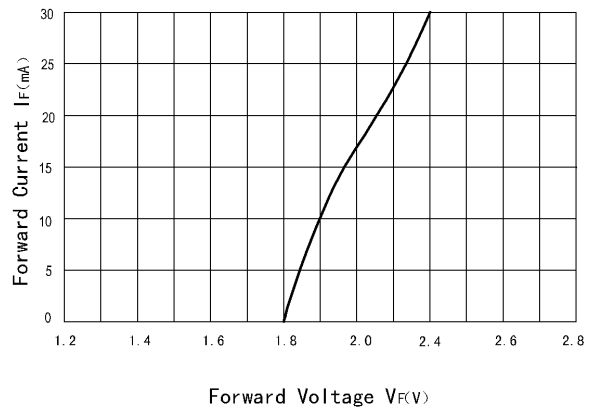
## BTL-52YEC-XX-X

### Typical Electro-Optical Characteristics Curves at $T_a=25^\circ\text{C}$

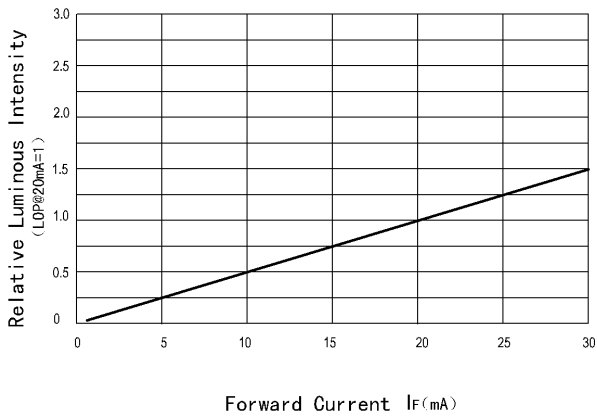
Relative Spatial Distribution



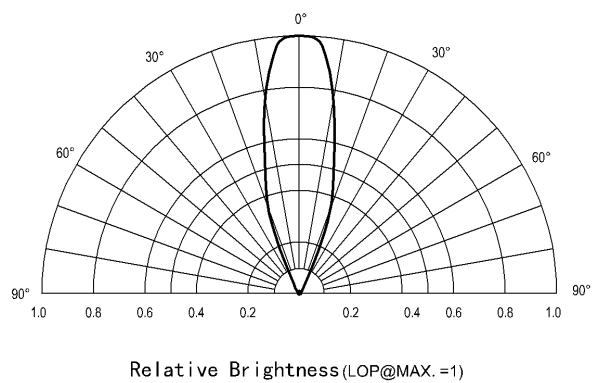
Forward Current VS Forward Voltage



Relative Luminous Intensity  
VS  
Forward Current



Spatial Distribution



BT-Rev. 1.0a

Specifications are subject to change without notice.

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